Overview of Newspaper Articles

Helena Independent – Helena, MT (last date searched 05/28/1935)

Section 1:	Summary and Articles 1-50	(10/04/1935 to 10/22/1935)
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Section 1

Articles 1-50 (10/04/1935 to 10/22/1935)

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Headline: Sharp Earthquake Is Felt In Helena At 7:47 Last Eve

Date: 10/04/1935 Info Categories: B, E, I, P

Headline: Helena Has Severe Jolt By Temblor

Date: 10/12/1935 <u>Info Categories</u>: B, E, H, L, N, P

Headline: <u>City Makes Estimate of Quake Loss</u>

Date: 10/13/1935 <u>Info Categories</u>: A, B, E, H, I, L, P

Headline: Urge Residents To Check Chimneys; Might Be Plugged

Date: 10/13/1935

Info Categories: A, I

Headline: Weather Bureau Here Records 31 Distinct Quakes

Date: 10/13/1935

Info Categories: E

Headline: Quake Damage To Schools May Cost \$200 To Repair

Date: 10/13/1935

Info Categories: B

Headline: FHA Will Authorize Loans For Damage Due To Earthquake

Date: 10/13/1935

Info Categories: A

Headline: This Changing Earth

Date: 10/13/1935

Info Categories: E, S

Headline: Quotes On The 'Quake

Date: 10/13/1935 Info Categories: B, E, H, N, P, R

Headline: Expert Reports On Quakes In Montana

Date: 10/14/1935

Info Categories: S

Headline: Suggest Earthquake Resistant Buildings Be Erected In City

Date: 10/15/1935

Info Categories: A

Headline: Clock Is Dead For 15 Years But Shake Starts It Up Again

Date: 10/16/1935

Info Categories: H, N

Headline: <u>Tremors Tuesday Add Slightly To Damages In City</u>

Date: 10/16/1935 Info Categories: B, E, P

Headline: Two Tremors Felt In City Wednesday

Date: 10/17/1935

Info Categories: E

Headline: One Killed, Score Hurt, By Tremors While Property Loss May Be

Over Million

Date: 10/19/1935

Info Categories: A, B, E, H, I, L, N, L, P

Headline: Heavy Damage In Sixth Ward From Violent Tremor

Date: 10/19/1935

Info Categories: B

Headline: Sleepless City Sorely Stricken By Earth Tremor

Date: 10/19/1935

Info Categories: E, P

Headline: Well; Sick Man Takes French Leave Of Hospital

Date: 10/19/1935

Info Categories: H

Headline: Butte, Missoula, Bozeman Shaken

Date: 10/19/1935

Info Categories: E, N

Headline: Helena Is Almost Deserted After Series of Quakes Rock The City

Date: 10/20/1935 <u>Info Categories</u>: A, B, G, H, I, P

Headline: Cooperation And Patience Needed

Date: 10/20/1935

Info Categories: A, B

Headline: Seismograph Records Of Helena Quakes To Be Studied

Date: 10/20/1935

Info Categories: S

Headline: Quakes Recorded In Helena Reach 249 Mark Today

Date: 10/20/1935

Info Categories: E

Headline: Wed; Couple Decides Not To Honeymoon Here

Date: 10/20/1935

Info Categories: H

Headline: Beautiful Italian Marble Altar Of Cathedral Ruined

Date: 10/20/1935

Info Categories: B, R

Headline: Where To Call For Help In Emergency

Date: 10/20/1935

Info Categories: A

Headline: Congressman Monaghan Wires Washington For Immediate Relief

To Stricken City

Date: 10/20/1935

Info Categories: A

Headline: Intermountain College Board Will Determine If Classes Continue

Date: 10/20/1935

Info Categories: B, P

Headline: Engineer's Estimates Of Losses Will Be High

Date: 10/20/1935 <u>Info Categories</u>: A, B, N, P, R

Headline: Brave; Parents Show Fortitude In School House

Date: 10/20/1935

Info Categories: P

Headline: Relief For Homeless Is Quickly Organized; Camp Set Up At Guard

Grounds

Date: 10/20/1935

Info Categories: A

Headline: Monaghan Urges Relief

Date: 10/20/1935

Info Categories: A, I

Headline: Telephone Operators Stick To Posts; 700 Receivers Are Shaken

From Hooks By Quake

Date: 10/20/1935

Info Categories: P

Headline: Plan; New System To Save Quake Damage

Date: 10/20/1935

Info Categories: H, P

Headline: Quotes On The Quake

Date: 10/20/1935

Info Categories: A, B, E, G, H, I, N, L, P

Headline: No Broken Gas Lines Found By Montana Power Company

Date: 10/20/1935

Info Categories: A, L

Headline: Beautiful Spirit Shown By County Hospital Patients

Date: 10/20/1935

Info Categories: P

Headline: Schools Of City Are Hard Hit By Earth Shocks; Loss May Reach A

Half Million

Date: 10/20/1935

Info Categories: B, I

Headline: S'Nuf; Boys Say Girls Need Not Pay Again

Date: 10/20/1935 Info Categories: B, H, P

Headline: Senator Murray Will Aid Helena

Date: 10/20/1935

<u>Info Categories</u>: A, I

Headline: Rebuilding Already Is Under Way

Date: 10/21/1935 Info Categories: A, P, R

Headline: Helena Sets About Rehabilitation

Date: 10/22/1935 Info Categories: A, B, P

Headline: Inspection Of The Shrine Temple Shows Quake Damage Not

Serious

Date: 10/22/1935

Info Categories: B

Headline: Should Tear Down Loose Stone, Brick

Date: 10/22/1935

Info Categories: A, B

Headline: Need For Oil Stoves Stressed by Lamport

Date: 10/22/1935

Info Categories: A

Headline: NRS Finds Jobs For 150 Men Saturday

Date: 10/22/1935

Info Categories: A, I

Headline: Deaconess School Is Moved To City; Will Take Salvail House

Date: 10/22/1935

Info Categories: A, B, I

Headline: Emergency Declared Monday By Council; Mayor Refused To Sign

Initial Resolution

Date: 10/22/1935

Info Categories: A, L, P

Headline: So The People May Know; Force Of Earthquakes Spent

Date: 10/22/1935

Info Categories: A, S

Headline: Salvation Army To Establish Station At Point Near City

Date: 10/22/1935

Info Categories: A

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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SHARP EARTHQUAKE IS FELT IN HELENA AT 7:47 LAST EVE Reported To Be Most Severe At Fort; No Damage

Helena was again visited by one of its occasional tremors last evening when an earthquake of several seconds' duration gave the city a jar at 7:47 o'clock. It was reported as being the most severe at the Fort Harrison veterans' hospital.

No damage was reported, although several phone calls at The Independent last night were to the effect that a flimsy brick wall on State street was toppled over. Workmen, it was said, were in the process of wrecking an old building there, and the "shaker" merely lessened their labors.

Thought an Explosion

The tremor was so sharp that many believed it to be an explosion. After the most distinct quake, there was a rolling for a few seconds which convinced everyone that Helena was again being visited by a first-class temblor.

Since June 28, 1928, when two distinct earthquakes of long duration rocked Helena, several have occurred. None, however, have been as serious as those of seven years ago, when the earth was split wide open near Three Forks, great rocks were hurled on the Northern Pacific tracks near Lombard, holding up trains for hours, and several buildings both here and in the Three Forks area were slightly damaged.

There was also a report of an earthquake at about 9 o'clock last night, but this could not be substantiated. Usually after one of the "rockers," Helena people feel earthquakes for a week or so afterward.

Less than a minute after the quake last night The Independent was showered with hundreds of phone calls from all parts of the city.

"Was that an earthquake, or haven't you had a report on it?" was one of the questions fired

"Do you expect there will be any more?" was another.

"I never heard an earthquake sound like that before," was the comment of one quake witness.

"Any report of an earthquake in San Francisco?" an elderly voice queried, apparently believing that Frisco is the distributing point for all quakes in the country.

After the shock the streets in the residence sections were filled with people, wondering what it was all about. Veterans of Helena's many quakes, however, did not appear to be alarmed at the wrist slap dealt out by Mother Earth last night.

[Helena Independent; October 4, 1935]

HELENA HAS SEVERE JOLT BY TEMBLOR Much Loss Shock Is Felt Through State Over Wide Territory

SHOCKS CONTINUE

The U. S. weather bureau had recorded 18 quakes up to 2:33 a.m., but the shocks were growing far apart. None of the later shocks were of the magnitude of the first three, which rocked the city broadside with violent suddenness.

Reports at the weather bureau indicated that the tremors occurred as follows: 12:51, 12:54, 12:55, 1:04, 1:07, 1:20; eight from 1:20 to 1:38, 2:06, 2:10, 2:11, 2:25 and 2:33. Helena was rocked early this morning by what was described officially as the worst earthquake in the history of the city. The first and most severe quake occurred at 12:50 a.m. and was followed by a score of lesser violence.

While damage was very severe and widespread throughout the city, and may run into many thousands of dollars, it was chiefly limited to cracked walls, shaken down chimneys and plaster, broken windows and similar items. Nobody was hurt.

The damage was especially severe at Fort Harrison, where the shock may have centered. A number of the buildings at the veterans' hospital were badly cracked.

The shocks drove thousands of people into the streets in their night clothes and alarm was general. Few persons in the city went to bed before daylight.

Reports from the outside indicated that the shocks were felt generally over this section of the state. They were quite severe in Great Falls and Butte and one report stated that light tremors were felt in Dillon.

In Helena Valley

Charles Greenfield, Jr., who resides six miles out in the valley, stated that the earthquake was more severe there than the big one of 1925, but was slower in motion. It was also unusually severe in East Helena and Rimini, indicating that the center was probably in the vicinity of Helena.

At 2:10 a.m. the United States weather bureau had recorded 11 distinct and separate quakes, all apparently traveling from a south to north direction. The first major tremor at 12:51 lasted from six to seven seconds while the second shock at 1:32 a.m. terminated in a second.

Soon after the initial tremor, Main street became alive with crowds of quickly dressed hotel residents who were awakened by the sudden, violent shock. In the Placer hotel a number of dressers and other fixtures were knocked down and people ran from their rooms clad in their night clothes and whatever else they could snatch to cover their bodies.

Rumble Heard

By 2 a.m. Main street seethed with nervous crowds, standing far in the center of the street. Many were afraid to return to their rooms, where a few moments before they were roughly awakened from their sleep by the first, rumbling quake.

Policemen were busy and patrolled the streets. Many reports of property damage were made at police headquarters, particularly relative to fallen chimneys, broken windows, and store goods knocked from the shelves. Stock in the Heiser & Finnegan store on South Main street was dislodged while similar damage was reported from the Brackman store in the Northern Pacific district.

The first of the shocks was hair-raising and breath-taking. Brick walls in the Independent building weaved noticeably and bulged until it seemed they would burst out. Windows rattled as in an explosion and many were broken in Helena and East Helena.

Less severe, but still decidedly sharp quakes, followed at 12:54, 12:55, 1:04, 1:07, 1:27 and 1:35 a.m. A number of slight ones, felt only in parts of the city occurred between these times and up to 2:10 a.m.

Says 20 Shocks

The west side of town seemed most susceptible to the tremors according to the reports of the alarmed householders. R. A. Strandberg notified this paper at 1:45 that he had counted 20 separate and distinct quakes. Others from that section of town reported a continuous series, some of which were merely rumblings accompanied by little or no motion.

The earthquake precipitated a flood of telephone calls which swamped the local exchange as subscribers sought desperately to reach friends and relatives in this city and outside calls. Ten extra operators were summoned to duty and were hard pressed to handle the unprecedented load.

At East Helena, it was reported that two front windows of the Richardson Drug store were broken and a large quantity of stock shaken from the shelves. Five sections of the plate glass windows of the Fiatow Mercantile company were broken and an unestimated amount of damage was done to the stock. Similar damage was believed to have been done throughout the town.

At 924 Eleventh avenue, a brick apartment dwelling, cracks appeared in the walls wide enough to thrust two hands through, one of the tenants reported. Calls from almost every section of the city reported chimneys entirely or partially toppled over, pictures and plaster shaken down, furniture overturned, dishes broken and similar damage.

Virtually every building at the veteran's hospital at Fort Harrison was cracked and a great number of chimneys were knocked down. Hospital officials were able to maintain some semblance of order although many of the inmates, fearful of the violent quakes, left their beds and ran to the campus.

No estimate of the damage could be ascertained although hospital officials said that nearly every building was cracked, including the administration offices. Although the tremors were exceptionally violent at Fort Harrison, no one was injured and order was maintained. Similar shocks were felt through the Kenwood district.

The state capital was hit by a series of the tremors but investigation being conducted early this morning failed to reveal any serious damage, although watchmen said that undoubtedly some would be uncovered later.

The home of Albert W. Smith, 828 Sixth avenue suffered considerable damage from the quake. A window casing in the kitchen of the brick structure was jarred several inches out of position and plaster was torn from the walls in several places. A cracked wall and several pieces of broken glassware as well as bricks knocked from the chimney was recorded at the Gaskill home next door, while other homes on both sides reported little or no damage.

Windows of the East Side grocery store at the corner of Davis and Broadway were broken and canned goods were thrown from the shelves. Considerable damage took place at the Eleanor apartments on Broadway and many of the occupants were awakened by plaster falling over their beds. Pictures, cooking utensils and other movable objects were strewn over the rooms and apartments.

Chimneys Fall

The 1200 block on Ninth avenue received violent tremors and a general report of property damage was made, including fallen chimneys, cracked stucco buildings, and broken glass. A water pipe was broken in one of the homes and the kitchen was flooded as the residents took to the streets.

One of the quakes twisted the roof of a home near the intersection of Harrison and Floweree avenues, and much damage was reported as the walls cracked and the tile flooring in the bathroom faulted like a miniature earthquake itself.

The quake was felt more severely in The Independent building than the quake of 1925. Plaster fell from the ceiling in the composing room and matrices were jolted out of the machines.

A number of chimneys fell in the vicinity of Thirteenth and Warren and others will have to come down.

Excited and fearful of more serious disturbances, thousands of residents milled through the streets slightly clad most of the night. Many got in their cars and drove out of the city to be on the safe side. Hundreds huddled in groups in the middle of the streets in many sections of the city waiting for the next and perhaps worst shock to occur.

Rescue Baby

It would have presented a most ludicrous scene, had it not been for the alarm and hysteria. On North Ewing street, one couple was noticed hurry down the middle of the thoroughfare wearing barely enough apparel to appear in public and pushing a baby carriage with a baby unclad except for a blanket wrapped around him.

A woman from the valley called The Independent and said "everything was tumbling around the valley" and that she "just knew it couldn't be tumble weeds." Another woman, a subscriber to the paper, called after the fifteenth shock and wanted her paper sent to a different address. She was informed the subscription department was closed until after things settled down.

All was comparatively quiet at 3 a.m.

IN BUTTE

Butte, Oct. 12,--(AP)--A distinct earth shock was felt here this morning just a few minutes before one o'clock.

So far as could be learned no damage was caused.

The shocks continued for half a minute.

Denver, Oct. 12,--(Saturday)--(AP)--Father William Armand Forstall, Regis college observer, said the college seismograph recorded an earthquake at 12:57 to 1 o'clock this morning, apparently centered in Montana.

The machine indicated a likelihood the damage would be slight.

[Helena Independent: October 12, 1935]

CITY MAKES ESTIMATE OF QUAKE LOSS Total High Fear Lasts For Hours As Vibrations Continue

After nearly 24 hours of feverish excitement and tense waiting for a possible recurrence of the earthquake that rocked the city early Saturday morning, Helena drew a deep breath of relief and settled down to a state of comparative calm.

At 1 o'clock this morning more than six hours had passed without a tremor being recorded officially.

As the tenseness wore off the situation yesterday, the city began to take stock of the damage done and a preliminary check placed the loss at \$50,000 or more. Damage unapparent at the present time may raise this total considerably, it was stated. Only one severe shock, the first one, occurred, although the weather bureau instruments showed 31 separate tremors and vibrations from 12:51 a.m. Saturday morning to 6:48 p.m. last evening, when the last was recorded. Only a half a dozen of these were of sufficient intensity to be regarded as sharp shocks.

Rough Estimate

City Engineer Oscar Baarson spent the entire day checking up on damage in all parts of the city. He roughly estimated that the damage, including loss of all descriptions, would reach \$50,000 or more and might even total \$75,000 when a complete check is had. The greatest hazard was in damaged chimneys and flues and all property owners are urged to check these carefully, since hidden cracks or ruptures may lead to serious fires or explosions.

The city was generally in a great state of confusion for hours after the initial devastating shock. Many persons did not go to bed at all, or slept in their cars outside of town. Others milled around the streets until driven in by a steady rainfall that started about 4 o'clock in the morning.

Radio reports that additional and more severe shocks were predicted during the afternoon and evening served to keep the city in an uproar during the day and well into the night until the falsity of these rumors were demonstrated by the failure of the predictions to come true.

W. E. Maughan, meteorologist at the Helena weather bureau, branded as false a rumor that he had predicted shocks at 2, 4 and 7 o'clock. Although shocks were felt at approximately those hours, the official said he would not claim any credit, and explained that the weather bureau would not claim any credit, and explained that the weather bureau never makes such a forecast. He asserted no one could predict an earthquake. Opening walls in all parts of the city indicated the roll was from north to south. Centered apparently close to Helena, the main temblor was also felt in north central and south central Montana cities. No damage was reported from points other than in the Helena vicinity.

At the first main jar, people poured out of their homes in night dress. Scantily clad hotel patrons rushed onto Main street, too, for no reason other than to get out from under. Kept by successive shocks, they dressed and rode about in automobiles or stood on the streets, swapping experiences. A few gave in to hysteria and physicians were called. Nerves were drawn as one guiver followed another.

Despite the tensity and alarm of the early morning hours, there was a strain of comedy running throughout.

Police patrolled the city and reported they were amazed at the gaudy night attire the

Capital city residents were displaying as they stood in groups and talked nervously. A resident of the city's older section, the south end, said "white men turned black and black men turned white."

The signal board in the telephone office lighted up almost as a unit after the opening rumble. Communication was choked for a few minutes but extra operators were called to handle the crush.

Some dogs barked joyously at the proceedings of mother earth, but others howled in fear. Turkeys in the Helena valley floundered about in the attempt to get off the wavering ground and confusion reigned in henhouses.

Warehouse Damaged

Perhaps the damage most noticeable and most severe was at the old National Biscuit company warehouse on Boulder avenue, in the Sixth ward. A 25-foot chimney on the east side of the structure was toppled over, throwing bricks all over the ground for 25 or 30 feet around and through the roof, which was considerably damaged. The retaining wall on the south and east portions of the building was bulged out, and it was necessary to erect wooden braces yesterday to keep it from falling. It is estimated that the loss at the old warehouse will run in the neighborhood of \$400.

The Shrine temple, Consistory temple and Masonic temple were not damaged by the shaker. It was anticipated that the hundreds of dishes stored in the basement at the Consistory would be broken, but a check revealed that they weathered the quake better than some of the chimneys in the city. Downtown buildings escaped with little or no damage, although at the A. A. garage, at the head of Main street, a crack appeared in the front outside wall that was several feet in length.

City Hall Cracked

A bad crack was discovered yesterday in the rear of the city hall building and several other buildings on South and West Main streets were found to be damaged. Several of the old brick dwellings of the city suffered badly bulged walls and it was reported yesterday that two or three might have to be torn down.

According to statements made yesterday by the pastors of several local churches, those structures weathered Saturday night's tremors with slight damage.

Excepting a small patch of plaster in St. Paul's Methodist Episcopal church, that building, St. Peter's pro-cathedral, the First Presbyterian church and the First Christian church were unscathed.

Portions of plaster were loosened in St. John's Lutheran church and the First Lutheran church, but no serious damage was done to the structures.

The quakes were beneficial to the First Baptist church, inasmuch as they partially dislodged a chimney on that building which was scheduled to be replaced. "If we get another quake," said Harvey Baty, pastor of the church, "we may be saved the trouble of tearing the chimney down.

College Hit

Although there was considerable damage done to the properties of Intermountain Union college, President Jesse Bunch was unable to give any estimate, but will early this week when an underwriter completes his check. Little damage was done to the brick work excepting a fallen chimney. The quake wrecked many of the walls in the interior, some of them recently redecorated.

Following the initial shock students fled their rooms to the campus, some remaining until early in the morning when rain drove them back in. Although instructed by their coach "to turn in and get a good night's sleep," the members of the college football squad had

anything but that. They, with others, left their rooms in Mills hall after the first violent crack of the quake.

Damages at Fort Harrison, estimated at approximately \$1,000, was confined largely to fallen chimneys, cracks in plaster and tiling, and other minor losses, according to Dr. Herbert C. Watts, the manager. There was, however, little structural damage done. Dr. Watts praised the courage of the patients at the Veterans' hospital, who were severely shaken by the tremors. Most of the patients remained in their beds but some insisted on going outside.

There was little damage at the State Nursery and Seed company, in the same locality, and while a number of the glass windows were cracked, none were broken. Several steel wires holding the greenhouses together snapped with the quake but the houses remained intact. The state capitol also escaped damage and a thorough investigation conducted by the custodian failed to reveal injury to any of its contents.

While canned goods, jams and jellies in many cellars suffered from the quake, hard liquor kept up a sturdy front, and with the exception of the East Helena liquor control store, there was no damage done to liquor stocks. Officials at the state warehouse said there were no broken bottles there, while the same was true in the Helena store.

On East Side

Helena's east side suffered more damage from Saturday night's quake than any other part of the city, according to reports by residents of that section.

In the neighborhood of the 1200 block on several East side avenues, chimneys were dislodged, wall plaster was cracked, some falling from walls and ceilings, windows and dishes were broken and gas and water pipes were sprung, causing leaks. No water mains were broken by the shocks, however, and the supply reservoirs were undamaged. According to statements made yesterday by many people whose dwellings were severely strained or cracked by the upheavals, there will be a number of beds which will not be mussed up this morning, due to their occupants spending last night in seemingly safer abodes.

Loss Mounts

Estimates of loss throughout the city continued to mount yesterday as reports piled in one after the other. The damage ranged from small to substantial amounts. It appears that a large proportion of the homes in the city suffered in one way or another.

In some instances loss was confined to jars of preserves knocked from shelves, broken dishes, shattered mirrors, injured furniture, broken windows and other minor damage. Many property owners will have to replace loosened or shaken down plaster. Probably 50 or more chimneys will have to be entirely or partially rebuilt and numerous walls will have to be repaired and strengthened.

A number of Helena drug and grocery stores suffered considerable loss when bottled merchandise was dislodged from the shelves and sent crashing to the floor. The drug stores suffered especially in this fashion.

[Helena Independent; October 13, 1935]

URGE RESIDENTS TO CHECK CHIMNEYS; MIGHT BE PLUGGED

To avoid explosions, especially in gas furnaces, Helena people are urged to have their chimneys cleaned before the real cold weather comes. Friday night's earthquake possibly shook bricks inside of many chimneys in the city, and experts say that unless they are removed people are risking serious explosions or fires.

Several explosions have been caused by faulty chimneys, or by plugged chimneys, and in several cases it has been found that it was due to bricks falling inside. Explosions can be caused by coal furnaces as well as gas furnaces, and as a word of warning all homeowners are urged to check up on their chimneys within the next few days.

[Helena Independent; October 13, 1935]

WEATHER BUREAU HERE RECORDS 31 DISTINCT QUAKES Up To Midnight None Had Occurred For Over 5 Hours

Up until midnight last night a total of 31 tremors, most of which were slight, were recorded at the Helena weather bureau. The last one was at 6:48 last evening, with an interval of more than five hours up to midnight elapsed without signs of another.

The longest interval during the day was from 11:25 yesterday morning until 2:47 yesterday afternoon, when 3 hours and 22 minutes passed without a quake. The quakes were most frequent between 1:20 yesterday morning and 1:38, when eight were felt over the 18-minute period.

The following tabulation shows the time of the quakes yesterday, and the time elapsed between shakes:

Time Interval

1st -- 12:51 a.m.

2nd -- 12:54 3 min.

3rd -- 12:55 1 min.

4th -- 1:04 9 min.

5th -- 1:07 3 min.

6th -- 1:20 13 min.

7th-14th -- 1:20 to 1:38

15th -- 2:06 28 min.

16th -- 2:10 4 min.

17th -- 2:11 1 min.

18th -- 2:25 14 min.

19th -- 2:33 8 min.

20th -- 2:33.15 15 sec.

21st -- 2:51 7:45 min.

22nd -- 4:26 1:38 hrs.

23rd -- 4:29.15 3:30 min.

24th -- 4:36 6:45 min.

25th -- 5:30 54 min.

26th -- 5:48 18 min.

27th -- 10:57 5:9 hrs.

28th -- 11:25 28 min.

29th -- 2:47 p.m. 3:22 hrs.

30th -- 4:01 1:14 hrs.

31st -- 6:48 2:47 hrs.

[Helena Independent; October 13, 1935]

QUAKE DAMAGE TO SCHOOL MAY COST \$200 TO REPAIR

Damage done to buildings of Helena school district No. 1 will perhaps cost in the neighborhood of \$200 to repair, J. F. McBride, clerk of the district, said last evening. Mr. McBride said that although he made a close check on the damage done he would not be surprised if additional evidences of the quake were revealed after school goes into session Monday.

Bryant school was the hardest hit by the Saturday morning shaker. A fire wall on the west side, 25 feet in length, was toppled over, Mr. McBride said. Some iron grating at the foot of the building was badly bent when it was struck by the shower of bricks from the fire wall.

Plaster Falls

In about every room at the Bryant school plaster fell from the walls or ceiling said the school district clerk. In the lower hall a piece of plaster about three feet by four feet fell from the ceiling.

At the new Helena high school the earthquake left three cracks in the wall of the auditorium, and there were several cracks in the steps leading from the main hall into the auditorium. There were several cracks around the steps at the main entrance, and in the wall on the second floor. In the gymnasium there were two or three cracks in the concrete base for the seats.

At the old high school, now occupied by the works progress administration, one of the tower blocks bounded off the cornice and alighted on the west side of the structure. Mr. McBride estimated that the missile weighed about 800 pounds. Considerable damage was done to the roof of the old building by the bounding boulder that supported the tower. In the northwest corner of the building there was a crack in the ceiling that ran from the rooms on the first floor to the roof. Several windows were broken.

There was one crack in the plaster at the Emerson school, but there was no damage detected at Central, Hawthorne, Broadwater and Jefferson schools or the old gymnasium and the bungalow on the Central school grounds, occupied by the school district offices. **[Helena Independent: October 13, 1935]**

FHA WILL AUTHORIZE LOANS FOR DAMAGES DUE TO EARTHQUAKE

Residents of Helena and vicinity whose properties suffered damage from the earthquake early yesterday morning are reminded by Barclay Craighead, state director for the Federal Housing administration, that it is possible to secure a modernization credit loan from the local banks for the purpose of repairing damage done.

Windows, walls, ceilings and chimneys suffered chiefly from the quake and all work necessary in connection with the repair of this destruction is eligible for a loan of this type as insured by the FHA, according to the state director.

For Windows

"Store owners in particular whose heavy plate glass windows in store fronts suffered substantially from the temblor, will no doubt be interested in knowing that they can make immediate replacements by arranging with their bank for a loan of this kind," said Mr. Craighead.

It was also explained that not only are the necessary materials eligible but the cost for labor may also be included in the loan which may run from one to five years. The government increases the credit possibilities of prospective borrowers by agreeing to pay 20 per cent of the mass loans of this type in the event the borrower defaults and this insurance is furnished without cost.

[Helena Independent; October 13, 1935]

THIS CHANGING EARTH

People in central Montana had a demonstration shortly before 1 o'clock Saturday morning, that the world, or our own earth, was not created in six days, or at least it was not completed, and we have no way of knowing the length of the Biblical day.

Certain it is that our earth is still in the course of formation, and physical events within the last century have given us a graphic demonstration that Nature still has a lot of work to do before the earth we inhabit settles down to become a cooled off and solid mass to meet the thousands of years between the present day and eternity.

If our world, or earth, ever had a beginning, no matter how far back, there is no comparison possible between the time the universe has existed and the eternity that preceded it. No matter how many millions of millions of centuries we may choose to put back the first creation of this earth, it is but as a moment of time compared to eternity. The earth we inhabit must have been made out of old materials already in existence. We have a place to live, thrown together out of matter that has always existed. The forces of gravity, of growth and decay are constantly rearranging the matter in conformity with such laws

That is what causes earthquakes. The Bible tells us that in the beginning was "chaos." And what is chaos? It is simply matter in an unformed state. But it is matter; it is something tangible to work with, so the earth was thrown together and formed of this matter which had probably always existed in the universe.

So we are expecting too much to believe that the earth was created and made perfect in six days--even if a day was as a million years. This earth of ours is still being formed; the matter is still being worked over. The earthquake of Saturday morning was the shifting of subterranean materials. The volcanic actions in the South Seas are but efforts of Nature to complete the job of finishing off the earth we inhabit. Islands there appear, and in the course of years they disappear beneath the surface of the ocean. These things have happened again and again during recorded history. The dust storms of two years ago when the surface soil of vast areas was transferred to other areas to make them fertile, are but other attempts of Nature to complete the formation of the speck in the Universe we call our earthly home. Whole civilizations have been blotted out and their former habitats covered with shifting sands and soils.

Geologists and other scientists may quarrel over the causes, but we prefer to believe that our earth is so young that it is still in the process of creation. Materials of which it is made are gradually slipping into place. The earthquakes felt in Montana are comparatively inconsequential. Sometimes they make enough noise and cause enough confusion to call sinners to repentance. The one early Saturday morning was a noisy temblor. Noises of various kinds usually precede, accompany or succeed even a small earthquake of short duration. Some of these seemed to those who heard them to resemble the howling of a storm; the growling of thunder, the clanking and clashing of iron chains, the rumbling of heavy wagons or the shattering of enormous masses of glass. Such noises are transmitted through the ground, the sea or the air.

The consolation which we have through all our little temblors is that only five great earthquakes are known to have occurred in the United States since its first settlement. The first of these was in Massachusetts in 1755. It was fifty-six years before another shock of any proportion was experienced, that in New Madrid, Mo., in 1811. The third was in the Inyo valley in California in 1868; the fourth at Charleston in 1886. It was a bad one and was felt for distances of 1,000 miles from Charleston. The fifth was the San Francisco

quake in 1906. It was the worst ever experienced on this continent, destroying San Francisco and Santa Rosa. It claimed 800 lives and \$300,000,000 worth of property was lost.

No part of the earth's surface is wholly free from such earthquake vibrations, but destructive temblors have been confined to limited regions. No one need move out of Montana because of the work of Nature in trying to rearrange our geological strata and give us a firmer dominion in which to live for a good many years to come. The earth will reach maturity some time--some far away time creation will be completed so we can live in peace.

[Editorial]

[Helena Independent; October 13, 1935]

QUOTES ON THE 'QUAKE

For the benefit of those old-timers who have been saying that there were no earthquakes in Helena in the early days, Charles N. Kessler produces a page from the fly leaf of his father's ledger, penned the latter part of July, 1874. Nicholas Kessler, founder of the city's brewery, wrote the following: "We have just experienced a very severe earthquake. I think that much damage has been done."

Twenty contractors, here for the highway commission lettings Friday, filed out of the Placer hotel after the big rumble yesterday morning, and spent the remainder of the night in their cars.

Some of the boys were having a celebration in a down-town hotel when the big shaker occurred yesterday morning. "COME ON IN!" hollered one of the merry group, "you don't have to knock the building down."

The 'quake even shook the rain loose from the skies. Following the series of temblors at 3 o'clock yesterday morning, the Helena weather bureau reported that .14 of an inch of precipitation fell in the city over a three-hour period.

At the Masonic Home in Helena valley damage due to the earthquake was slight, Superintendent George W. Todd said yesterday morning. A small amount of plaster was shaken down, but this was not regarded as serious. For a while there was near-panic among the residents of the home, all of whom are elderly people, but in due time they returned to their beds.

Charles Greenfield, Jr., perhaps wins prize for the number of shocks recorded at his home in Helena valley. He reported between 75 and 100, while R. A. Strandberg was a close second with between 30 and 40 detected. The Rodney street gang on the east side ran a poor third with less than 35.

An Intermountain student, awakened out of a sound sleep by the tremor, sat up in his bed and said: "I think I felt an earthquake." His room-mate, whose bed was scooted out into the middle of the floor, replied: "Yeah, I think there's one under my bed too."

Those Helena people who have witnessed earthquakes in California said yesterday that the most devastating ones of recent years in the Sunshine state were no more severe than the one here yesterday morning, but that they were of longer duration. Had the one yesterday lasted for several seconds longer, it is believed that the damage done would have been tremendous.

Two students from the State School of Mines are spending a few days in Helena in an effort to find the center of the disturbance. In due time they expect to find an opening in the earth, perhaps in the vicinity of Helena.

One estimable citizen, well known in official county circles, said: "I am usually a calm man but that first shake unbalanced me so far mentally that I went back in the house when I had recovered sufficiently and opened a quart of 15-year-old whiskey that was a special gift and was being saved for Christmas. When I pull a trick like that you know something happened."

Three babies were ushered into the world at St. John's hospital in time to experience the undescribable sensation of an earthquake shock but all came through the ordeal with colors flying. Patients at the hospitals withstood the experience splendidly although nervousness and strain was apparent. There was no panic, however.

Four or five men will have jobs for the next two or three weeks straightening up the mess at the Holter Hardware company wholesale warehouse. A carload of miscellaneous steel had just been unloaded and stacked on the main floor of the building. When the

warehouse was open yesterday, it was found to be scattered to the four winds and it must be untangled and resorted again.

Shortly before the first quake hit the city early yesterday morning, a big Swede, who had touched the bowl too often and too deeply, weaved into a down town bar where over a glass of beer he proclaimed his strength and fighting ability to the world in general and the occupants of the bar in particular. When the tremor rumbled through the bar, every one but "Easy" made a hurried departure. Thinking they were afraid of him and in his unstable condition unable to feel the unstable condition of the world beneath him, he shouted to the fleeing beer drinkers:

"That's right, run. I can lick all you --'s."

Swaying back and forth he quaffed his beer.

Roadhouses and the like are not particularly opposed to earthquakes. When the first tremors started at 12:40 a.m., Saturday, many Helena residents who otherwise would have enjoyed a quiet night's sleep, got up, and fearful of returning to bed visited several of the city's night haunts. The fear continued throughout the day and far into the night. "I haven't taken a drink for nine months," one said, "but here's a go."

[Helena Independent; October 13, 1935]

EXPERT REPORTS ON QUAKES IN MONTANA

Butte, Oct. 13--(AP)--Saturday morning's earthquake had no connection with Montana's disturbance of 1925, and occurred in an area subject to seismic activity, where shocks may occur in the future, nonpredictable as to time and intensity, according to Prof. Harold W. Scott of the Montana School of Mines geology department, he returned today from an investigation trip for the School of Mines.

The state's second recorded destructive earthquake was deep seated, a northwest to southwest fracture, north 30 degree west, in sedimentary rocks of the paleozoic age which deflected in the granite area of the boulder batholith where Helena forms the north end and Butte the south end, the geologist explained.

"Probably no surface cracks were made," Prof. Scott said, "due to its occurrence in the valley east of Helena where the fill of loose material absorbed the shock." He asked that if any surface crack should be discovered near Clasoil, 14 miles southeast of Helena, that it should be reported to the School of Mines.

Mines Okeh

He stated that no known harm to mines had resulted because of the location of the disturbance in the valley away from mining districts.

Geological evidence points to a long period of quiet, during which stresses will accumulate, causing other shocks in the future. Time and intensity of future disturbances cannot be predicted, he said.

To make buildings in Helena and its vicinity earthquake proof, Prof. Scott advised discontinuance of veneer or face brick without bond or ties to fasten it to the back wall; bracing of chimneys with strap iron, and deeper foundations, especially where loose soil is present.

[Helena Independent; October 14, 1935]

SUGGEST EARTHQUAKE RESISTANT BUILDINGS BE ERECTED IN CITY

Because Helena is in what is termed as a definite earthquake area, Sigvald L. Berg, chief architectural supervisor for the federal housing administration in Montana, is urging that the building codes here be revised with the view of constructing places that are earthquake resistant.

These additional precautions in building, he said, would add little to the cost, and would give occupants a feeling of security. Structures of this type are being erected in California, and other states where earthquakes are known to occur.

Berg lived in California for some time, and while there made an extensive study of earthquake resistant buildings.

[Helena Independent; October 15, 1935]

CLOCK IS DEAD FOR 15 YEARS BUT SHAKE STARTS IT UP AGAIN

Among the articles received by Mrs. Elizabeth Goede as wedding gifts, when she was married, was a clock.

It ran well for a short while and then quit. It withstood repeated efforts of jewelers who tried to keep it running. Then it was placed on a closet shelf, where it had stood for 15 years. After last Friday's quake, Mrs. Goede heard a noise in the closet and upon investigating its source she discovered the clock ticking away in perfect rhythm. It was still running yesterday.

[Helena Independent; October 16, 1935]

TREMORS TUESDAY ADD SLIGHTLY TO DAMAGES IN CITY Continuation Keeping People In Highly Nervous State

Two brief but fairly sharp earth tremors rumbled under Helena yesterday afternoon and added slightly to the \$50,000 damage toll resulting from the initial severe quake that disturbed the city early Saturday morning.

The two most distinct quivers came at 2:09 and 2:21 p.m., and another lighter but fairly noticeable movement came about 4 o'clock. Such additional loss as occurred was limited entirely to the extension of damage already caused by the Saturday quake.

Rumble of Trucks

Gaps in cracked walls were widened and extended in some instances and some plaster loosened by the previous shock was shaken down. A few shaky chimneys were further weakened and one or two windows were broken.

Continuance of the vibrations had a large number of the residents in a highly nervous condition last night--ready to jump at the rumble of a truck in the street or a sudden gust of wind and it is believed that a number of the suspected tremors were in reality due to these causes

Many left town to stay with relatives or friends until the earth under Helena quits its quivering. Others left doors of their homes wide open, to cut down their elapse time to the middle of the street.

Spells of hysteria and nausea were common especially among the women. Some reported a headache at each earth shock, and others experienced twitching leg muscles. Only a few hours of restless sleep each night seemed to be the quota for a number of people.

Verified Only

Weather bureau officials said their total of quivers included only those that had been verified and felt distinctly in the bureau office on the fourth floor of the federal office building. They said there may have been more, either not felt in Helena or of not enough intensity to jar the stone federal building.

A steam pipe at Intermountain Union college was broken by one of the sharpest quakes of the afternoon. One class at the college was dismissed when two young women members were affected, one succumbing to hysteria and the other fainting.

Several schools dismissed classes yesterday afternoon. The schools were in the sector of the city where the tremblers seemed to be striking the hardest. More plaster fell at the Bryant school.

The veterans' hospital at Fort Harrison was not greatly affected by the afternoon's display of earth jolts, but officials have marked out areas around cracked chimneys and walls there in which no one is allowed.

A window in Helena's old high school building snapped in the afternoon, and plaster cracked in the auditorium of the city's recently completed PWA high school structure.

[Helena Independent; October 16, 1935]

TWO TREMORS FELT IN CITY WEDNESDAY

Lewis and Clark county settled down pretty well yesterday, with two tremors reported, exactly 12 hours and 45 minutes apart. The first was yesterday morning at 10:37, while the one last night at 11:37 was quite noticeable. This brings to 52 the total number recorded at the Helena weather bureau since early Saturday morning. The fact that the quivers are so far apart indicates that the "earthquake season" is drawing to a conclusion.

[Helena Independent; October 17, 1935]

ONE KILLED, SCORE HURT, BY TREMORS WHILE PROPERTY LOSS MAY BE OVER MILLION

Many Are Left Without Shelter And City Is For Time Demoralized; East Helena Also Suffers Severe Damage; East Side And Sixth Ward Are Worst Sufferers In Helena

One person was killed, a score or more were injured and property damage estimated at upwards of \$1,000,000 was suffered in Helena last night when a devastating earthquake rocked the city at 9:52 o'clock, lasting 10 or 12 seconds. The condition of some of the injured is serious.

Lights and power were down for nearly an hour and communication was paralyzed for nearly that length of time, completely demoralizing the city. Many buildings and homes were partly or entirely demolished and scores were left without shelter.

Guard Held Ready

Col. E. H. Williams, adjutant general of the state, mobilized the national guard here and ordered it to hold itself in readiness to be called out for any emergency. He was waiting for orders at 11:30 o'clock last night.

People climbed into their cars and fled from the city in terror. They took blankets and what few belongings they could gather in a mad rush and prepared to spend the night in their automobiles.

The dead man was Dave Harris, 23, colored, who was buried under several tons of brick when the front wall of an old two-story building on South Main street near the corner of Wood, fell out. Harris was caught in the middle of the street.

East Helena suffered severe damage and a number of buildings were reported collapsed. Several persons were injured and it was indicated that the loss would run high.

Paralyzed

Despite the efforts of the telephone operators to handle the load, communication was paralyzed for more than two hours and it was impossible to reach many parts of the city and surrounding vicinity.

Damage was widespread throughout the city, the entire east side and the Sixth ward suffering particularly. Many homes were destroyed or so badly damaged that they will have to be rebuilt.

Besides those confined in the hospitals, many others were given emergency treatment and released or were treated at their homes or doctor's offices.

The fire department moved all apparatus from the fire station in the old city hall building and held it in the streets in readiness for any emergency.

The main business section of the city, however, from Broadway to Helena avenue, escaped with little or no damage. If there was any substantial loss in this district it was not apparent last night.

The new Helena high school building, the Bryant school, Intermountain Union college, the national guard armory and other large buildings suffered heavy loss. The north wall of the Bryant fell out and the other walls were badly cracked. One wall of the high school was said to be badly cracked and the interior was much damaged. The armory was nearly razed.

Two Small Fires

The city fire department answered three calls, one a false alarm. Another was a blaze in chemicals in the science department of the high school and the third was at 1601 Boulder where a broken gas pipe caught on fire. Both were quickly extinguished.

The terrific, rocking shake last night followed a series of four or five fairly sharp tremors

that occurred during the day. These, however, gave no premonition of what was to come. The earthquake was widely felt over western Montana but there were no reports of damage on the outside.

Radio Station Hit

Northwest airlines, Inc., announced that the company's radio station here had been disabled as a result of the earthquake shock which shook Helena.

The westbound transport plane due in Helena early Saturday morning was ordered not to land in the Capital city if the airport was not illuminated. It was a precautionary measure, company officials said. The lights were off and the plane went on to Livingston.

This morning at daybreak E. S. Perry, head of the department of geology at the Montana School of Mines in Butte, and Harold W. Scott, assistant professor of geology, commenced a survey to determine, if possible, the origin of the fault. Dr. Francis Thomson, president of the institution, accompanied the men to Helena.

Receiving stations for the wounded were set up hurriedly in St. Peter's and St. John's hospitals.

Nurses on Duty

The shock has scarcely quieted down after the first severe shaking when 30 nurses in training at St. Peter's arrived at the hospital for duty from the nearby dormitory. Simultaneously a number of persons living in the vicinity appeared and offered their services wherever they might be needed.

Though devoid of lights, persons living nearby sensing the seriousness of the situation, rushed in with lanterns, candles, flashlights and kerosene lanterns.

Emergency apparatus was hastily set up in St. John's operating room to care for the first emergency cases.

Relatives of the injured crowded the hospital halls and nurses and interns rushed about. Due to the confusion as many hospital patients able to leave their beds fled from the buildings, to be replaced by injured.

The Injured

Miss Julia Patton, student at St. Vincent academy, hit by flying bricks.

Miss Marie Kirwin, Union bank stenographer, hit by debris.

A. B. Jackson, 540 Hillsdale, twisted back when caught under falling porch.

Dorothy Korch, East Helena, broken leg.

Major Sol. Peterson, United States property and disbursing officer, severe head lacerations, badly injured nose and face, caught in collapse of national guard armory as he ran out of doors.

Mrs. Lyman Sperry, Helena, badly injured legs when run down by a car dislodged from its parking place by a tremor, just as she left her own home.

Scores of others with minor injuries were treated in quickly established dressing stations in the corridors and hallways of the two hospitals. At least a score or more patients fled from the two buildings as the second severe tremor struck the city.

Anxious relatives poured into the two buildings as soon as the first wave of hysteria had subsided but those with minor hurts were treated and left hastily.

About Campfires

Vacant lots and parkways were filled with people who crowded about campfires to ease the chill of a mountain night.

Terror Stricken

The damage will be in excess of \$1,000,000 according to City Engineer Oscar Baarson who made a speedy survey of the city's property.

Helena's new half-million dollar high school suffered great damage when the tremor shook down plaster and tile partitions in the auditorium and leveled the smoke stack. Large cracks appeared in the walls of the buildings with the gymnasium badly shaken.

In Marlow

Panic and hysteria reigned in the Marlow theater as hundreds of people in attendance made frantic efforts to reach the front doors. Several women fainted and little children cried for their parents as the lights went out and a mad rush for the doors followed. Plaster fell from the high roof of the building and the violence of the shock rocked the building from side to side. People shouted and screamed and several were carried from the building. Similar scenes took place at the Rio theater.

The Bryant school again bore the brunt of the shock and one of its walls caved it. The National Biscuit company building in the Sixth ward, badly damaged in Helena's first major quake early last Saturday morning, again suffered a severe jolt and the upper two floors tumbled down.

Depot Hard Hit

Wide-spread damage occurred in the Sixth ward and it was one of the hardest-hit sections of the city. Buildings crumbled to the ground and in one place three houses in a row were leveled, according to a report of the city engineer. There were several persons injured in the ward but as far as could be determined at a late hour last night, there were no fatalities there. One woman received a broken shoulder while one or two others were badly bruised. Some collapsed from the shock and were taken to the hospital as soon as assistance could be found.

The extreme south end of Main street and its intersecting streets and alleys, housing mostly cheap shacks and historical markers of the gold rush days in Montana, was thrown in utter confusion, augmented by the grim-sight of the bloody victim lying on a pile of bricks slapped across South Main near Wood street intersection.

Part of the Shrine temple, one of the city's most spectacular landmarks, was badly damaged and a 40-foot section of the coping on one of its walls was ripped down. The tower remained intact.

Too much cannot be said of the splendid work done by the telephone company and its courageous staff of girl operators. With anxious persons wishing to contact friends and relatives and with long distance wires buzzing the girls remained at the boards.

On Job

"Are you still on the job?" one of them was asked.

"You bet your life we are," she replied.

Among the most serious damage occurred at the U. S. armory building on Warren street off Helena avenue. Col. Erastus Williams made an emergency call for all guardsmen of the Helena company of the national guard to report immediately in uniform. A portion of the company will be used to patrol the armory, where a considerable amount of army equipment is kept, and the remainder is expected to aid local peace officers in protecting Helena property.

Three feet of the coping for a length of about 50 feet fell from the east wall of the Lockey building at Sixth and Allen streets. Considerable damage was reported at the Brown Lumber company where some of the buildings collapsed. The H. Earl Clack station at Helena avenue and Montana avenue was reported almost a total wreck.

Most Severe

City Engineer Oscar Baarson reported that the quake appeared to be most severe in an area paralleling Davis street to the roundhouse. The Cooper, Batch and Haynes homes of

Sixth avenue were among those badly damaged by the quake while two houses in the 900 block on Eleventh avenue, 922 and 924, collapsed from the violence of the shock. Severe damage was also done to the home of Dr. Trerise at 638 N. Ewing. Dozens of other homes were either leveled or partially destroyed.

While comparatively little property damage was done at Fort Harrison and the morale of the patients was being maintained, an order was issued to evacuate the buildings and shortly before midnight all patients were removed and beds erected on the hospital campus. Those able to go to their homes were allowed to do so. The fire department made a trip to Fort Harrison to help in the supervision of the work, but there were no fires reported in the building.

Streets Littered

Coping fell from the Helena apartments in Grand avenue. Stone blocks from the top of the Dempsey garage fell into the alley. Stock of the Safeway store on Main street was toppled from shelves littering the floor to a depth in places of more than two feet. Service stations stocks of flashlight batteries were depleted within a few minutes. Taxicabs became emergency ambulances and many of those injured were taken to hospitals by the cabs. Windows at Fligelman's and Buy Rite Cash grocery were broken. Minor damages to windows, walls and chimney occurred indiscriminately over the entire city. Hospitals were busy and from 30 to 40 persons were taken to the two institutions, some badly bruised and cut, others in bad nervous condition. Shortly after the violent shock occurred, hundreds of Helena citizens packed into their cars and started for the country. A score or more of minor automobile accidents took place on the highways near the city and

several injured persons were taken to hospitals for medical attention. Although the state capitol was in the path of the quake, little damage was done to the main structure although the offices were not inspected. Considerable plaster fell from the walls of the corridors. Both the liquor warehouse and the Helena retail store sustained liquid losses although of minor extent.

On Sixth Avenue

Damage was also reported at Rates store, Fifth and Holbrook; the residence of Art Cooper, 841 Sixth street; the residence of Ed Halin, 800 block on Fifth avenue; the East Side grocery store on Broadway; the residence at 826 Fifth avenue, where Dave Pizer received cuts on the face; the coping on the county courthouse, and the total wreck of a brick residence at Ewing and Twelfth.

Hayden Simpson, once a trombonist for Sousa and Paul Whiteman, brought his horn into action on Main street in a medley of march tunes. Hotel occupants, standing around in night attire, looked surprised.

Although churches in Helena were badly shaken and perhaps damaged inside, the fallen chimney of the Baptist church was the only external damage done. The interior of the First Lutheran was considerably damaged. Grocery stores, garages, residences and apartment houses received a broadside from the quake and scores suffered broken walls and injured properties.

The front of the Capital hotel on Railroad avenue partially was knocked out. The house and barn of W. C. Thiel in the Helena valley were partially wrecked, the only damage reported last night from the valley.

In the Sixth ward the depot chimney was dislodged but did not fall. Fronts of the entire 1400 block on Railroad avenue were damaged. The residence of Mary Rougle, 1314 Lyndale avenue, was totally wrecked. Although two persons were inside the home at the time they escaped serious injuries.

Dwellings

The quake spelled havoc for the residence of W. J. Wilson, 1502 Boulder avenue, but there too residents miraculously escaped injury. The duplex of Thomas Mooney, 1601 and 1603 Lyndale, was totally wrecked. General damage was done to the home of J. H. Doern, 419 Eighth avenue. Considerable damage was reported at the house of Ole Kickbush, Eighth and Davis streets.

The front of the Eighth avenue grocery, 423 Eighth avenue, was broken out and the stock widely scattered inside.

The Barker bakery, Rodney and Seventh, the building was almost totally wrecked and an automobile was buried in the brick. General damage took place at the residence of S. A. Fisher, 335 North Rodney, with the front of the building falling with the quake. Brick veneer on the walls of Lehman's apartment store, Sixth avenue, fell to the ground and other damages of minor nature were reported.

At East Helena, store fronts fell to the street, brick-faced walls toppled and building cornices crashed.

The streets in the little town were littered.

Some damage was reported from the American Smelting and Refining company plant, but this could not be checked immediately.

An East Helena girl was injured and taken to a hospital. She was believed to have suffered a broken leg.

The St. Peter's hospital in Helena reported several earthquake victims were brought in.

For a time, about an hour, the doctors worked under the handicap of no lights.

Relatives of the injured were grouped in the halls of the building.

Relief Organized

Merrill C. Hazzard, secretary of the Lewis and Clark chapter of the American Red Cross, announced that the organization would commence work immediately this morning to aid families whose homes had been destroyed and who were forced out into the streets.

[Helena Independent; October 19, 1935]

HEAVY DAMAGE IN SIXTH WARD FROM VIOLENT TREMOR Homes Demolished And Business Houses Suffer

Helena's Sixth ward received the brunt of last night's quake, many homes in that section being completely demolished, and many of the store buildings being badly shattered. Only a few people received even minor bruises.

The National Biscuit company's warehouse on Boulder avenue had the rear wall shaken out and the roof settled down, crashing through the structure in many places.

Nearly every plate glass window is broken out of the buildings on Helena avenue.

Those suffering the worst damage are Brackman grocery, Gordon Mercantile, Depot drug store, Larson apartments, Curt's grocery store, Montana Meat company.

Side Torn Off

On Railroad avenue the front fell off the Capitol hotel and the walls were badly shattered, all of the glass is out of the Depot Corner store.

An apartment house at 1601 Lyndale had one whole side torn off. All of the occupants escaped injury.

Two brick houses belonging to Anne Warland were completely shaken down.

Both ends of the Bryant school crumbled and the walls were barely hanging together.

The old Northern Pacific land office suffered heavily, the roof and two walls being shaken down.

The Nash Finch wholesale grocery company's office had the rear end torn out. The Christie Transfer company's warehouse was badly shattered, and practically demolished.

Houses Hit

A brick house at 1502 Lyndale belonging to W. J. Wilson was completely demolished, the roof settling to the ground on the top of the debris.

The Purdee home at 1725 Boulder was crumbled but the occupants escaped with minor scratches.

The E. R. Burgan home at 1331 Lyndale is a complete wreck.

The H. Earl Clack garage on Helena avenue had its walls shaken out but the roof still stood on its supports, although it was badly sagging. A number of cars in the garage were badly battered.

Carroll college escaped severe injury as the quake shook the structure. One window cornice was dislodged and fell to the ground but the interior was practically unhurt.

[Helena Independent; October 19, 1935]

SLEEPLESS CITY SORELY STRICKEN BY EARTH TREMOR

By T. M. Metzger

When the sixtieth earthquake to rock the Helena area in a span of seven days struck with a vicious force tonight, a city grown sleepless after nights of uncertainty suddenly verged into hysteria.

Striking with a terrifying suddenness when the less easily disturbed were preparing to try for at least a cat nap after other earlier but mere rattling shakes had hit the city, Helena folk, perhaps unwisely, ran to the streets.

In my district in the western hill section children and their elders screamed and cried with fright as the almost deafening rumble swayed and rolled the city. Though the tremor lasted perhaps ten, perhaps fifteen seconds, it seemed an eternity.

Then -- Darkness

Almost immediately the city was plunged into an eerie darkness.

Near my home the crash of crumpled plate glass punctuated the cries of the hysterical. Those remindful of the appalling California disaster could be heard cautioning others to remain away from doorways; to stay inside and take their chances with the swelling, rolling earth.

Others less cautious and careful, those who dashed at the first booming crash, were caught in the falling cornices and debris but luckily fate was with most of them.

In another second, it seemed, persons cautiously lighted matches, groping their way about in residence yards, down terraces and over fences. Little harried groups gathered quickly in the middle of the street and multi-family conferences were many.

Throughout it all, after the first wave of hysteria had subsided, here was a stoic determination to not become frightened. One family whose yard I visited had handed candles to each member of the clan posted on the front door step, there to stay, they said, for had not previous quakes rocked their home.

Youngsters were hastily wrapped in blankets for in the confusion clothes closets were darkened. Some early retirers dashed into the chill of the early night meagerly clad and their teeth chattering with the weather plus the attendant fright.

Seek Open Plots

From out of apartment houses, particularly those of two or more stories, occupants poured in a steady stream, most of them taking refuge in nearby open plots or parkways. Fires soon lighted the gloom as refuse of any and all description was utilized to add a light and a ray of warmth and hope.

Several times after the first quake the lights bobbed on but only for a moment. Those more adventurous clambered wearily and cautiously into homes in that short interim only to dash hastily out as the lights dimmed and finally faded out again as another roller shook the city. Downtown confusion was even more intense. From the theaters poured the early audience, not orderly, for none could expect complete calm in such a hectic moment. Ushers stood their guard and though some fainted from fright and the rush for exits, none was believed badly hurt.

[Helena Independent; October 19, 1935]

WELL

Sick Man Takes French Leave Of Hospital

Ether anaesthetic and earth agitation do not mix. At least that is the opinion of the attendants at St. Peter's hospital after a man who had been operated upon two hours before took a hasty departure through a rear screen porch.

When the quake struck, a Mr. Green, residing at 1023 Ninth avenue, decided that he would start moving as well as the walls. Two hours before he had been operated upon for blood poisoning in his hand. Disregarding the door in the screen around the porch, Green "made a new door" in the direct line of his flight.

Some time later he was found on his hands and knees and clad only in his night gown by M. C. Hazzard, secretary of the Lewis and Clark chapter of the Red Cross in front of the Nolan residence on Lawrence street. He had managed to make about a block's distance. Mr. Hazzard took Green to his residence only to find that the rest of the family had departed for the country. Neighbors induced Green to return to the hospital. On arrival there he requested that he be taken to the rear of the building as he insisted entering the hospital the way he left. Which he did, crawling back through the hole he made in the screen on his departure.

[Helena Independent; October 19, 1935]

BUTTE, MISSOULA, BOZEMAN SHAKEN But Tremors Are Not Severe

Missoula, Oct 18--(AP)--Missoula people were badly frightened tonight about 9:48 o'clock when two violent earth shocks shook the city from one end to the other.

Two distinct shocks were felt within a period of about 30 seconds. No damage was reported.

Butte, Oct. 18--(AP)--Butte felt a fairly severe earthquake lasting about 30 seconds at 9:50 o'clock tonight.

In Bozeman

Bozeman, Oct. 18--(AP)--Bozeman trembled and heaved for 15 seconds tonight in the most severe shake felt here since 1925 when buildings in Gallatin valley towns were damaged to the extent of several thousand dollars. Tonight's quake came at 9:49 p.m.

Recorded in Spokane

Spokane, Wash., Oct 18--(AP)--The seismograph at Mount St. Michaels indicated the epicenter of an earthquake felt over a large area tonight was in western Montana. Paul Luger, S. J., assistant in charge, said it was impossible to fix the exact area. The first shock, felt here at about 8:54 p.m. (P.S.T.) knocked the stylus from the recording sheet, but the shocks were continuing after it was repaired four minutes later. Luger said it was the severest quake recorded here since the 1925 earthquake in the northwest. Minor shocks continued for 25 minutes.

Felt Far to West

The shock was felt in all parts of the Inland Empire. It was reported from Walla Walla in southeastern Washington and Sand Point in extreme northern Idaho.

Many persons ran excitedly from apartment houses in Spokane as pictures on the walls and light fixtures swayed. Windows rattled and chairs were moved.

Moscow, Idaho, reported three or four distinct shocks.

[Helena Independent; October 19, 1935]

HELENA IS ALMOST DESERTED AFTER SERIES OF QUAKES ROCK THE CITY BUSINESS AT STANDSTILL AND GATHERING FORBIDDEN

It May Be A Week Before Authorities Allow Resumption Of Normalcy; Damage In City Conservatively Put At Two Millions But Business District Stands Up Well

Helena was almost deserted today as its residents, many frantic from the devastating quakes of the last few hours, are leaving the city for other points in the state until the earthquake tremors subside. Business was at a standstill Saturday with almost every establishment in the city closed.

Following a conference with city officials, State Fire Marshal Arthur C. Parsons issued an order that all public gatherings of any nature would be banned until further notice. By virtue of the ultimatum, restaurants, beer parlors, schools, churches, stores and other places where gatherings took place were closed. It may be tomorrow, it may be a week or more, before the state fire marshal and city officials allow Helena to resume its customary course.

Helena looked over its disaster today and counted damages conservatively placed at \$2,500,000. While the business district stood up under the shock of the tremors, as a precautionary measure it was roped off by order of city officials and all traffic was barred. Pedestrians were warned to keep away from high buildings.

Patrol City

The Montana highway patrol was brought into service and last night aided local peace officers in directing traffic and patrolling the streets. State Fire Marshal Parsons conducted a survey of the city and several building partially wrecked by the quake were condemned. The chimney at St. John's hospital was shot down with high-powered rifles and several more were to be added during the day.

A special meeting of the city council was held Saturday and a state of emergency declared, by virtue of which City Engineer Oscar Baarson was given full authority in the condemnation of Helena buildings constituting potential damage hazards.

The national guard was called out at 8 o'clock Saturday evening to help officers patrol the city. Thirty-five were on duty at a time. Most of these were stationed through the downtown district, while two trucks patrolled the east and west sides of the city. They were continued on duty as long as required.

Two Are Dead

With the city virtually trembling with fear and with subterranean shocks occurring at almost regular intervals, only one business house balked at the idea of protecting the lives of people in the city. Paul McAdams, manager of the Rio theater, asked permission of the state fire marshal to open the doors of the amusement center. The request was denied. Crumbling walls and flying debris brought serious or painful injury to at least nine people, death to two and minor cuts and bruises to many more, a check of Helena's hospitals revealed.

The dead are Dave Harris, 23, a negro, and Charles Siggelink, a cook at the federal transient camp. Harris was mutilated from the first violent quake Friday night, when a two-story brick building collapsed on South Main street, pinning the victim under several tons of brick. Siggelink died yesterday morning at 7 o'clock at St. Peter's hospital of injuries received when a transient camp building crumbled.

Nine in Hospitals

Although from 30 to 40 persons were treated for quake injuries, but seven remained in the two Helena hospitals today and their condition was reported "satisfactory."

Those at St. Peter's hospital were Louis Bergher, address unknown, severe head lacerations suffered while standing near the Montana hotel; Mrs. Dana Sorrick, 1630 East Lyndale avenue, cook at the Northern Pacific depot, fractured arm; Major Sol Peterson, lacerated and bruised when caught by the collapse of the national guard armory; Mrs. S. W. Koich and daughter, Dorothy, East Helena, latter suffering a broken leg. But two patients remained at St. John's hospital. They were: Miss Marie Kirwin, stenographer at the Union bank, injured when struck by falling debris as she left her apartment back of St. John's hospital; and Miss Julia Patten, teacher at St. Vincent's academy, struck by flying debris.

Condition Serious

The condition of Miss Marie Kirwin, Union bank stenographer, and Miss Julia Patten, St. Vincent teacher, was considered grave, with both suffering from brain injuries, according to the attending physician, Dr. B. C. Shearer. The two women, patients at St. John's hospital, however passed a satisfactory night.

Miss Irene Tuck, 836 North Jackson street, also received serious scalp wounds Friday night when she was struck by a falling brick. She was treated at the hospital and later was allowed to remove to her home. Miss Tuck is a telephone operator.

Others taken to the hospital Friday night were released yesterday and today after their injuries were treated. Hospital attendants said that only the names of cases serious enough to remain there under care were taken and the identity of those treated for minor cuts and bruises was not learned. Patients bore the temblors with fortitude, attaches reported. Those able to leave the hospitals did so and their places were taken by the more seriously hurt. Neither of the hospitals was badly damaged.

Others Hurt

Others treated at the hospitals but released included A. B. Jackson, 540 Hillsdale, twisted back when caught under a falling porch; Mrs. Delia Sperry, 114 Grand street, legs injured when run down by a car dislodged from its parking place near home; and Dave Pizer, 826 Fifth avenue, badly cut on left cheek as his home was wrecked.

While no report has been issued by geologists from the Montana School of Mines in Butte, who are conducting a survey in the Helena area to locate the origin of the fault, cracks 150 feet long, two or three inches wide and three feet deep were opened near the Stanchfield gun club grounds in the Helena valley, W. E. Maughan, meteorologist at the Helena weather bureau, reported yesterday afternoon. The cracks, he said, indicate that there was terrific pressure on the earth at that point but they do not go down to rock formations to indicate whether or not the fault there has settled.

Call for Aid

With many families left homeless by the violent tremors, the Helena Chamber of Commerce is asking cooperation of all citizens in an effort to solve the city's housing problem. It has issued a call for persons who are willing to share their houses with neighbors. "Help each other" was the motto adopted by the organization.

"After thoroughly surveying the damage done by Friday night's earthquake here, I deem it a miracle that scores of people were not killed," said Walter Beck, assistant Montana highway patrol chief. Every section of the city suffered severely, Mr. Beck said, particularly the east side and sixth ward, where many homes and business houses were literally shaken to the ground.

With dire straights confronting some and terror still seizing many, Monsignor Victor Day of the Catholic diocese of St. Helena, issued a call to his parish leaders to add to the mass the prayer, "Tempora, Terranemotus," or relief from the earthquakes.

As the growling continued the situation retained now and then a bit of humor such as that found in the case of Zebulon Melhorn, cafe proprietor, who after laboring ceaselessly for hours to feed the many, determined to lock up and call it a day only to find the place had not been bolted in 28 years and no key was available to turn the lock.

Warning Given

With the danger still lurking in every jump of the earth, authorities tonight urgently cautioned householders to immediately remove damaged cornices and chimneys to avoid further casualties. Buildings already weakened by days of pounding, they feared, might collapse if the quakes continue.

A more minute survey of the property losses suffered disclosed many cracks and twists uncovered until daylight ended the night of that. At the county hospital in the valley it was found desirable to evacuate all patients and abandon the building. This was done with no delay.

In the same region at the Deaconess school for children the structure was found cracked from top to bottom and in a dangerous condition.

In the Northern Pacific railroad yards in the epicenter of the quakes vast losses were sustained in shattered warehouses and freight buildings and a wrecked section of a huge roundhouse. School building losses were estimated at from \$150,000 to \$300,000 with one building a total wreck.

The East Helena plant of the American Smelting and Refining company suffered to the extent of between \$5,000 and \$10,000.

Though Helena generally was ready to accept what might come, many were making an exodus to ranches, resorts, and to other Montana cities and railroads reported the heaviest day's outgoing passenger business in months.

Townsend yesterday extended a neighborly hand to Helena and persons rendered homeless by the devastating tremors are invited to Townsend, where places will be provided for them, according to announcement made by Frank McCarthy, secretary of the chamber of commerce there.

Persons wishing to take advantage of the friendly move on the part of Townsend people should get in touch with Mr. McCarthy there.

[Helena Independent: October 20, 1935]

COOPERATION AND PATIENCE NEEDED

With cooperation and patience on the part of people of Helena and the public service

companies, normal conditions will soon be restored in Helena in safety. The damage as a result of the earthquake is widespread, even in places where from outward appearance, there is little or no sign of the weakening of chimneys and walls. While chimneys have been shaken heavy fires should not be started in coal burning furnaces or stoves until the flues are thoroughly inspected and all obstructions removed. This is even more necessary where natural gas is used. As the weather is mild it is safer to

This is even more necessary where natural gas is used. As the weather is mild it is safer to turn off the gas entirely until the flues can be examined and brick or soot removed. Many who depend on natural gas for their principal heat, also have fireplaces. It is safer to use the fireplace than to turn on natural gas until it is made positively certain that the flues are not obstructed in any way.

Officials of the Montana Power Company hastened to Helena from Butte early Saturday morning and they have as large a crew of experts on the job as possible. They reported no breaks whatever in their gas mains, and said they would hasten inspections as rapidly as possible but customers must not depend on them entirely and any reliable person who can inspect and clean chimneys should be employed when the Power company will make the inspections as soon as their crews can reach places where damage has been reported.

[Helena Independent; October 20, 1935]

SEISMOGRAPH RECORDS OF HELENA QUAKES TO BE STUDIED

Seismograms--records--of the Helena earthquakes are being sent to the geology department of the Montana School of Mines for a study into the causes of the earth movements.

The records were made on the Montana State college seismograph, located in the sub-basement of the engineering building there. It is the only instrument of its kind in Montana and shares honors with one in Spokane, Wash., as one of the only two in the Rocky mountain region.

The Helena quakes were clearly recorded on the machine and required for minor shocks, 20 seconds to reach here. They moved the recording needle one-seventy-fifth of an inch. "Every earthquake of any magnitude that has occurred in any part of the world since the instrument's installation has been recorded here," Professor Therkelsen, who has charge of the recordings, said.

"We have recorded quakes in both India and Madagascar, the former taking over half an hour to reach us here after it had occurred."

Three impulses are usually recorded. The first received is the direct impulse, the second is one reflected from the core of the earth, and the third is an impulse which follows the earth's crust.

[Helena Independent; October 20, 1935]

QUAKES RECORDED IN HELENA REACH 249 MARK TODAY Total Of 190 Are Felt Since The Big One On Friday Nite

The temblor at 12:26 today was the 249th to be recorded at the Helena weather bureau a week ago yesterday morning when the city was severely shaken for a few seconds shortly before 1 o'clock. It was also the 190th since the one Friday night that did the big damage, recorded as the 60th.

W. E. Maughan, meteorologist at the Helena weather bureau, said this morning that after the big temblor, the shakes continued with nearly steady frequency over a period of an hour and a half. None of the quakes since that time have been of more than two seconds duration.

Since midnight there was only one of two seconds time, and that was recorded at 3:10 o'clock this morning. There had been 55 tremors felt in Helena since midnight at 12:26 o'clock this afternoon.

It was noticeable said Mr. Maughan, that the lighter shocks, give a quivering or waving motion and are of less duration than the heavier ones that come with a jolt.

[Helena Independent; October 20, 1935]

WED * * * * * * * * *

Couple Decides Not To Honeymoon Here

Rob McAlister, former resident of Helena, and Anna Olerich, both of Great Falls, decided to get married. If wed in times like these, they thought, and where the quakes were the toughest, their married life should never get to rough to weather.

They came to Helena to have the knot tied. While they were in the courthouse Saturday morning one of the medium-sized rollers waved up the floor and jiggled the counter holding the register book.

The bride-to-be turned and fled the building. Following her came the groom-to-be, carrying the register book and the seal, and Ed Jasmin, the clerk, carrying the pen and ink. The license was written out on the courthouse lawn, much to the delight of many

bystanders. Then they set out to find a priest to marry them.

Monsignor Victor Day was located and agreed to administer the nuptial oath.

After the marriage, the couple decided that they had had enough of earthquakes and would rather spend their honeymoon in a more restful spot, so they went back to Great Falls.

[Helena Independent; October 20, 1935]

BEAUTIFUL ITALIAN MARBLE ALTAR OF CATHEDRAL RUINED

Unestimable loss was suffered at St. Helena cathedral by earth shocks which caused the beautiful marble cross surmounting the crucifix scene high above the main altar to tumble and break. It was made from the finest Italian marble imported to the country when the church was first constructed, according to Father Hugh Faley, assistant pastor of the parish. Also destroyed were the altar steps, also composed of the imported stone. One small spire fell on the outside of the building while at least two pillars were loosened on the interior of the building. The parish house was not damaged.

Cracks appeared in the walls of St. Paul's Methodist-Episcopal church on Broadway where openings of from one to three inches were plainly visible at the point where the walls and roof joined. Some of the walls were also pulled outward.

Many Churches Escape

St. Peter's pro-cathedral, located on the west side of the city, suffered practically no visible damage. A party was in progress in the club rooms of the church when the temblor came and those attending remained orderly, Dean H. H. Daniels reported.

No damage was reported at the First Christian church at the corner of Benton and Power on the west side, while the First Presbyterian, located close to the center of the danger zone on the east side suffered no damage, according to the pastor Rev. James Robertson. Plaster was cracked from the wall of the First Lutheran church and one entire wall in the parsonage fell in, according to the Rev. Emil Ziegler, who stated that considerable plastering work will be needed to repair the building. No one was injured.

Shoot Down Chimney

It was deemed necessary to knock down the chimney of the heating plant at St. John's hospital which was badly damaged. This was accomplished by rifle fire on the weakened structure late Saturday afternoon. Rev. Martin Rigstrom of St. John's Evangelical Lutheran church said there was "no damage of any kind" at his church. No inspection was made at the time of the organ to determine if it had been injured.

The undertaking parlor at the corner of Rodney and Broadway suffered severely from the shock. Walls of the building cracked and sprung and the stucco exterior scattered all over the premises and streets surrounding it.

Store Ruined

On east Broadway, walls of an apartment building fell, crashing through the roof on the Log Cabin grocery store, ruining the stock as well as the ancient structure which was at one time the home of an early-day pioneer.

Many brick buildings of the duplex type scattered about the city, received serious injury through sprung walls, falling brick walls and falling balconies and porches.

Helena's new half million dollar high school, finished only two months ago, and occupied only since the beginning of the fall semester, was extensively damaged by the terrific earthquake here Friday night. The above photo shows the east wall of the auditorium, which was badly shattered by the tremor. Contractors and architects who built the structure said that the entire auditorium wing would have to be replaced, at a cost of between \$100,000 and \$150,000.

The lower picture shows the effect of the quake on one of Helena's older buildings. The National Biscuit company warehouse, on Boulder avenue which was seriously threatened by the tremor a week ago, was destroyed beyond repair last Friday. The warehouse is located where the quake did its greatest damage in Helena, the Sixth ward.

[Helena Independent; October 20, 1935]

WHERE TO CALL FOR HELP IN EMERGENCY

All persons needing relief or assistance by reason of the earthquake are requested to call any of the following numbers, Sam Roberts, chairman of the Lewis and Clark chapter of the Red Cross announced today.

Direct appeals by refugees may be made by calling 1270 888 or 2507. Persons knowing of others who need assistance should call 888 or 2507. They are urged to obtain full details regarding the reported cases.

[Helena Independent; October 20, 1935]

CONGRESSMAN MONAGHAN WIRES WASHINGTON FOR IMMEDIATE RELIEF TO STRICKEN CITY

One of the first to act in the emergency created by the earthquake was Montana's junior representative in congress, Joseph P. Monaghan, who early Saturday sent two important wires to Washington directing Secretary of War George P. Dern and the federal housing administrator to take immediate steps to relieve conditions here.

Mr. Monaghan's wire to Secretary Dern follows:

"Many hundreds homeless tonight as result of terrific earthquake, Helena, Mont:, last night stop. Visited city today find people in streets in desperate condition stop. Please arrange for camp stoves, bedding and tents and army emergency relief equipment as needed stop. Act promptly tonight and advise.

JOSEPH P. MONAGHAN,

MC, First Montana Dist.

In his wire to the federal housing administrator Congressman Monaghan urged that steps be taken for expeditious loans to all stricken people so that the work of rebuilding could go ahead as rapidly as possible. His wire read as follows:

Loss Told

"Hundreds of Helena, Mont., homes crashed as result of series of terrific earthquakes stop. People in desperate condition I personally witnessed today at Helena stop. Please arrange for expeditious loans to all stricken people stop. Please act promptly as possible and advise."

Mr. Monaghan sent the same wire to the federal home loan administrator at Washington. **[Helena Independent; October 20, 1935]**

INTERMOUNTAIN COLLEGE BOARD WILL DETERMINE IF CLASSES CONTINUE President Jesse W. Bunch Asks Meeting Of The Board To Consider Course To Be Taken With Damaged Buildings

A meeting of the board of trustees of Intermountain Union college was to be held today to determine if class work was to be continued at Helena hall, main building of the campus. The call was issued by the Rev. Jesse W. Bunch, president of the institution.

Damage to the school buildings was impossible to estimate but was confined chiefly to the new gymnasium and Helena hall, both of which were badly cracked. It is believed both will have to be at least partially rebuilt.

Gym Damaged

A portion of the west wall of the gym fell out at 9:47 Friday night while students and others were gathered at the hall to celebrate their first victory over the School of Mines football team. It left a gaping hole in the wall. Many tiles that were completely torn out of the wall landed on the floor inside.

The lower floor of Helena hall is not severely damaged although it looks bad as the plaster is cracked and fallen off in quantities. Class rooms upstairs and the chapel are the most severely damaged. The large cracks extend not only through the plaster but through the outside walls and the class rooms appear unsafe for use.

Mills hall, the dormitory and residence hall, looks badly damaged but most of the ruin there is of a surface nature. Unofficially it was said that the substructure of the building is not damaged but an official appraisal has not yet been made. There, chiefly on the first floor, pieces of plaster from five to 10 feet in diameter, are knocked off with some damage to fixtures and room furnishings. The building was completely repainted and refinished during the summer and that work is completely lost. The lower portion of the building will have to be replastered completely.

Reinforced by Steel

Mills hall is of better construction than Helena hall, having reinforced steel girders as a structural foundation and it stood the temblors far better.

President Bunch said students at the college were calm during the quake and seemed to have control of themselves at all times. Only a few boys ventured to sleep in their dormitory rooms last night, the others either carried their mattresses to the campus and stayed there, rode around the city in autos or stayed in the new lodges being constructed on Eleventh avenue. The lodges were not hurt.

A few students had gone back to their homes for a few days but President Bunch said he expected they would return and he anticipated no loss in enrollment.

[Helena Independent; October 20, 1935]

ENGINEER'S ESTIMATES OF LOSSES Will Be High It Is Possible That Helena Damage Is 3 Millions

Helena, the capital city of Montana, whose streets and hills have yielded upwards of \$100,000,000 in gold, has suffered a loss of fully \$2,500,000 in property damage, City Engineer Oscar Baarson estimated vesterday.

The total may reach or exceed \$3,000,000 it is believed. It is almost certain that each day will reveal new damage not at the present time perceptible.

Damage was widespread and general but the loss was far less on the west side of the city, lying on the lower slopes of Mount Helena, than in the other sections. Hardly a block in the city escaped without damage of a greater or lesser degree.

The Sixth ward and Northern Pacific depot district was the hardest hit of all and the damage in that district will be tremendous when it is totaled. The depot, business building, schools and churches were so severely shaken and damaged that many will have to be rebuilt.

On the east side, the damage area covered the entire section east of Warren street. Scores of homes were hit almost beyond repair and there were few buildings of any kind that did not show some ravages of the terrific rocking. Where dwellings structurally withstood the tremor, loss of furnishings, dishes and the like was heavy. Rooms turned topsy turvy, windows were shattered, pictures and mirrors were shaken down and heavy furniture was overturned and thrown about as it were stove wood.

Wild disorder was apparent everywhere and yards and streets were littered with debris. City street department employees and FERA workers started the cleanup early Saturday morning and most of the principal streets were cleared yesterday. The work will continue as emergency relief activities are organized.

City Hall

Helena probably will have to have a new city hall. The old building at the head of Main street is so severely damaged that it appears improbable that it can be repaired. Nearly all the plaster was shaken down, partitions were shaken loose and the rear wall was ripped loose, bulging out more than 3 inches at the top.

The county courthouse and jail buildings suffered considerable damage, the amount not yet determined.

Twenty-two men and four women prisoners in the county jail were saved from possible injury last night when a large quantity of brick, loosened by the quake, fell through the inner ceiling and landed on the floor just inside the first door to the cell blocks.

The prisoners were kept inside the small entrance way when the bricks fell and not one was injured.

"All remained orderly, although they wanted to be released," Jailer Ben Rinda said today. "We gave them as much safety and protection as possible, at the same time keeping them confined to the jail."

Walls Bulge

Other damage to the jail consisted of wreckage of the north outside wall, which fell to the street, and the bulging of the east wall.

At the county courthouse, one or two large cracks appeared high up on the outside of the building but County Commissioner A. J. Coty said, after a detailed inspection had been made, the building was found to be in good shape.

Inside a large quantity of plaster was torn loose. Portion of the high chimney on the east

side, fell to the ground.

The state capitol and the federal building were two outstanding structures that apparently escaped damage other than cracked plaster and other minor items.

Extraordinary precautions were taken to protect life and property and the more heavily damaged sections of the city were roped off.

Cathedral Suffers

St. Helena cathedral, beautiful million-dollar structure, has suffered severely. In addition to heavy loss inside the structure, one of the spires was shaken loose and another sharp shock might topple it over, City Engineer Baarson said.

Loss will be considerable at the Shrine temple where large sections of the coping was shaken down on several sides and much damage was done inside.

The Larson block and apartments at the N. P. depot was so badly torn that it will have to be evacuated by stores and tenants until it can be partially rebuilt. Lehman's market on East Sixth avenue was almost demolished. Much brick was shaken down and all of the walls are bulging. It was indicated yesterday that it probably would have to be torn down.

Shoot Stack Down

At St. John's hospital, the damage was chiefly confined to the smoke stack. A section fell out, leaving a large hole. Fearing it would topple on the building, state patrolmen and other officers shot the top down with rifles Saturday afternoon.

At 67 South Main the front wall of an old building fell into the street, and the rear wall onto Jackson. It was here that Dave Harris, negro, was caught under an avalanche of bricks and killed.

At the A-A garage, the west part of the upper front wall was cracked and buckled so badly that it must be pulled down and rebuilt. Part of the side wall of a building at Wood and Jackson streets also came down.

As early as 8:30 o'clock a crew of men, under direction of Councilman Noble P. Evans, commissioner of streets, was busy clearing away the debris.

Several South Main street front walls, considered to be dangerous because weakened by the quake, will be roped off to protect the public, Chief of Police Roger Smith said.

Buildings on State street likewise were damaged, several of them considerably.

Already making plans for rebuilding and with crews at work tearing away the completely lost structure, officials of the H. Earl Clack company took first steps yesterday to erect a new building at the intersection of Helena and Lyndale avenue's.

With the walls gone and the roof held up only by a huge Northern Pacific transport bus and a truck belonging to the Capital Commission company, not a one of the eight or 10 other automobile garaged in the structure were damaged in the least.

Two men, C. Oakley Brown and Larry Burdett, were in the building at the time of the big quake struck. Both, however, were working under the N. P. truck and neither was injured. "A horrible noise, with bricks falling everywhere and the truck going ahead and sideways at the same time," was the way Brown described the crash this morning.

He and Burdett stood in the doorway until the bricks ceased to fall and then escaped to the open, neither injured.

N. P. Loss Heavy

Friday night's quake caused hundreds of thousands of dollars damage in the Northern Pacific yards, according to C. A. Mattmiller, roundhouse foreman.

Every brick building in the yards was twisted and sprung, and about half of the huge chimney fell to the ground.

The boiler room suffered considerable damage as the roller twisted and flopped the pipes

and flues around.

In the railroad repair shops, machinery was tipped over, rails were bent out of shape and benches lay scattered in confusion over the room.

Most of the roof of the Christie Transfer and Storage liquor house, west of the Northern Pacific depot, fell in and pushed the walls out. One of the walls fell on a freight car loaded with whisky, which was being unloaded into the warehouse and nearly struck Ray Howe, employee, who was doing some office work. A considerable amount of whisky was lost. **[Helena Independent; October 20, 1935]**

BRAVE

Parents Show Fortitude In School House

Great fortitude was shown by a group of persons attending a Parent-Teacher meeting on the third floor of the Kessler school building in Kenwood when the hardest of the quakes hit at 9:47 Friday night, according to Chief of Police Roger Smith, who happened to be in the building attending the meeting.

The lights were extinguished and every condition necessary to promote a panic was present, yet the 55 people present remained in the building and showed great restraint in the face of impending doom but left the building in an orderly manner. They were aided by two or three persons having flashlights, and with the aid of these all left the building without injury.

"The bravery of those people and especially the women, was remarkable," Mr. Smith declared. "Every condition preceding a panic prevailed, but aside from a first-impulse rush for the door, the crowd behaved splendidly. I am certainly proud of that group."

[Helena Independent; October 20, 1935]

RELIEF FOR HOMELESS IS QUICKLY ORGANIZED; CAMP SET UP AT GUARD GROUNDS

Emergency relief for those made homeless by Helena's devastating earthquake Friday night was organized swiftly Saturday and during the afternoon a refugee camp was opened at the national guard grounds west of the city.

The American Red Cross and the FERA joined in establishing the camp. Nearly 100 national guard tents, obtained from the armory, were set up and bedding was provided. Kitchens and first aid stations were established and the camp was prepared to take care of all demands. Approximately 400 persons spent Saturday night there.

The work was accomplished under the direction of Sam A. Roberts, chairman of the Lewis and Clark chapter of the American Red Cross, and F. H. Marvin, director of emergency relief for the FERA.

In Charge

Paul T. Carlson, field representative for the national Red Cross, arrived by plane early Saturday evening from the St. Louis headquarters to take full charge of the relief activities. Temporary headquarters have been opened here in the offices of the Montana Livestock Loan company in the old National Bank of Montana building at Main and Edwards, and Saturday afternoon, the entire city was canvassed to determine those in need of help. The survey was conducted by employees of the Union Bank and Trust company, the First National Bank and Trust company and the Federal Reserve bank.

Persons forced from their homes who need quarters at the relief camp are requested to call 1279 and they will be advised what to do. Others who know of persons needing assistance are asked to obtain full details of the cases and needs and phone 888 or 2507.

Well In Hand

The survey of the city Saturday showed only a comparatively few persons in need of immediate relief, but a large number required temporary living accommodations and food. Chairman Roberts announced today that the camp would be maintained as long as there is any need for it, although the efforts of the officials will be directed toward getting people back in their homes as rapidly as possible. Workers will be delegated to clear up debris and make inhabitable the dwellings that are not badly damaged. Other accommodations will be provided for the persons whose homes are so badly wrecked that they cannot be made livable except by extensive repairs or rebuilding.

Parents are also urged by Chairman Roberts to keep their children home, particularly from the downtown streets which would be the most dangerous place they could be should walls be shaken out of business blocks.

Wires For Aid

After making the preliminary survey, Chairman Roberts dispatched the following telegram Saturday afternoon to William Baxter, Jr., director of the Red Cross headquarters at St. Louis:

"Preliminary survey of earthquake damage shows very heavy property damage running into millions of dollars but few injuries of serious nature and comparatively small amount of personal distress. stop In cooperation with FERA, we have set up camp at national guard camp grounds with shelter and food. stop Have over one hundred and fifty people there now and expect substantially greater number tonight. stop Principal problem will be housing and furnishing assistance for home rehabilitation to people who have no ability to handle work for themselves or through existing agencies. stop We urgently need National Red Cross assistance for such work, stop Temporary assistance to people in distress

condition will require more than ability of local chapter to pay, but impossible to make any accurate estimate now but think will require several thousand dollars. stop Need disaster representative immediately."

Mr. Roberts also stated that sufficient Red Cross and federal funds had been assured to meet every demand for relief that might be made.

[Helena Independent; October 20, 1935]

MONAGHAN URGES RELIEF

Congressman Joseph P. Monaghan was one of the first public officials to arrive in Helena Saturday to see what if anything he could do to be of assistance to the people of Helena and vicinity to aid them in repairing and rebuilding. He was accompanied by his brother and spent several hours looking over the situation.

Early in the afternoon the congressman telegraphed Relief Administrator Harry Hopkins: "Visited Helena today: damage done by earthquake inconceivable. More serious damage threatens unless relief workers from other parts of the state can be ordered here immediately to assist in removing shaky construction and bolstering up infirm walls and chimneys, also direct relief necessary for helpless and homeless people. Please act quickly and advise.

JOSEPH P. MONAGHAN, M. C."

[Helena Independent; October 20, 1935]

TELEPHONE OPERATORS STICK TO POSTS; 700 RECEIVERS ARE SHAKEN FROM HOOKS BY QUAKE

During the serious quakes of Friday night, the Mountain States Telephone company handled the situation capably and every local and toll position was occupied the entire night as the greatest volume of business in the history of the state organization took place, it was announced by Walter C. Fallon, Montana traffic superintendent.

The telephone company, particularly the girl operators and the plant force, was highly commended for its splendid work during the quakes. When the first major shock took place Friday night about 9 o'clock several of the operators not on shift volunteered and at 10 o'clock when the serious tremor occurred every operator had volunteered and a full force of 55 girls was at the switchboards, Mr. Fallon said.

Many Obstacles

The operators were handicapped by the fact that the tremors had dislodged upwards of 700 telephone receivers in the city and the boards for a time were a mass of colored, flashing lights, the traffic superintendent said. The girl operators refused to leave the switchboards even for relief and every local and toll position was maintained all night. As soon as the power stopped, the plant put on it emergency lights and worked without any more difficulties in that connection. Operators were called into Helena from Great Falls, Anaconda, Bozeman, Livingston and other nearby points, the traffic superintendent said. The full force will remain in the city until the earthquake tremors subside. During the night, special preferential service was given to hospitals, police and fire department, relief associations and the like, Superintendent Fallon said. Special equipment made this service possible.

Volunteer Force

Operators on their vacations and former employees of the company volunteered to go to work and they were all taken on as the organization handled the greatest volume of business, both local and toll, in its history in the state, Mr. Fallon said.

The superintendent thanked the people of Helena for their cooperation and tolerance with the operators during the quake period. He pointed out that often during the greatest rush on the switchboards calls were a little slow in coming through but Helena people "didn't kick." Since the Friday night shocks, the company has received a countless number of calls commending it for loyal community service.

Radio broadcasts of an exaggerated nature were partly responsible for the mad rush on the switchboards, as relatives and friends of Helena people in all parts of the country made frantic efforts to reach Helena by telephone to verify the radio broadcasts, Superintendent Fallon said.

The plant force as well as the operators were praised by the traffic superintendent. He said that the operators refused to quit their posts, and when their time was up slept in the rest rooms until called.

[Helena Independent; October 20, 1935]

PLAN * * * * * * * *

New System To Save Quake Damage

One of the South Main street "weary willies" has evolved a plan to be used in the construction of brick buildings which he guarantees will prevent earthquake damage. Iron rods are to be run through the ends of the building, and on the ends of the rods will be placed huge rubber washers. This system will provide elasticity to the structures, the man said, and the buildings can sway back and forth to their hearts' content without any damage.

"Yes sir, that's just about the best plan I've ever thought up," said the rambler. "Say, by the way," he added, "would you like to buy a petrified tree?"

[Helena Independent; October 20, 1935]

QUOTES ON THE 'QUAKE

No looting of homes following the quake Friday was reported in Helena except at the home of Patrolman Martin Foley, 1538 East Lyndale street, where a pocketbook was taken containing an undetermined sum. This morning, the police station reported that there had been no thefts over the two-day period except an automobile. There was no evidence of other lawlessness in the city.

Although the whole house was in ruin, an electric refrigerator in the apartment of Tom Mooney, 1601 Lyndale avenue, continued to operate and keep the "groceries" from perishing. The refrigerator was hardly moved from its base and nothing inside of it was tipped over.

Because of the great damage at the county hospital, a mile or so north of Helena, the institution has been abandoned, it was announced by the superintendent, R. D. (Dick) Tobin. He said that the buildings were not safe, and that the inmates would go either to the I. O. O. F. home or to the transient camp at the fairgrounds. The only injury at the county hospital was an aged woman whose face was wounded.

Although none of the equipment was damaged, including several army trucks, the state arsenal on N. Warren street was almost completely wrecked by the Friday night tremor. Colonel E. H. Williams, adjutant general of the state, said that most of the equipment was well-packed and therefore escaped damage. Major Sol Peterson, disbursing officer at the arsenal, was severely cut about the head and face when a ceiling in the structure crumbled.

Jacqueline Schrapps, young daughter of Mr. and Mrs. Earle J. Schrapps of 043 North Montana avenue, barely escaped injury, perhaps death when she jumped from her bed and fled to the front of the house during Friday night's quake. In a few seconds the house was practically in ruins, with the young girl's bed left hanging in mid-air, partially in the house and partially outside. Her bedroom was on the second floor.

One of the calmer witnesses of the earthquake was Charles Simpson of Helena, who yesterday morning paid a visit to Intermountain college to register. The girl at the desk at first believed him to be jesting but was later seriously convinced that Simpson meant business. His registration was taken.

Cracked walls and partitions of a minor nature were reported at the federal building, which withstood the Friday night rocker in good shape, Postmaster Harry Hendricks said yesterday. Officials at Washington D. C. inquired about the damage, if any, and Hendricks said that, although none was in evidence, he recommended that a construction engineer be sent here to make an investigation and survey.

Mrs. Albert Goede went to a card party Friday night and for that reason she was alive yesterday. Huge boulders ripped from the walls of her bungalow crushed every object of furniture in the house and flattened her bed.

Dr. L. H. Fligman, president of the Montana Medical association, dropped off a train from the East Saturday just in time to join his colleagues in extending aid to the quake victims. St. John's hospital as well as St. Peter's quickly emptied of patients who could walk, but a new list soon occupied their beds. A nurse was assigned to each at the former place. Freaks were not exceptional in the grinding of the earth for in several blocks but one dwelling would show appreciable damage.

The Helena meteorological station believed the 60th and climaxing quake was a northeast to southwest motion.

The Western Union office was besieged throughout the night and most of Saturday dispatching messages from Helena persons to anxious relatives elsewhere. Manager William War estimated more than 1,000 messages were sent out to all corners of the nation during a rushing three or four hours. To care for the overflow a cable station was opened in a tent on Helena avenue.

One aged Negro who ran from his home on Ewing street just as it collapsed, called a taxi company and forthwith posted \$10 for the privilege of merely sitting in a cab in front of the shambles of his home.

Lamp posts throughout the city swung dizzily about as first one and then another tremor shook them. Most of the twisted lights continued to function.

One family, the Edward Reinigs, whose home was sheered of its brick front, retired to the rear seat of a car parked in a darkened garage in the rear. They admitted they didn't sleep. The Great Falls-Helena highway was laden with cars parked by occupants who were determined to get away from the rocking city. This continued through Saturday. One of the most amusing incidents of the tragedy occurred at where the keeper of the

One of the most amusing incidents of the tragedy occurred at where the keeper of the spigot was filling a flagon when 9:47 arrived. Without any adieu he dashed for the street but forgot to turn off the beer. When he finally returned several inches of brew covered a good portion of the floor.

As some merchants waited on jittery customers Saturday they reached to the floor for wanted articles for the shelves had been emptied by the tremors and no attempt was made to refill them.

When W. E. Maughan, meteorologist, arrived at his office Saturday and prepared to consult a clipping list telling of the many quakes, he found a heavy bust of Julius Caesar reposing on the papers.

While students were clearing the debris late Saturday at Intermountain Union college a prospective student entered the dean's office to register.

The state arsenal on Warren street housing much of the Montana national guard equipment, was a mass of wreckage but fortunately a new caravan of trucks had been removed.

President Jessie W. Bunch of Intermountain Union college summoned a hurried meeting Saturday of the college trustees to consider the condition of Helena hall and to determine if classes could be resumed in the building, badly torn.

Helena was plunged into darkness at the outset of the terrifying tremor when a falling wall carried down a transmission line. There were no serious gas line breaks, however.

With the dust arising periodically as a new tremor struck, the H. Earl Clack company Saturday began removing the debris of its service station preparatory to rebuilding.

A \$50 plate glass table top at the O. A. Hargrove residence was broken into hundreds of pieces but there was little other damage there.

Only one case of looting or pilferage was reported to police Friday night or Saturday, although countless show windows were shattered. The one depredation involved the theft of a purse from the wrecked home of a policeman called on emergency duty.

That scores of people were not killed was the expression of wonder by Walter Beck, assistant state patrol officer, after he had surveyed the damage.

Fifty-five men and women were attending a meeting in the Kessler school when the place was plunged into darkness, but there wasn't even a hint of panic.

Several tons of rock crashed down from a hillside burying the Yellowstone Park-Livingston highway and tearing down communications lines near Chico Hot Springs, it was reported here.

Twenty-seven prisoners in the Lewis and Clark county jail narrowly escaped serious injury when sheet steel from the ceiling, plaster and tile showered their cages. J. Brown, night warden, suffered a cut hand from a flying brick, but he was the only casualty. However, the sturdy old jail building was badly shattered, the east wall bulging out several inches. Of several Helena homes willed to Mrs. W. C. Crum by her late husband, but two remained intact Saturday, and the others were wrecked beyond repair.

Carroll College will remain closed a week and should reopen October 28, Dr. Emmet Riley said.

Through Mayor C. J. Bausch, F. H. Marvin, special representative of the Federal Emergency Relief administration, has offered Helena people assistance in clearing away debris from their homes. The relief workers provided by the FERA will also aid in making small repairs.

A file of all newspaper clippings concerning the "week of tremors" are being kept by W. E. Maughan, meteorologist at the Helena Weather bureau, for submission to weather officials at Washington D. C. The clippings were in good shape following the Friday night shaker, despite the fact that a bust of Julius Caeser had fallen from a cabinet and pinned them to a desk.

Bennie Jacobus, 6, daughter of Mr. and Mrs. Donald W. Jacobus, 922 Eleventh avenue, was in the house alone Friday when the walls of the structure gave way. The house is a duplex. Mr. and Mrs. Horace W. Gregory, who occupy the other side of the place were at the show. Mr. Jacobus was not in town, and Mrs. Jacobus was putting the car away at the time of the quake. The little girl miraculously escaped injury.

At the Butte Post office yesterday there were numerous inquiries as to whether or not Carroll college was on fire. Others called to ask if it was true persons going to Helena had to have permits to get inside the city limits. Just before press time the Post was being flooded with a volley of inquiries as to whether or not the capitol was in flames. Many reservations were made at the railroad offices Saturday and today by persons leaving for more stable country. Saturday night an endless caravan of cars was moving from Helena, going in all directions. Besides the customary luggage, many of the cars were packed with baby buggies, small stoves, and the like. A baby's crib was strapped across the top of one car that was 'southward' bound late Saturday afternoon. Operators of gasoline stations and garages in the city did a land office business following the quake Friday night and reports today showed that business was holding up well. Practically every car owner in the city had the old tank filled to the brim as they "took to the motorized homes." The stations, many of which were closed, opened with the return of electricity and in many instances called the entire crew back to the job to handle the unusual number of customers. Retail firms had every tank truck available in service taking additional supplies to the stations as their tanks were rapidly emptied.

The Placer hotel escaped damages Friday night in good shape, it was reported yesterday. A close investigation was made of the building, both inside and out, but only injury reported was the falling of particles

of plaster from the ceiling. Business was being conducted at the hotel this morning as usual.

Saturday night "celebrators," of whom there were few except those who imbibed to "forget it all," thought that prohibition days had returned when they tried to buy the "stuff" yesterday. The liquor store was closed, and several persons were reported as paying \$5 a quart of whisky and gin that during normal times they wouldn't feed to the cat that keeps them awake at night.

Those who did not leave the city Friday and Saturday, but who chose to stay away from their homes at night, lined the streets with their cars in an attempt to get some sleep. One of the favorite spots was along Hill park, where hundreds of people had their rest. Vacant lots were also filled with cars.

While battling a fire in the chemistry laboratory of the new high school Friday night, Roland E. Dietmeier, instructor in chemistry, escaped injury when he stepped out in the hall for a moment. He had hardly left the laboratory when the ceiling above the spot where he was standing crashed to the floor.

Those who have experienced earthquakes elsewhere warned Helena people to take their chances inside of a building or house during a tremor rather than running outside. Doorways between rooms are supposed to be safe spots. Most injuries during earthquakes in the past were caused by people dashing madly from buildings during the course of the quake. By doing this they are likely to be struck by falling bricks or stones. Despite the confusion, no automobile accidents of major proportions were reported Saturday and today. There were, however, several reports at the police station this morning of cars that had fenders bent or torn off.

[Helena Independent; October 20, 1935]

NO BROKEN GAS LINES FOUND BY MONTANA POWER COMPANY

No broken gas mains and uninterrupted service was the splendid report which officials of the Montana Power company were able to issue this afternoon following one of the most severe quakes in the history of the American continent.

Officials of the company announced today that an extra crew of expert gas and electric men had been put on here and that a check of all lines, both gas and electricity, showed no serious damage. They also lauded the wonderful spirit of cooperation on the part of the property owners and customers who did everything in their power to make the task confronting the company as easy to cope with as possible.

Hundreds of requests had been received by the service department for inspections and turning on gas which had been wisely turned off by property owners following the shock of Friday night. These calls were being taken care of as fast as all available employees of the company, who had been pressed into service, were able to make but keeping pace with them was almost impossible. They were, however, taken care of with amazing speed and reliability. With the exception of gas heaters and stoves, which danced about during the giant shake, few leaks developed and these were confined to houses which were almost totally destroyed. These were in many instances taken care of by property owners.

Should Inspect Chimneys

"Property owners should, without delay, have their chimneys inspected by a competent builder or some one well qualified to pass upon their service ability," Charles A. Bernier, division superintendent, said today.

Mr. Bernier explained that the gas company cannot inspect chimneys, a work that should be done by a builder, brick mason or engineer.

The quake did virtually no damage to the power company's offices on Main street or the substation on Jackson, but the walls of the garage in the rear of the offices were badly bulged.

Extinguishing of street and house lights during the shock Friday night was attributed to the burning off of two transmission wires near East Helena, a damage that was soon repaired. In addition, city transmission lines were broken when walls fell at the old Family theater on South Main, the National Biscuit company plant on Boulder avenue and the old state armory on North Warren street. These breaks were also taken care of promptly.

[Helena Independent; October 20, 1935]

BEAUTIFUL SPIRIT SHOWN BY COUNTY HOSPITAL PATIENTS

"As fine a spirit as was ever shown by any company of men and women in the world," was the comment of Dick Tobin, superintendent of the Lewis and Clark hospital, who removed 64 inmates, 24 of whom were in the hospital building when the earthquake hit Helena at 9:50 Friday night.

Superintendent Tobin said no one was scratched. One paraletic patient was utterly helpless in his bed when a wall caved in, covering him with brick. A window frame fell over the head of the bed and he also got a shower of glass.

"Lay still until I pick the brick off of you," said Mr. Tobin.

"Never mind me, I don't feel any pain anywhere," replied the old patient. "Go get the others out, I'm no good anyway and it does not matter if I do die."

Mr. Tobin got him out.

The inmates of the county hospital were removed to the federal transient relief camp at the fairgrounds. Those in charge down there showed Mr. Tobin and his patients every courtesy. They will be housed there for an indefinite period.

[Helena Independent; October 20, 1935]

SCHOOLS OF CITY ARE HARD HIT BY EARTH SHOCKS; LOSS MAY REACH A HALF MILLION

Earthquake damage to Helena's public schools centered on the new high school building and the Bryant school as far as devastating damage is concerned, according to Superintendent R. O. Evans.

Superintendent Evans yesterday estimated the damage done to the new high school at approximately \$150,000, but did not set any amount on the damage done to the Bryant school as he considered that building a total loss.

St. Mary's school and parish building in the Sixth ward, a parochial institution, was wrecked beyond repair and probably will be a total loss, Rev. Peter Marnane said today. It will be abandoned and rebuilt.

Classes have been discontinued until further notice. The school portion of the building was especially hard hit. One wall of the building was stripped of one layer of brick and the auditorium and church were badly damaged.

The Hawthorne, Kessler, Broadwater, Emerson, Jefferson and Central schools received only slight damages from the crumblers.

All public schools in the city were ordered closed for at least a week by Mr. Evans yesterday. Each building will be given a thorough technical examination to determine the exact extent of the damage, and to consider the possibilities of repairing the structures in the near future.

"Until this wave of temblors has subsided, and it is absolutely safe for children to attend classes, there will be no school in the public schools," Mr. Evans stated.

The school board will try to find buildings suitable for use of the high school students and the Bryant school pupils.

New High School

Although the Bryant school was practically ruined by the shock, by far the most disheartening sight was that of the new high school building.

The north half of the high school appeared to be completely ruined. In this end of the building are located the auditorium, and the auto-mechanics, chemistry, commercial drawing and other departments.

The walls of the north wing were only partially standing, and were bulged underneath the sagging roof.

Looking through the gaps, spectators saw the interior of the building filled with fallen plaster and broken supports. Portions of the roof had fallen in and daylight could be seen through the gaps.

Lincoln School

The Lincoln school was a third unit of the school system to suffer great damage. It was practically destroyed. The rear half of both stories collapsed, and the roof slid down over the heap of broken timbers, brick and metals. The buildings had not been used of late.

Old High School

The old high school building, while not showing much apparent damage from the outside, was seriously injured internally. The broad stairs leading to the upper stories were so badly damaged nobody was allowed to use them today.

Deaconess School

Cracked from top to bottom and with many of the gables down, the Deaconess school in the Helena valley also felt a sharp attack of the quake.

Possibility that the school would be closed for the year and the students returned to their

homes was expressed. This created a tremendous housing problem, however, as many of the resident pupils are orphans and have not homes.

Other parts of the valley also felt the shock with distinct force.

Central School

Central school appeared to be intact when examined from the outside. But in the walls of the rooms there were a number of extensive cracks, and injury done to the building was problematical. Architects A. B. DeKay and Norman DeKay, accompanied by City Superintendent R. O. Evans, made a technical examination of the interior this morning.

Kessler School

The Kessler school building, which is outside the city in the Kenwood addition, apparently was not injured greatly. Stone coping from over the east gable end of the structure had broken off, and was piled at the base of the east wall, but otherwise no damage could be seen.

Broadwater School

The Broadwater school in the northern part of the city apparently was undamaged, though some plaster had fallen in some of the rooms. Roof and walls seemed intact from the outside.

St. Helena School

This school seemed to have escaped injury entirely. A nontechnical examination of the walls and roof from the ground revealed no damage.

Hawthorne School

Damage done by the earthquake at the Hawthorne school was inconsiderable. Some plaster had fallen from the ceiling in one room, one of the ceiling lights in a corridor had fallen and smashed on the floor, and the glass face of the clock that adorns the front wall of the building at the apex of the roof was caved in. There also were some cracks in the walls.

Emerson School

No damage was done the Emerson school that could be detected by a nontechnical examination. Apparently the earthquake shocks had been insufficient however heavy they may have been at the spot, to disturb the structure or its contents, for a small plaster of paris statuette on a pedestal in a corridor had not been displaced.

The Jefferson School

The Jefferson school was another educational structure in the Helena school system that came through the many and violent tremors of the night without injury. Flowering plants in pots in the windows of the building were not disturbed.

The Carroll College

It was the same story with the Carroll College. While one dormer window was broken, and some plaster and small objects were shaken loose, the damage was not material. The school authorities said they considered themselves very fortunate.

[Helena Independent; October 20, 1935]

S'NUF * * * * * * * *

Boys Say Girls Need Not Pay Again

Once each year, according to tradition, the co-eds at Intermountain college must take the men of the college to a dance and pay and pay.

Last night was the night. The girls called for the boys, paid their way to the dance at the Intermountain gymnasium, filled out the programs. And then the end!

It was the end of the fifth dance. About 300 students and friends milled in the middle of the floor waiting for the music to start again. Then the floor shivered. The students remained calm. The walls started to rock and some ran for the protection of arched doorways while others remained in the middle of the floor.

Walls Open

The lights went out and the west wall started to crumble. Bricks and mortar crashed to the floor which a moment before had been filled with carefree young men and women. Stars peeped through an opening about ten by ten feet in the double wall near the ceiling. Someone cried, "Anybody hurt?" There wasn't.

"Take it easy, plenty of time," others said calmly and the dancers filed slowly out through the door. The men lighted matches for the girls to see their way down the steps.

Everything was calm and orderly and had there not been bricks all over the floor the dance might have gone on.

Outside girls gathered up their formals so they didn't drag on the ground, tucked protecting arms around the boys and surveyed the damage.

Said the boys: "You needn't take us to any more dances."

[Helena Independent; October 20, 1935]

SENATOR MURRAY WILL AID HELENA Says Federal Help Is Needed

Senator James H. Murray Saturday evening telegraphed Mayor C. J. Bausch that he was not only taking up with federal relief agencies the necessity of acting promptly in aiding the homeless of Helena as a result of the earthquake, but that "I am on the way to Helena to render all the aid in my power to assist in the crisis which Helena faces."

That there will be much need of federal help Senator Murray fully realizes and if there was ever an opportunity for work relief, Senator Murray declares it exists in Helena.

May Fly to Capital

The junior senator from Montana arrived at the Placer hotel early Sunday morning and made frequent use of the telegraph and long distance telephones in communicating with Washington. He is prepared to fly to Washington and present the Helena case personally if he does not get an immediate response and assurance that the federal government will assist in rebuilding homes and school houses in Helena.

[Helena Independent; October 20, 1935]

REBUILDING ALREADY IS UNDER WAY Spirit Good

Loan Corporation Is Organized; Funds Are Pledged

Reconstruction plans took definite shape in Helena yesterday afternoon with the organization and incorporation of the Montana Reconstruction Corporation, and today that agency will be prepared to receive applications for loans from individuals, commercial enterprises, school districts, hospitals and various other private and public institutions. The Montana Reconstruction Corporation will receive funds from the Reconstruction Finance Corporation and will in turn loan these to approved borrowers at 4 per cent interest. Application was made yesterday to the RFC for an initial allotment of \$150,000 and it was indicated that the transfer of the money would be made today.

Name Officers

Organization of the rehabilitation agency was effected at a meeting of the membership of the Helena Chamber of Commerce and Norman Winestine was named president; Earl Brown is vice president and H. C. McCuin is secretary. Immediately the concern was incorporated under the laws of the state.

All loans made by the corporation must be secured by real property and must constitute a first lien on the property. If the property is already mortgaged, it will be necessary to get the mortgage holder to waive priority before the new loan can be obtained.

Blanks Ready

Blanks for making applications for loans have been printed and applications will be received starting today, President Winestine announced. The headquarters of the corporation will be in the office of the RFC on Edwards street, in the annex of the National Bank of Montana building.

The funds allotted by the RFC are from an appropriation of \$5,000,000 made by congress specifically for earthquake disaster relief. Loans of this type are meant solely for individuals, business concerns and institutions which are not in a position to borrow directly from a bank, because they must repay them over a longer period than a bank may loan for, but which still have good security to offer.

Many Start

In the meantime, scores of persons with the means to proceed immediately went busily about the business of repairing the damage to their homes and business properties. City Engineer Oscar Baarson and a staff of four architects, two engineers and a contractor started the work of inspecting buildings to determine if they are safe for occupancy. A certificate of occupancy is issued in each case where a building may be occupied without alteration or repair. With the others, a summary of what must be done is prepared and given to the owner.

Mr. Baarson appealed yesterday afternoon to property owners desiring inspections to be patient. There are several hundred requests on file, and with such a small staff as is available at present some people of necessity must wait for a time. Mr. Baarson has his offices in the Placer hotel building.

Long Hours

Since the quake that shook the city Friday night, Mr. Baarson has been working 18 and 20 hours a day surveying property damage, and making examinations and inspections. Indicative of the inborn optimism and unquenchable spirit of the people of Helena, already many building permits have been taken out for repairing of quake damage. Since the first shock that caused only \$50,000 of damage, nearly a score of permits calling for work

valued at nearly \$120,000 have been issued. Included are permits for two new dwellings. City Engineer Baarson has not required permits for minor items such as removing or repairing chimneys and similar work.

At the Red Cross headquarters, funds were ready to help any who requested aid. The Red Cross is taking care of those who have no financial means to repair or reconstruct their homes. In addition, the Red Cross is prepared to provide shelter, food and clothing to all who need it.

Workers Coming

E. S. Transue, disaster relief director for the national Red Cross, who is in charge of the program, announced last evening that four more trained disaster workers are on their way to Helena and will be on the job before the end of the week. They are Miss Henrietta Wilkins, Mrs. Helen Martin and Miss Frances Blackburn of St. Louis headquarters and Andrew Collier of Washington, D. C.

Quite a number of persons in serious need of help registered with the Red Cross yesterday, but not as many as anticipated.

Mr. Transue urged all persons who will need help or who think they may need help to call at the office and talk things over with the officials.

"The Red Cross wants to come to the assistance of every person in Helena who is in distress or who require financial aid," he said. "We also invite those who may be interested to come in for information about the rehabilitation program consists of, whether or not they may require our help."

An indication of the feeling of sympathy and desire to aid on the outside came yesterday when a check for \$500 reached Mayor C. J. Bausch from the Billings Commercial club through H. J. Coleman, its president.

Want to Help

"We are hopeful that this small sum of money may be of some use in the immediate emergency and until regularly organized agencies can function. The people of Billings are anxious to be of any aid possible and if you will advise us of needs, immediate steps will be taken along the lines suggested," an accompanying message read.

In this connection it was emphasized in messages from various out-state cities tonight such as Great Falls, Butte, Anaconda and others, that they escaped the ravaging of Friday's earth movement and were willing to aid in any possible manner. Butte, where the vast mines and resources of the Anaconda company emerged unscathed, had planned an extended program of emergency assistance.

Though Helena has experienced an acute shortage of building tradesmen, Walter T. Bridges, associate director of the National Re-employment service for Montana, cautioned outsiders against coming to the city for work until they are called.

"We have an adequate number of skilled workers on our rolls in Montana," he said, "and these men will be transported here as rapidly as they can be used."

By last night nearly 170 had been supplied to various tasks of cleaning and rehabilitation. With the city hall in unsafe condition, the mayor and councilmen considered the desirability of occupying the former public library building to carry on its emergency work. They were waiting, however, for an inspection of the latter building which also was shaken.

Anticipating another heavy demand for shelter administrative forces at the Camp Cooney refugee center prepared to ward off possible suffering from increased cold weather by the hurried installation of additional heating equipment in the tents. A suggestion also was made as a drop in the mercury to 20 above zero was predicted, that temporary barracks be erected there to replace the tents.

Though numerous additional cases of shock had been treated by physicians, there were no further injuries and the five most seriously hurt Friday night, Major Sol Peterson, regular army; Mrs. Sam Koich and daughter of East Helena; Julia Patten and Marie Kerwin, were reported recovering. A sixth victim, Miss Joan Pease of Butte, injured in an automobile accident while en route to Helena, also was improved.

[Helena Independent; October 21, 1935]

HELENA SETS ABOUT REHABILITATION CORPORATION WILL FIND FUNDS FOR REBUILDING WRECKED EDIFICES HERE

Emergency Reconstruction Committee Will Act; Red Cross Put In Charge Of All Work Of Relief, On Order Of Governor Cooney; Murray Will Press For Loans For City

With damaged buildings being repaired, residents returning to the city, and the quakestricken city of Helena organized for speedy recovery and rehabilitation, the nervous tempo of Helena's citizenry steadied down yesterday as the American Red Cross took charge of the work of aiding unfortunate families rendered homeless by a weekend of subterranean tremors.

Declaring that a "great reconstruction task" confronts the people of Helena, Governor Frank H. Cooney yesterday issued a proclamation designating the American Red Cross as the official relief agency and appealing to all people of the state to contribute to a relief fund which the Red Cross is authorized to raise.

"With a view of co-ordinating relief and avoiding duplication of effort and other forms of waste, I hereby designate the American Red Cross as the official relief agency, which will deal with the problems of the individual sufferer. I ask all agencies, both public and private, which have to do with welfare in any form, to give it their full support and co-operation and to co-ordinate relief in this disaster through the Red Cross," Governor Cooney said.

Care For Needs

In his appeal for contributions, Governor Cooney said that all funds so raised would be spent "solely and entirely in the humane task of caring for the needs of the victims of this disaster and of restoring them to their normal life." Contributions should be sent to local Red Cross chapters to be turned over to the Lewis and Clark chapter for disbursement. In Helena today there will be established an organization known as the Montana Rehabilitation corporation, which will receive money from the Reconstruction Finance corporation, to loan out for real estate repairs, it was announced by S. A. Bingham, Montana manager of the RFC. The organization is similar to one formed in California after the Long Beach quake.

Official Here

Mr. Bingham was advised by Washington to proceed with the arrangements for the organization of the Montana corporation. It will act as a private agency and will be non-profit making and will make loans only for damages accruing to real estate from the devastating tremors of Friday night.

J. F. Seeley of Los Angeles, who helped in the supervision of the plan in California, arrived here yesterday and will assist Mr. Bingham in launching the program. Loans will be made with collateral to be furnished consisting of first liens on the property damaged. The forming of the corporation is precedented by an act of congress which allocated \$5,000,000 for disaster relief. Since the RFC cannot make loans outright to individuals, the creation of the corporation to receive the funds from the RFC is necessary, Mr. Bingham said.

Decks were cleared in Helena for immediate action and an Emergency Reconstruction committee was appointed to supervise all work and direct and co-ordinate all activities for the rehabilitation of the city and the care of its needy and shelterless. The "steering committee" was the result of a meeting conducted yesterday afternoon in the Placer hotel and attended by state, county, municipal and government officials and many of the city's leading business men.

The Emergency Reconstruction committee is composed of S. V. Stewart, T. A. Marlow, Cecil Wilson, Hugh Adair, Harold Longmaid, Quay Painter, E. B. Benson, Oscar Baarson and T. H. Blaine.

Murray Active

United States Senator James E. Murray, directing the necessary preliminaries for federal assistance, promised the committee that he would do everything in his power to bring hasty federal aid to Helena. He also was instrumental in having the city council declare an emergency to exist in order that the federal government and its various agencies could proceed promptly.

As soon as a survey is made in the city and the scope of the damages ascertained, Senator Murray will

wire Washington and, through the Emergency Reconstruction committee and the city council of Helena, obtain loans and grants with which to place the city back on its feet.

Mayor Blocks Action

Although the council did not act on the emergency resolution until yesterday morning, one had been prepared by City Attorney John Mahan and presented to Mayor C. J. Bausch by Commissioner Amos M. Shellady in his own home for him to sign. Believing that the resolution gave the commissioner of public safety and charity too much authority in the crisis, the mayor refused to sign the resolution. Bitter words were exchanged between the mayor and councilman in the mayor's home.

Disregarding legal technicalities, Mayor Bausch drew up an ordinance wherein the city, in appealing to the federal government, was not itself liable but agreed to assist in the rehabilitation work. City Attorney Mahan pointed out that the resolution was inadequate and that the duties of the mayor and councilmen were defined by statute and could not be ignored. Mayor Bausch wished to place Commissioner Noble Evans in entire charge of the work, leaving the head of the police and fire department out of the picture. The city attorney drew up another emergency resolution, which was adopted.

Must Unite

"This is a grave situation," U. S. Senator Murray said at the gathering yesterday afternoon. "We must stand together. There must be no political bickering. We must work as a single unit."

A fairly accurate picture of what Helena will do within the next days in rebuilding its stricken city was outlined at yesterday's joint meeting. Senator Murray will, he said, stand behind every move for securing federal aid.

School boards, acting independently, will make a survey of their losses and apply to proper federal agencies for help.

The board of county commissioners, acting as an independent body, will do likewise.

The City of Helena, in addition to its statutory duties, may appeal to the federal government for financial assistance.

Many Sources

Individuals and families rendered homeless and destitute by the earthquake, will be taken care of by the American Red Cross.

Business houses damaged will be repaired at the expense of the owners, unless loans are secured from the federal housing administrator or the RFC.

Property owners with means will rebuild at their own expense, or secure FHA or RFC loans.

Federal money will come into Helena from various sources, U. S. Senator Murray pointed out. He will wire Washington immediately for assistance and it will come through slum

clearance agencies, federal housing, emergency relief, RFC, public works, and works progress departments of the government.

City Calm

Calm prevailed over Helena yesterday and it was ready to erase from its mind the hysteria of the past few days. Many residents of the city who had left for other points in the state were returning, seemingly, ignoring the minor tremors of the earth's adjustment following the major shock of last Friday night.

While many property owners of the city quietly went about the business of replacing their residences, the immediate problem facing Helena was that of providing shelter for the homeless. A bitter wind, carrying continuous flurries of snow, made the problem more acute. With offices established in the Montana bank building, E. S. Transue, disaster relief representative of the American Red Cross, gave out the assurance that everyone would be adequately provided for by the organization.

As far west as Spokane and from several of the cities of the state came messages of proffered assistance. Butte, Great Falls, Missoula, and Townsend, through their Chambers of Commerce, offered to aid Helena in its great catastrophe.

Baarson Takes Charge

By virtue of the emergency resolution passed by the city council, the city engineer, Oscar Baarson, was given full authority to condemn buildings partially wrecked by the quakes. The city hall being unsafe, through the courtesy of Matt Balfour, the city engineer was given headquarters in the Placer hotel, taking over the rooms adjoining the Northern Pacific railroad offices.

The city engineer was assigned four men and today will commence a comprehensive survey of the city, compiling the damages and removing dangerous walls and chimneys. While the city engineer's crew is limited, he expects to be in a position by Wednesday to utilize relief labor. State Fire Marshal Arthur C. Parsons and Acting Fire Chief Martin Juhl are assisting in the survey. Many residences will be condemned and ordered torn down, the city engineer said.

300 Abandoned

There already have been found approximately 300 private homes so damaged as to be uninhabitable, and a dozen or more that will be condemned at once. Work of bringing down weakened chimneys and walls was carried on during the day and will be continued until all such hazards have been removed, Mr. Baarson said. The chimney on the county jail was shot down with high-powered rifles and similar action will be taken on a chimney in the Great Northern yards.

As the survey continues the extent of the havoc done by the quakes is found to be mounting and the city engineer has estimated that damage done to all kinds of buildings in Helena will total not less than \$2,500,000 and may exceed \$3,000,000.

Volunteers Wanted

Appeal for volunteer assistance of all technicians and skilled building trades men was issued by City Engineer Baarson. Such men are needed badly and must work without compensation. If persons whose homes are damaged will call in competent contractors or architects, on their approval permits for repairs will be issued without further delay, Mr. Baarson said. Persons wishing further information along this line should telephone the city engineer.

At yesterday's gathering in the Placer hotel the first constructive steps towards the rehabilitation of the city were taken. Norman Winestine presided over the meeting and with

Mayor Bausch named the personnel of the special committee to guide all activities. **[Helena Independent; October 22, 1935]**

INSPECTION OF SHRINE TEMPLE SHOWS QUAKE DAMAGE NOT SERIOUS

A thorough inspection yesterday revealed that the Shrine temple was not structurally damaged by the large quake Friday night, it was announced yesterday by W. K. Converse, recorder of the Shrine, who with Joe Bossler and Al Johnson, contractor, conducted the investigation.

Brick work on the structure was damaged to some extent but there is nothing to prevent repairs being made and the temple being again used as in the past, it was said. It was estimated that the repairs to the building would cost between \$5,000 and \$7,000. **[Helena Independent; October 22, 1935]**

SHOULD TEAR DOWN LOOSE STONE, BRICK

S. L. Berg, architectural supervisor for the housing administration, who had experience in architectural work in California following an earthquake, said yesterday that loose brick and stone casonry should be torn down immediately, or should be properly braced. "What may be accomplished in the matter of rehabilitation of damaged structures depends entirely upon the construction of the brick work," said Mr. Berg. "This applies especially in the matter of solid walls of brick, as to whether they can be reinforced or should be removed entirely.

[Helena Independent; October 22, 1935]

NEED FOR OIL STOVES STRESSED BY LAMPORT

O. C. Lamport, secretary of the Helena Chamber of Commerce, yesterday issued a call for kerosene oil heaters to be used in homes where quake damage to chimneys prevents the use of coal or natural gas.

As this type of heater can be used to give fairly comfortable heat, anyone having one which is not being used is asked to telephone the Chamber of Commerce at number 37, as it may be used by some family living in a house otherwise uninhabitable because of the lack of fire.

[Helena Independent; October 22, 1935]

NRS FINDS JOBS FOR 150 MEN SATURDAY

When the county NRS officers were advised to vacate the courthouse on Saturday afternoon, following Friday's major quake, the offices were set up on the courthouse lawn, and a total of 150 persons were assigned employment and sent out, Walter T. Bridges, associate state director of the state NRS, said yesterday.

Mr. Bridges said that there is plenty of help available, and that his offices will be able to take care of nearly every need. Many of those registered with the NRS are skilled workmen, and can be ready for the job on short notice.

[Helena Independent; October 22, 1935]

DEACONESS SCHOOL IS MOVED TO CITY; WILL TAKE SALVAIL HOUSE

With the buildings of the Montana Deaconess school so badly damaged that it was necessary to abandon them, arrangements were made yesterday to move the children and staff into the old Salvail residence on Madison avenue, which did not suffer from the tremors.

Since the Friday night quake, the children have been housed at The Shanty, a dance pavilion on the Great Falls highway eight miles out. The school authorities, however, were severely handicapped there by the lack of facilities. Both buildings at the Deaconess school are in a bad state and may have to be entirely rebuilt.

At the large Salvail dwelling, the faculty will be better able to take care of the youngsters but furniture and some other equipment is badly needed. The Montana Power company has donated two gas ranges and Helena merchants are contributing kitchen utensils, tableware and other necessary items.

[Helena Independent; October 22, 1935]

EMERGENCY DECLARED MONDAY BY COUNCIL; MAYOR REFUSED TO SIGN INITIAL RESOLUTION

With the city of Helena in the throes of its greatest calamity and with hundreds of people made homeless by major earthquakes and with the total damage indicator pointing as high as \$3,000,000, it was disclosed at the city council yesterday morning that Mayor C. J. Bausch had refused to sign a resolution last Saturday night declaring the existence of an emergency, the first step the city was required to take in securing relief assistance for the city's destitute from Washington D. C.

The ordinance was drafted by City Attorney John Mahan and was presented to the mayor in his home by Councilman Amos Shellady for signature. Although Camp Cooney was crowded with more than 600 homeless persons living in tents, the mayor refused to sign the emergency resolution.

Thought Done

At a conference of the city officials Saturday afternoon it was the understanding of Commissioner of Public Safety A. M. Shellady, City Attorney John W. Mahan, City Engineer Oscar Baarson and Commissioner Noble Evans that the adoption of a resolution declaring a state of emergency had been approved unanimously. It was so announced by Commissioner Shellady, Mr. Mahan and others and was so published.

Acting on this authority, City Attorney Mahan prepared the proper resolution and delivered it to Commissioner Shellady. When it was presented Saturday night to Mr. Bausch for his signature as mayor, required to make it effective, he objected strenuously. His refusal was not learned until late Sunday afternoon.

The resolution was not passed until noon yesterday when the city attorney made it clear to the mayor that the resolution was absolutely necessary.

Had Own Plan

The action came after the mayor had first submitted a resolution of his own which would have made Street and Alley Commissioner Noble Evans emergency director of the city with full control. It entirely eliminated Commissioner Shellady from consideration. At yesterday's council meeting outside pressure was brought to bear, and after it had been forcefully impressed upon him that action declaring an emergency must be taken by the council, and that without further delay, the mayor yielded.

"I have been told definitely that the first thing the city must do is to declare an emergency, to assure the government of our responsibility," Commissioner Shellady said.

"I have already given the government that assurance. It is in my hands," the mayor replied.

Will Take Care Of It

Commissioner Shellady insisted that the resolution be introduced and the mayor, extremely nervous and scarcely able to remain in his chair, shouted, "I'll take care of it. You keep still. It won't be acted upon. I have just put Evans in charge."

A number of people were present at the council meeting, held in the water department offices, and disgust was written on more than one face. While the council argued over the matter, City Attorney Mahan drew up a second resolution, similar to the first drafted and which the mayor declined to sign last Saturday night, and then presented it to the mayor again.

The city attorney explained that the duties of the mayor and councilmen were established by law, and to place one man in charge would be in violation of prevailing statutes and grounds for removal from office. The mayor glowered at the resolution and then said, "You think I am jittery, but I am not. I guess there is nothing objectionable in this resolution." The resolution was introduced and passed, after two hours had been consumed in bickering.

Wants To Be Sure

Although Commissioner Shellady had issued an order to policemen and patrolmen in the restricted areas of Main street to allow trucks to enter for the purpose of loading and unloading, Mayor Bausch declined to believe it and had passed through the council such a resolution.

"Although I don't get a nickel, a penny from the Bausch & Sons establishment, I want to see that my trucks are allowed to load and unload there," the mayor said. Still insistent that his emergency resolution was more significant than the one prepared by the city attorney, and that the federal government would furnish financial aid without the legal wording and character of the resolution finally adopted, Mayor Bausch said, "I am just like Theodore Roosevelt. He got the Panama canal, and paid for it afterwards."

Buy Pump

With officials waiting anxiously for the ordinance to be passed so that appropriate wires could be dispatched by Senator Murray to Washington, D.C., the mayor stopped the council proceedings and held an executive session in the rest room of the water department, where he and Commissioner Evans purchased a \$1,185 water pump to be installed at the Eureka plant to subsequently pump water up hill to the Hale reservoir. Commissioner Shellady agreed to the purchase with the provision that the 50-horsepower pump be used to supplant the present 10-horsepower pump, and to be used in pumping water to the Woolston reservoir, the pumps there having been wrecked by the earthquakes.

The pump was purchased from the Fairbanks-Morse company. The council also approved the purchase of about 1,700 feet of pipe from the American Cast Iron Pipe company. On several occasions Mayor Bausch disagreed with suggestions made by his colleague, Commissioner Shellady.

"I wouldn't be too sure," Commissioner Shellady told him, "The courts have backed me up so far."

Read Decree

"You don't know what you are talking about. I went up and read the decree handed down by Judge Horsky. The decree denies the petition for judgment for Pigott. That's all. He won't get a cent."

The emergency resolution which was adopted following the tirades of the mayor follows: "A resolution declaring an emergency caused by an earthquake, authorizing an appeal for government aid, directing the city building inspector to make investigation for condemnation of buildings and structures, and to authorize occupancy and repair and, if necessary to save lives and property, to level buildings and structures if in his opinion a hazard exists, and with government funds so allocated to employ, deputize and employ any person or persons in any capacity until said emergency has passed; authorizing the commissioner of streets to cope with the emergency with all the powers granted the building inspector, and authorizing the commissioner of public safety and charity to make any rule or regulation necessary properly to conduct the police and fire departments, with the same powers given to the building inspector and commissioner of streets until said emergency has been declared at an end, said emergency resolution granting all departments of the city to operate under an emergency as contemplated in section 8, chapter 121, session laws of Montana.

"Whereas, the city of Helena has suffered and continues to suffer from an earthquake

which occurred October 18, 1935, with more than 300 subsequent tremors; and "Whereas, the city and its residents are in great need of aid from the government of the United States; and

"Whereas, many walls and other structures have been weakened, or have fallen or may fall, and many residents of said city have been rendered homeless and much property has been exposed, and the residents and property in the city need emergency protection, and the usual employees of said city need emergency protection, and the usual employees of said city are unable to meet the requirements of the situation:

Is Emergency

"Now, therefore, be it hereby resolved by the city council of the city of Helena, Mont.:

- "1. That a public emergency exists in the city of Helena, Montana, caused by an earthquake and subsequent tremors:
- "2. The mayor of said city is hereby given full authority to make appeal to the United States government for the necessary aid, and to meet the emergency in the departments under his jurisdiction by exdinance:
- "3. The city building inspector is hereby authorized and directed to make immediate investigation of the conditions of buildings and structures in said city which may be hazardous to life and property, to condemn any building or structure and cause it to be leveled if in his judgment the same is dangerous, to authorize occupancy and repair of buildings and structures, and with the government funds allocated for said purpose to remove any hazard to life and property, and to deputize or employ any person or persons necessary to protect the persons and property of the residents of said city with said government aid:

Use Of Streets

- "4. The commissioner of streets and alleys of said city is hereby authorized and given full authority to restrict use of streets and alleys in said city, to employ any persons necessary properly to meet the emergency in his department, and to use any precaution to protect the persons and property in said city:
- "5. The commissioner of public safety and charity of said city is hereby authorized and directed to make any rule and regulation necessary for the preservation or order, and to conduct the police and fire departments of said city in any way to meet the requirements of said emergency, including the deputizing and employment of persons.

"It is hereby further resolved by the city council of the city of Helena:

"That all departments in said city will cooperate, one with the other, properly to protect the lives and property of the inhabitants of said city, and that this resolution shall be in full force and effect immediately upon its adoption and shall continue until this council declares the emergency at an end."

[Helena Independent; October 22, 1935]

SO THE PEOPLE MAY KNOW Force Of Earthquakes Spent

All day Monday The Associated Press and all of its correspondents in whatever city where authorities could be interviewed with regard to earthquakes, were working for the people of Helena and the readers of The Independent.

The general verdict was that Helena, having suffered its major earthquake, is now the safest city and the center of the safest area in Montana.

From San Francisco late Monday night, came a special telegram containing these statements of the theories and facts as related to Associated Press correspondents. All of this matter was prepared especially for the people of Helena at the request of The Independent.

Harry C. Wood, research associate in seismology, Carnegie Institute, Washington, who in 1925 warned Southern California architects to be prepared for strong quakes, holds to the theory that major shocks relieve strain and likely reassure against other severe shocks for a considerable term of years.

Berkeley specialists do not subscribe to the extent of placing any great reliance on this theory by Dr. Bailey Willis, professor emeritus of geology at Stanford, who says "Each shock, large or small, disburses part of the accumulating energy. When they are numerous, the energy runs down. When they are few, the energy accumulates. Great shocks of 1857 and 1906 in California, are instances in which strain was relieved for long intervals."

The late John R. Freeman, author of a 900-page book, entitled "Earthquake Damage and Earthquake Insurance," one of the most exhaustive compilations of earthquake studies ever made, gives considerable credency to the theory.

He said, "The present writer has found no evidence in the history of earthquakes within the United States, disproving that a region of very great frequency of quakes, may be one of the very safest places in the world for writing earthquake insurance because of the relief of earth stress by these minor quakes, also there is the probability that in the weaker rocks, where many frequent quakes may relieve the earth stress before it can accumulate in force sufficient to snap back with extreme violence."

Elsewhere this high authority says "These minor quakes or vibrations, may be interpreted as revealing earth pressure which if not thus relieved, might accumulate and ultimately produce a violent and disastrous earthquake."

In other words, it was fortunate that the minor quake arrived in the Helena area in the early morning of October 12 and the force of this temblor and all the little vibrations, between 1 o'clock Saturday of October 12 and 9:50 the evening of October 18, were not combined, or the Helena area might have experienced a disaster of greater proportions. The week between the two "quakes," enabled the earth pressure to "let off steam" and get rid of its energy.

Since the major earthquake of Friday evening, the vibrations have been less frequent and of less violence, until at this writing, it is the opinion of the most eminent scientists who could be reached by The Associated Press for The Independent, that the subterranean difficulties in this area are all spent--they may flow off a little at times, but another major earthquake seems very improbable.

Cheerio!

[Helena Independent; October 22, 1935]

SALVATION ARMY TO ESTABLISH STATION AT POINT NEAR CITY

A. E. Cramer, representing the Farmers' Union Trading company, yesterday offered the use of the Green Meadow farm warehouse to the Salvation Army for an emergency relief station, it was announced yesterday.

Immediate action was taken to make the building adequate for temporary quarters for refugees of the earthquake, and several families were transferred there last evening. The Salvation Army's regular quarters are in the stricken area on South Main street, so a temporary field office is being established in the Green Meadow warehouse.

The army is working in conjunction with local FERA officials who are anxious to establish a safe, sound and warm shelter for many persons who are suffering from exposure because of the inclement weather.

Clothing is also being transferred to the warehouse from the army building, and will be available for those who have need of same.

Persons in need, or knowing of others who are in distress, are requested to phone the FERA, 1279.

[Helena Independent; October 22, 1935]

Section 2

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Headline: Transient Camp Sought For Use As Co. Hospital

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Headline: Helena's Needs Taken Up At Meeting Of Officials Called By The

Governor

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Headline: Boys Show Courage And Enterprise In Tearing Down Ruins

Date: 10/23/1935

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Headline: State Liquor Store Opened By Shellady; Traffic Ban Lifted

Date: 10/23/1935

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Headline: Disaster Is Not New To Helena History Shows; Each Time City

Has Arisen With Renewed Vigor

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Headline: <u>Earthquake Damages Helena's Cemeteries</u>

Date: 10/23/1935

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Headline: Helena Quake Total Reaches 372 Since Big One On Friday

Date: 10/23/1935

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Headline: City's Residents Throng Streets As Stores Open

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Headline: City Conducts Self In Orderly Manner, Law Officers Say

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Headline: Bausch And Evans Refuse To Have Buildings Inspected At City

Expense: Committee takes Over Helena Reconstruction; Mayor

Seeks To Block Rehabilitation

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Headline: Work Is To Be Begun On Dismantled Buildings

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Headline: Red Cross Office Has Total Of 75 Registered Here

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Headline: Perfect Order Kept At The Deaconess School By Boys

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Headline: Children Asked To Forego Halloween

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Headline: View Of Scientist On Helena Tremors

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Headline: House Laughed At Peterson For His Quake Insurance

Date: 10/24/1935

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Headline: Homeless People Spend The Nights In N. P. Coaches

Date: 10/24/1935

Info Categories: A

Headline: Police And Fire Departments Are In New Orleans

Date: 10/24/1935

Info Categories: A, B

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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OFFICERS AND MEN CALLED BACK FROM LEAVE TO BARRACK

Missoula, Oct. 21--Officers and enlisted men of Fort Missoula who were on leave Sunday evening, were called back to the fort.

During the evening a roundup of officers and men was made in the city and those in theaters were called out to report to the Milwaukee depot. From there they were taken in motor trucks to Fort Missoula.

Information from the headquarters at the fort was that the men were being called to their headquarters to be in readiness for any emergency which might arise. This was taken by civilians to mean that Fort Missoula troops are to be in readiness to go to the earthquake area in Helena, if needed.

[Helena Independent; October 22, 1935]

THOSE INJURED IN QUAKE RECOVERING NOW AT HOSPITALS Condition Of All Is Improved; Many Released

The victims of last Friday night's great quake who were received at Helena hospitals were yesterday reported as well on the road to recovery, with only one person still in a condition which might be considered serious. Most of them have been released.

The condition of Major Sol Peterson, United States army, who was injured when the roof of the armory collapsed, was yesterday reported as improved, at St. Peter's hospital where he was taken following the accident.

Miss Marie Kirwin, Union bank stenographer, and Miss Julia Patten, teacher at St. Vincent academy, both of whom were seriously injured by falling debris, were reported last night as improved at St. John's hospital, where they were taken following the Friday night shake. The condition of Mrs. Margaret Barnes of 1220 Eighth avenue, Mrs. Annie Boyer from Camp Cooney and Mrs. Lenora Jones of 534 Broadway, who were admitted to St. Peter's hospital Sunday, was greatly improved last night, but not to such an extent that they might be released.

The three elderly women were suffering from shock and were all without permanent shelter.

[Helena Independent; October 22, 1935]

TIED * * * * * * * * *

Quakes Do Not Stop Wedding

Although the earthquake Friday night disrupted things generally, it did not interfere with the plans of David Carlton Shope and Bernice Roland, employees of the Nash-Finch company, to be married Saturday, it was learned yesterday.

They merely hopped into their car and drove to Missoula. The wedding was performed at the home of Mr. Shope's mother, Mrs. Emily Shope, 425 South Fifth street west, at 8 o'clock Saturday evening in the presence of relatives and immediate friends. Rev. Thomas W. Bennett of the Church of the Holy Spirit performed the ceremony at 8 p.m. Before the ceremony Mr. and Mrs. Elmer Lindquist sang "O Promise Me."

Were Working

Mr. and Mrs. Shope were at work in the company's office when the quake struck Helena Friday night. They escaped when the quake started and got to safety in the street before the walls started crumbling. Mr. Shope's car was damaged by falling bricks, which ruined a fender and a headlight. The couple were accompanied to Missoula by Mr. Shope's brother, Irvine (Shorty) Shope, Mrs. Shope and their daughter, who were here for the ceremony. The latter Mr. Shope, employee of the state highway department, was in the department offices at the time of the quake.

Their home was wrecked by the quake but Mrs. Shope and the daughter escaped injury. [Helena Independent; October 22, 1935]

ABOUT \$75,000 DAMAGE DONE BY EARTHQUAKE AT E. HELENA BRICKS FALL FROM BIG STACK

Damage done at East Helena by Friday night's major earthquake will reach about \$75,000, it was estimated by officials of that place yesterday. The principal damage was in the business district where brick and stone structures were considerably shaken and wrecked. Four homes in East Helena, all brick places, were uninhabitable. Most of the houses there are frame, and withheld the strain of the terrific shock in good shape. Frame houses were damaged only to the extent of wrecked and near wrecked chimneys, most of which will have to be replaced.

Houses Evacuated

The brick houses where families were compelled to evacuate were those occupied by Ernest Pearce, Sam Alecksich, George Rate and Steve Cinker.

As a result of the big quake, 45 feet will have to be removed from the top of the East Helena stack, J. D. MacKenzie, superintendent of the plant said yesterday. The American Smelting and Refining company will send a crew from Salt Lake City to do the work. Mr. MacKenzie estimated that the damage to the smelter will amount to about \$10,000. There were 10 men on shift when the quake occurred, all of whom escaped without injury. The Anaconda Copper Mining company plant at East Helena was not damaged the slightest, officials said.

The big stack on the A. S. and R. property was shattered for about five or six feet at the top, dumping 100 tons of bricks to the ground. A hole, about three by five feet, was in the stack about 25 feet from the top, and a crack runs around it for 45 feet from the top. Mr. MacKenzie said that the plant would be closed for about a week the last of this month or first of November to do this work.

Still Working

He emphasized the fact that there was no necessity for discontinuing ore shipments to the smelter, as the ore handling, loading and receiving departments are all operating. The entire staff was at work yesterday.

When the 45 feet are removed from the big stack, there will be no replacement, but a new lead cap will be placed on top of it. The stack is 400 feet high at present, but will be cut down to about 355 feet when repairs are finished.

Two obsolete stacks at the plant, each about 125 feet high, were damaged beyond repair. They will be removed, but will not be replaced, said Mr. MacKenzie.

The superintendent said that 25 feet of flue in back of the furnaces fell in, and that a crew got to work on it Saturday morning, and operations were able to resume late in the afternoon.

The East Helena schoolhouse was damaged considerably, and will be closed for at least a week, a school official said. The replacement and repair work on the building will probably cost between \$1,500 and \$2,500. The building was damaged by the quake of Oct. 12, and repairs were under way when the big quake came Friday night.

In the schoolhouse, plaster was knocked off the walls and ceiling in every room, and the metal roof was torn apart. There is a large crack in the north wall of the structure, and the south wall is bulging.

An engineer will make an estimate of the damage within a few days.

All public gatherings in East Helena have been called off, although an official order has not been issued by city officials.

John Gough of East Helena said that the water department was undamaged by the

earthquake, and that all of the mains were in good shape. The city office in East Helena was damaged together with other structures in the business section. The fire station was damaged so equipment had to be removed for the time.

[Helena Independent; October 22, 1935]

LIFTED * * * * * * * * *

Beer And Rum Shops May Open

Deeming the danger past, Amos M. Shellady, commissioner of public safety, issued an order to Police Chief Roger Smith for the lifting of the ban on beer parlors and the state liquor store.

In the wild confusion following the initial tremors, the commissioners of public safety ordered the closing of such establishments. With the quakes virtually subsided and the morale of the people regained, Commissioner Shellady said he saw no reason to continue the ban.

He also issued an order to the police chief to limit the restricted area on Main street to only that sectionbetween Broadway and State streets. This morning at 8 o'clock all ropes but those guarding against the traffic on South Main will be taken down, the commissioner said.

[Helena Independent; October 22, 1935]

CHILDREN AT INSTITUTIONS EXHIBIT REMARKABLE COURAGE UNDER TRYING CONDITIONS; DAMAGE IS NOT GREAT

Superintendent Milo F. Dean, of the Montana Children's home and hospital, announced Sunday that the institution had weathered the shocks splendidly.

The Helena home for babies, younger children and girls sustained only slight damage. Plaster was cracked in some of the rooms and chimneys were shaken down. The home for boys in the valley was undamaged as far as could be ascertained, Superintendent Dean said

"The children took it just fine," he declared. "Of course, they were frightened at the time but they soon became calm and I think their morale is better than that of most adults."

Girls Take It Fine

The situation at the Vocational School for girls in the valley was similar. Mr. and Mrs. Hal R. Ives, superintendents, reported that the damage appeared to be of comparatively minor nature. Considerable plaster was shaken down in one cottage and some bricks were dislodged from another. Two or three chimneys were toppled over. However, no walls were shaken loose and no structural defects could be found.

Tents were obtained and the girls of the institution are being housed outside, with bonfires to keep them warm.

"They are in excellent spirits and the morale is of the best," said Mr. Ives. "In fact they seem to be on their mettle and determined to demonstrate the fact that they are not worried in the least. They are even better behaved and easier to handle than in normal times."

St. Joseph's orphans' home in the Helena valley suffered damages to the extent of \$50,000, but all of the occupants escaped injury, it was announced last night by Father J. J. Connolly of that institution.

Instructors at the school stated that the children were bearing up splendidly under the strain of the last few days, and that they are kept busy at something continually in order that their minds be occupied.

The building used as the school was damaged so that it is impossible to use it, he stated, and for the present it will be abandoned.

The dormitory building was badly shaken and its walls cracked in many places, but it is still inhabitable. The main stack on the building was cracked all over and will be torn down. About three tons of bricks fell from the rear sustaining wall of the dormitory building, and it may be necessary to remove the top floor of the structure in order to repair the wall, it was said.

The children have been moved to the barn where emergency quarters have been established. Those in charge of the school intend to resume classes sometime tomorrow, in the dormitory building.

According to a statement yesterday by the mother superior of the Good Shepherd's home, Catholic institution for girls two miles west of the city, none of the occupants were injured, but the walls of the institution were badly cracked by the quake, and one wall is sagging outward at a dangerous angle.

The smokestack of the laundry building was shattered and will be replaced with a steel one sometime this week.

The sisters and the girls of the school are camping out in a small summer house on the grounds, and are getting along as well as can be expected, the mother said. Occupants of the Odd Fellows' home in the Helena valley were shaken up and

considerably frightened by the temblor, but the building was not harmed in the least, according to an announcement by Mrs. E. B. Jones, matron of the institution. **[Helena Independent; October 22, 1935]**

FORTUNATE HELENA

With all our scares, losses, woes and fears, as a result of a major earthquake last Friday evening, Helena is the most fortunate place on the American continent where temblors of such proportions have occurred.

Not a fire in the Helena era; not a broken water main; not a broken gas line; telephone and telegraph service overloaded but still working; no floods to record; no dams broken; electric light and power service continuous except for a few minutes following the quake which shorted some high-voltage wires; mild weather and bright sunshine except for a few hours Saturday and Monday when rain and snow were threatened.

So we cannot refrain from saying to "That First Great Cause, least understood," that His bounty is beyond our speaking, and although our mouths be dumb, our hearts shall Thank Thee.

According to scientists and those who have given earthquakes serious thought and study, there is no record in history where, when a major earthquake occurs, there is a repetition at all likely. The vibrations which we hear and feel may continue for several days, a month or more, but another severe temblor is not at all probable.

Elsewhere in The Independent today is a list of the great earthquakes as far as recorded since the beginning of the Christian Era.

Look at their lists of dead and wounded!

Then consider that in the major earthquake which visited Helena, only two lives were lost. And Helena is a city with many old buildings; many homes which were not constructed to stand the power of earthquakes. Don't let anyone tell you that the Helena "quake" was one of the worst in history. It was bad enough. We are not discounting its shocking and seemingly supernatural power.

The almost universal succession of phenomena recorded in the case of notable earthquakes, is first a trembling or vibration, next a severe shock or several in quick succession and then vibrations which gradually but rapidly become insensible. No second severe shock or major earthquake is recorded. The quake of a week ago Saturday morning would not be and is not by scientists, classed as a major earthquake. It was a shock which preceded the disturbance of last Friday night.

Up to the time this is written, this has been the experience in the Helena area, and is said by scientists to have been the same as in other notable earthquake disturbances, except that the Helena temblor was insignificant compared to some of those in volcanic regions, where the earth has opened and swallowed up tens of thousands of people, or where an eruption as in New Zealand, covered the landscape for many miles around with suffocating dust and ashes many feet deep.

Let us be calm in the face of our troubles, real and imaginary. Our losses are financial-they will be quickly healed. We can pay for repairs and rebuilding, but we cannot bring back loved ones from the graves dug by the countless earthquakes since the world began. **[Helena Independent; October 22, 1935]**

OPEN FOR BUSINESS IS SLOGAN IN CITY; PURCHASERS ACTIVE Liquor Store Closed And Bootleggers Boost Prices

"Sure, we're open for business. People need stuff and we're the ones to give it to them," was the keynote of statements made yesterday by business and professional men of Helena.

Those buildings which were considered unsafe, however, remained closed to the public, but workmen and in some instances women, were actively engaged in cleaning up the debris and bringing about a semblance of order.

In the Sixth ward, where the fury of the earthquake seemed to center, building fronts were boarded up, but large signs indicated that rear entrances or entrances from adjoining buildings were open to admit customers.

The H. Earl Clack garage, completely ravished by the shake, displayed a large sign stating that the service station in front of the building was "Open for Business, We Need It."

Cheerful Manner

Grocery stores, butcher shops, wholesale houses and lumber and coal companies carried on business in a cheerful manner which helped greatly to keep up the brave spirit displayed by the folks whose dwellings were either wrecked or damaged.

The Northern Pacific depot, yards and roundhouse were the scene of much activity as large crews of men kept up a fast pace in the work of getting things back to normal. Helena's main business section wore a comforting and reassuring look as people went their many ways securing foodstuffs, dry goods, haircuts, permanent waves, hardware and the numberless things which are necessary at all times.

The state liquor store remained closed, and it was reported that opportunists from other Montana cities, quick to take advantage of such a dire situation, were bringing in large supplies of the bracing spirits which found a ready and lucrative market. Low-priced brands were not lacking takers, although the price paid for them was considerably higher than that usually asked for the topnotch grades.

[Helena Independent: October 22, 1935]

ALHAMBRA HOTEL IS FILLED WITH GUESTS

The major earthquake of Friday evening was felt only slightly at Alhambra Hot Springs, State Senator Mike Sullivan, proprietor of the Alhambra hotel, said yesterday. Every room in the hotel is occupied, and Sullivan said that he had to turn some people away. The quake he said, opened the hot water spring about three inches, and doubled the flow of water. At Alhambra, he added, the quake was "barely felt" and did not displace a single article.

[Helena Independent; October 22, 1935]

OUTRIGHT GRANT TO BE ASKED OF THE PUBLIC WORKS ADM'N TO FIX UP DAMAGED SCHOOLS

Trustees of Helena school district No. 1 last night adopted a resolution to apply to the Public Works administration for an outright 100 per cent grant to replace and repair damage done to the property of the school district.

A the same time the board adopted another motion, declaring the existence of an emergency, and authorizing the expenditure of at least \$3,000 for the immediate protection of school district property, and for temporary building repairs.

Begin Today

Today the West Coast Construction company, represented here by E. J. Decker, will cover damaged portions of the new high school with canvas to prevent any further losses that might be caused by rain or snow.

R. C. Hugenin, architect for the new high school, associated with Norman DeKay of this city, was authorized to arrange with the various contractors on the building for repairs that will make available about 30 classrooms. Expenditure of the money authorized by the emergency resolution must be approved by Chairman E. M. Hall of the board.

After the high school is covered with canvas at the necessary places, the contractors on the building will proceed to get the heating, lighting and water ready for use. It was brought out that the building must be heated, or further damage may result.

In regard to the PWA application for an outright grant to repair all of the school buildings in the Helena system, the clerk was instructed to assemble all authentic data and figures as to the cost of the repairs and replacements in order that there will be no delay at Washington due to insufficient information.

Walsh Acts

State PWA Engineer V. H. Walsh has already wired Washington officials for a sum to repair the high school.

In its resolution the board did not specify any sum, but chose to wait until definite figures have been obtained here.

Opening the meeting last night Architect Hugenin outlined the damage at the high school, stating that it was not as extensive as rumors have it.

From his examination it was apparent that the major damage occurred in the north wing, which is the auditorium. A great deal of brick, tile and partition must come down. It appeared the damaged wing will cost in the neighborhood of \$90,000 to put back into shape.

It will not be necessary to tear down the entire wing and replace it.

Thirty classrooms can be utilized while the repairs are being made.

Architect Hugenin pointed out that the building is not designed for an earthquake zone, because Helena was not considered in an earthquake zone. He added, however, that "you can't keep up with an earthquake."

Rooms in the building that can be used were designated by Architect Hugenin when questioned about the matter by Principal W. W. Wahl.

It was proposed that, if necessary, the gymnasium can be used for classes, as can the cafeteria.

When school opens, high school students will probably have to study "college style" as some of the study halls will not be available right away.

The boilers of the high school are undamaged, as are the concrete floors above them. It is possible that classes in aeronautics will be held at the airport if the arrangements can

be made. The possibility of using the old ship in the auditorium for the purpose was also discussed.

Hugenin advised the board, after conferring with a PWA auditor, to close its account with the PWA make application for the grant, and then accept the building. Outright grants, he said, have been made in the past in the case of destructive fires to new buildings. Stewart Bingham, Montana representative of the Reconstruction Finance corporation, appeared before the board with J. F. Seeley of Los Angeles, representing the RFC, to ascertain if the school district would be eligible to receive a loan from that agency for the needed repairs and replacements. Seeley said that congress had set aside \$5,000,000 for such an emergency, but that definite requirements had to be met.

It will take from three weeks to a month to get the high school in shape for occupancy. Other buildings in the system, except Bryant, may be ready in from two and a half to three weeks.

Bryant school, built at a cost of approximately \$80,000 is considered a complete loss. The application for a grant from the PWA will include the cost of replacing the Bryant school buildings.

At Hawthorne the damage may run about \$2,000, and at Central, probably less than \$2,000, it was estimated. Plaster damage was all that was done at the smaller schools. Bryant school pupils will perhaps attend Hawthorne, Central and Broadwater schools, and some arrangements may be made for using Coburn Memorial hall, in the Sixth ward. Architects Hugenin and DeKay will today begin a thorough investigation of repair and replacement costs of the entire school system.

Montana congressmen will be asked to pledge their full cooperation in securing the grant for the Helena school district.

At the suggestion of the architects and contractors, a competent engineer will be called in by the school board to inspect the damage at the high school and determine whether or not the injuries were caused by faulty construction or the severity of the major earthquake. All insurance policies on the new high school and the Bryant school were canceled yesterday by the companies that had issued them. A new appraisal will be made today, new policies issued, and the difference in the premiums remitted to the school district. The new high school carried \$388,000 worth of insurance on the building and \$12,000 worth on the equipment.

The board requested that the works progress administration make the necessary repairs at the old high school, now occupied by that government agency, and assured the WPA that it would not ask for the use of the structure for school purposes.

All members of the board were present at last night's special meeting.

[Helena Independent; October 22, 1935]

QUAKE GETS BLAME FOR AUTO ACCIDENT FRIDAY EVENING

Butte, Oct. 21--Ed Perkins of Butte blames the earthquake for the accident which wrecked his automobile Friday evening, friends reported yesterday.

Perkins was driving along the reservoir road when the strong tembler came. The agitation caused him to lose control of the machine and it went over a bank and overturned. The driver and a companion were uninjured.

[Helena Independent; October 22, 1935]

HELENA TAKES BREATH AND GOES COURAGEOUSLY ABOUT WORK OF RECONSTRUCTION

Helena, always prideful of its ability to take care of itself and meet its problems squarely in the face, yesterday drew a deep breath of relief and settled down to take stock of its situation and to make plans to rebuild for the future.

The tension of Friday night and Saturday was greatly lessened Sunday and by nightfall many persons had returned to their homes to spend the night. Saturday night the town was almost entirely dark.

Yesterday morning, bright and early, the mopup was started and scores of men were employed cleaning up debris and making such repairs as could be immediately undertaken.

Steps Into Breach

The county relief commission, which stepped into the breach Saturday, supplied men for cleanup work wherever possible. Since the damaging quake, it has taken care of its own relief cases and has helped with others as required. Now it is a position to resume its normal scope. It will provide for those on relief and the Red Cross will take care of the other cases.

All relief clients are subject to call to go to work on rehabilitation projects should they be needed, and the county organization is prepared to meet any future emergency. Chairman Sam Roberts of the Lewis and Clark chapter of the Red Cross announced last evening that the survey of the city to determine those who needed assistance, had been practically completed.

Funds On Way

"We have wired national Red Cross headquarters in St. Louis for sufficient funds to meet every demand which may be made upon us," he stated. "Every person who lost a home, and who is not able himself to rebuild it will be taken care of. We are able to give that assurance. Funds will be here immediately."

Mr. Roberts also stated that both Red Cross national officials now in the city would remain for some time and would be joined by two more trained workers to speed up the work of rehabilitation.

A group of public school teachers comprised the group that continued the city-wide survey yesterday. They were Phil Albertson, Roland Dietmeier, C. H. Marple, Dan Buck, George Leger, Fred Robinson, William Fahrer, Tate W. Peak and John Grosse.

The chapter chairman also announced the appointment of a disaster committee to supervision reconstruction plans. It is composed of R. E. Towle, chairman; Dick Tobin, John G. Brown, Quay Painter and John D. MacKenzie.

[Helena Independent; October 22, 1935]

VIEW OF EXPERT ON SHOCKS IN MONTANA

Pasadena, Calif., Oct. 21--(AP)--Carnegie institution seismological experts said today there is nothing unusual in the aftershocks of the Montana earthquake being reported from Helena.

"The only unusual factor in the situation up there was the occurrence of a strong foreshock a week in advance of the earthquake which caused the damage," said Dr. Charles Richter. "As to the aftershocks, if there is anything that could be considered unusual, it might be that there are less than usual after a big earthquake."

[Helena Independent; October 22, 1935]

343RD TREMOR FELT HERE AT 12:30 A.M.

At 12:30 this morning the 343rd distinct tremor was recorded at the Helena weather bureau, although there was every indication that the frequency of the interruptions was lessening.

Ten were recorded during the six-hour period from 6 o'clock last night until midnight, perhaps the least number in a six-hour span of time since the major quake Friday night. The major quake was the 60th since Oct. 12, so there have been 284 distinct disturbances felt since 9:52 Friday night.

There were three tremors felt between 8:42 and 11:21 last evening, the least there have been over a similar period since Friday night.

[Helena Independent; October 22, 1935]

MANY HELENA PEOPLE ARRIVE IN BILLINGS

Helena, Oct. 21--Many Helena residents, having relatives or friends in Billings, continued to flock into the city Sunday to take temporary refuge during the continued tremors that have been rocking the state capital.

All report the fearful sight of seeing buildings crumble under the constant quakes and they claim that the entire populace lives in dread that any moment a bad tremor might bring death.

Hotel blotters here showed several Helena entries but it could not be ascertained whether the parties were in Billings on business or because of the earthquake.

Anxiety of local residents for the welfare of the Helenans was evidenced by the influx of calls received at The Gazette office Sunday from persons desiring news of the earthquake-stricken area.

[Helena Independent; October 22, 1935]

SLIDE ON HIGHWAY NEAR LIVINGSTON CAUSED BY QUAKE

Livingston, Oct. 21--Folks driving between Livingston and Gardiner Friday evening were warned not to use the highway on the east side of the river because of a slide from the chalk cliffs about 24 miles south of Livingston that had made the road impassable. They were instructed to go to Emigrant and travel that way. It was said the slide consisted of several tons of the cliff that broke the telephone wires and endangered travel. The slide was said to be directly the result of the earth tremor that visited Montana shortly before 10 o'clock Friday night.

Inspection by road maintenance crews Saturday morning showed the slide not to have been as serious as at first reported, but it was necessary to bring out a crew to clear the highway of rocks and dirt. The road was put in shape for safe travel by noon Saturday. [Helena Independent; October 22, 1935]

KALISPELL REPORTS QUAKE DAMAGE LIGHT

Kalispell, Oct. 21--"What I was doing at the time" furnished fuel for many an earthquake yarn here the day after and stories came thick and fast.

Those who were affected most by the quake were prisoners in the county jail. When the steel cells began to creak and crack the prisoners made a real disturbance. The brick jail sounded as though it was cracking and distinct thuds were heard in the courthouse just a few feet away.

An examination of the courthouse building showed that a crack on the east side had widened. A crack in the Hileman building also opened up slightly, but so far as could be learned there was no damage of consequence in Kalispell.

[Helena Independent; October 22, 1935]

VISIT * * * * * * * * *

Streets Filled With Sightseers

Main street was thronged with people Sunday afternoon but they were not residents of Helena.

Several thousand visitors flocked into the city from Butte, Great Falls, Anaconda, Missoula and other cities on sightseeing tours.

Attracted by the reports of the heavy damage here, they came to view the ruins and many of them spent hours driving about the city.

Business Flourishes

The restaurants and service stations were taxed to capacity to take care of the rush of business.

"It was the biggest day I have ever had since I have been in business," said Tom Curtis, proprietor of the Curtis cafe. Other restaurant men open for business agreed with him. "I sold more gasoline between Friday night, following the quake and Sunday night, than I have during any other 48-hour period since I have been in the garage business" was the comment of Otto Krieg of the A-A garage. "At one time there was a line of cars more than a block long waiting for service."

His story was repeated by all other garage men contacted.

[Helena Independent; October 22, 1935]

I.U.C. PREPARES TO OPEN SCHOOL WHEN PERMITTED Cleanup Is Under Way On Campus And Grounds

Intermountain Union college will resume classes as soon as permission from the state fire marshal is given, President Jesse W. Bunch said yesterday as almost every available student on the campus worked to clean up the buildings and put them in habitable shape again.

Five contractors have examined the college buildings closely during the past couple of days, President Bunch said, and every one of them has said that the substructure is perfectly sound and that the buildings are safe for further use.

Meanwhile work is being rapidly pushed to get the plant in shape to open whenever the order is given. It will cost from \$10,000 to \$20,000 to fix up Mills hall and Helena hall for occupation, Mr. Bunch said, the estimate covering only the interior finishing work. It does not include the repair of cracked or bulging walls on the outside of the structures. A meeting of the board of trustees will be held Friday. President Bunch said his estimate on the complete repair of the buildings is roughly \$100,000 or possibly more.

"All we can do right now," the president said, "is to put things in working shape, fix up the class rooms in Helena hall and 40 or 50 dormitory rooms."

Most of the students left for their homes after being informed by authorities that the college would be closed for a week. President Bunch said he expected it would take some time for them to round up their belongings and get back on the campus after being notified that college was resumed.

Focal points of activity at the college today were the lodges on Eleventh avenue which are being rushed to completion. Heat will be turned on in one of the buildings tonight and the others will be ready for occupancy shortly. Students from the dormitory have been sleeping in the partially completed structures since the earthquake.

[Helena Independent; October 22, 1935]

RED CROSS OFFICIAL SAYS PEOPLE SHOULD GO TO THEIR HOMES

If buildings are not seriously damaged, people should move back into their homes, advises E. S. Transue of Denver, disaster relief representative of the Red Cross, who arrived here yesterday to conduct a survey of the quake losses in the city. He said that slight tremors would perhaps continue for some time, but none should be serious.

After touring the city he issued the following statement:

Home owners who are not in a position to make their own repairs are urgently requested to register at the Red Cross headquarters in the Montana Livestock Loan office at Main and Edwards streets.

"Anyone having bedding or stoves they can spare are asked to call 888 or 2507 and advise where same can be picked up.

"Red Cross officials and the local committee of the organization feel that if people will move back into their homes, one of the biggest problems will be solved."

The local Red Cross is urging those who are unable to meet their needs to register there right away. In order to properly give out the relief desired, it is necessary that family heads register.

A survey is also being conducted by the Red Cross to determine the total damage of the quake to Helena homes. High school teachers are doing this work.

Yesterday Secretary O. C. Lamport of the Helena Chamber of Commerce received the first call from a family without a home, and the six people were taken to the home of Paul Flint, 502 Monroe avenue. The family was that of George W. Langdorf, 821 Eighth avenue. Lamport said that the chamber of commerce is in a position to help other families who call telephone 37.

At the state FERA offices yesterday, F. H. Marvin, special representative of the FERA from Washington, said that the agency is in shape to handle those on relief rolls. He said that funds can be expended to help those on relief who were made homeless, but that the FERA cannot provide money to repair homes. The FERA arranged for the housing at Camp Cooney.

FERA workers will also help in clearing away debris around homes.

[Helena Independent; October 22, 1935]

GRID ******

Helena Bengals Will "Carry On"

Football will continue at the Helena High school.

Trustees of Helena school district No. 1 at their special meeting last evening authorized that practice be continued.

If necessary, the Bengal gridsters will use the field at the high school for practice, and the showers at the old gymnasium.

E. J. Decker, representing the West Coast Construction company, said that the showers at the new high school could probably be used within the next 10 days.

Next Saturday Helena plays the up-and-coming Great Falls team at the Electric city. Missoula plays here November 2.

[Helena Independent; October 22, 1935]

TRANSIENT CAMP SOUGHT FOR USE AS CO. HOSPITAL Senator Murray Wires For Permission To Give It

U. S. Senator James E. Murray last evening sent a wire to Washington, D. C., to the chiefs of the emergency relief association asking for permission to hand over to the board of county commissioners of Lewis and Clark county the federal transient camp at the fairgrounds, to be temporarily utilized as a county hospital.

During the heavy quakes Friday night, the county hospital building was virtually destroyed and the inmates and patients forced into make-shift quarters. U. S. Senator Murray held a conference with the county commissioners yesterday and agreed to make the request for the transient camp in behalf of the county.

Today the junior senator from Montana will be supplied with accurate information concerning the extent of the damages, and will wire Washington accordingly, it was announced. It was hoped to have the figures yesterday but those in charge decided to wait until today.

[Helena Independent; October 22, 1935]

FEDERAL BUILDING IN CITY WITHSTOOD THE SHOCK COMMENDABLY

The federal building was closely inspected yesterday and found to be in splendid shape, following the major earthquake on Friday night, although Postmaster Harry Hendricks has asked that an engineer be sent here to look over the situation.

During the tremor of October 12, Hendricks said that the principal damage was plaster cracks in the partition, the heaviest being in the stairway leading to the attic, and on the fourth floor. Damage was confined to the new wing of the structure.

On last Friday, Hendricks advised the public works branch of the procurement division for the treasury department, the plaster cracks on the upper floors were extended and several new ones appeared.

He said that the only damage to an outer wall was just outside of the disbursing office on the fourth floor, and this was slight.

The roof, Hendricks reported, was in good condition, but the smoke-stack was rocked, and was slightly damaged.

[Helena Independent; October 22, 1935]

GOVERNMENT IS SENDING AID TO HELENA HOMELESS AND DESTITUTE ARE ALL TO BE CARED FOR

Senator Murray So Notified By Washington Officials; Governor Cooney Announces WPA Is Delegated To Clean Up Wreckage; PWA Asked To Increase Grant Of School

Wires buzzed between Helena and Washington, D.C., yesterday as strenuous efforts, some successful, were being made to bring financial assistance from the government to this quake-ridden city.

U. S. Senator James E. Murray, who has taken an active part in getting Helena in position to receive federal funds for the emergency, received a wire yesterday from Aubrey Williams, assistant federal emergency relief administrator, to the effect that there is now en route to Montana a sum sufficient to take care of the destitute and homeless.

The telegram, addressed to Montana's junior senator, said: "Fund being transferred today. Everything being done to take care of situation."

Leaves For Capital

Senator Murray spent several busy days in Helena helping out in the quake catastrophe. He left the city yesterday afternoon for Butte and plans to be in Washington, D.C., within a few days to personally further Helena's rehabilitation projects.

The senator said that the amount mentioned in the FERA wire was at least \$100,000 and was to be used by the state relief agency in furnishing food, clothing and other necessities to the destitute and shelterless.

Governor Frank H. Cooney announced that successful negotiations had been consummated between James H. Rowe of Butte, personal representative of Frank Walker of the New Deal national emergency council, and Washington, and that assurance was given that the WPA would be delegated to take full charge of cleaning up dangerous conditions, wrecking damaged buildings and hauling away debris.

Decide Today

Mr. Rowe was informed by Mr. Walker that he would hold a special conference with Assistant Administrator Williams this morning and complete final arrangements. On Thursday, the following morning, Williams will meet with Administrator Hopkins and Secretary Ickes, and will urge the speedy cooperation of the PWA in coping with Helena's vast rehabilitation problems, principally in connection with schools and other public buildings.

U. S. Senator Murray has asked the PWA to extend the grant for the Helena high school from 30 to 45 per cent. Full details of Helena's plight is being furnished Washington by Mr. Rowe.

Two important conferences were held yesterday at the capitol with Governor Cooney presiding and representatives from state and federal agencies and city organizations in attendance. Wires were kept busy all day to Washington as the skeleton form of a comprehensive program took shape.

Governor Cooney submitted a plan to the group which was adopted and will prove satisfactory if government agencies join hands in helping a city crippled to the extent of approximately \$3,000,000.

Many Sources

Immediate emergency is the paramount issue and under the program as outlined the American Red Cross will take care of the homeless and orphan children. The federal emergency relief association will furnish food and clothing to relief people and borderline

cases, with the works progress administration delegated the task of tearing down unsafe construction and clearing away the debris.

Many solutions are offered those rebuilding and repairing their homes; the American Red Cross to handle the small rehabilitation cases; the Reconstruction Finance Corporation with its offspring unit, the Montana Rehabilitation Corporation, to make secured loans; the Federal Housing Administration to insure loans from private loan agencies, and the various private loaning agencies such as banks, building and loan associations and insurance companies to make sound advances.

On Job

With the banner of the American Red Cross waving as the official relief agency in Helena during the earthquake period, Disaster Relief Representative E. S. Transue has advised state officials that the organization will take care of all the needy and destitute. Registration opened yesterday in the Red Cross headquarters in the Montana Bank building and the set-up will be in complete readiness today. Case workers are scheduled to arrive so that a complete survey can be made.

Governor Cooney also took initial steps towards the correction of two evils--stopping exaggeration of news being sent out, particularly to broadcasting stations, and getting rid of all the transients in the city.

Ray Hart, works progress administrator for Montana, assured the gathering that the WPA would take an active hand in the rehabilitation work. There was no doubt in his mind that it would be allocated funds for the clearance of the city's debris. "If we can't do it, the relief commission will." he said.

Start Rebuilding

Helena was much calmer yesterday and the busy noise of hammer and saw could be heard as many residents of the city wasted little time in rebuilding and making necessary repairs.

Portions of the city remained restricted and under patrol, while beer parlors and the state liquor store were allowed to re-open.

During the days of the quakes, the Wishbone cafe on North Main street, owned and operated by C. J. Cullen, proved to be a helping hand to the police, patrolmen and members of the national guard. Free coffee was served to those in uniform at any time they wished. Hundreds of cups of coffee were provided during the quake period.

[Helena Independent; October 23, 1935]

CARROLL'S STATE INSURANCE LAW CARRIES NO PROTECTION FOR LOSS FROM EARTHQUAKE

Under the proposed state insurance law, suspended by petition and submitted to a referendum, public buildings insured there under would not have been protected from loss by earthquakes.

This was disclosed Tuesday by insurance underwriters who have made a study of the state insurance act, and it is made plain in two sections of the act that school district and county property would not be protected. But it provides that officers of such units, may insure public buildings against earthquake damage with private companies.

Section I which enumerates the perils against which state insurance is effective, provides: "That all public buildings of this state and of each and every political subdivision thereof, and the contents of all such buildings, except as hereinafter provided, shall be insured by the state against all direct loss by fire, lightning, tornado, windstorm, cyclone, hail, explosion, flood and water damage, under the provisions of this act, which said insurance shall be provided for, determined and paid for as provided by this act. Provided, however, that officers and authorities having charge of buildings and contents above described may insure against earthquakes and, or other perils not above enumerated in this section."

[Helena Independent: October 23, 1935]

REPORTS THAT RIO TO OPEN NOT TRUE; STATEMENT ISSUED

Reports about the Rio theater opening in a few days are entirely erroneous, according to Paul McAdam, manager.

In a statement yesterday, Mr. McAdam said: "The show will not open until everything has quieted down, the tremor ceased, and the building carefully inspected by the authorities. An examination of the building indicates there is no apparent damage done.

"The quake did not seem to strike as hard on the downtown section of town as in the residence district, and we even continued the show for a few minutes when the power was on. Not realizing the extensive damage done, we made an addition to an ad prepared for the morning paper. However, upon reaching home, the real force of the earthquake was apparent; our brick dwelling was in shambles, and our folks nearly hysterical. In forgetting about the ad, we no doubt caused considerable confusion, which anyone experiencing the quake can easily understand."

[Helena Independent; October 23, 1935]

RAILROAD OFFERS TO TRANSPORT SUPPLIES WITHOUT ANY CHARGE

Any Red Cross supplies that may be required for citizens of Helena who suffered loss in the earthquake will be transported free by the Northern Pacific, M. S. Gunn, division counsel for the railroad, was notified yesterday in a telegram from President Charles Donnelly, then in Creston, Iowa.

The telegram follows:

"On behalf of Northern Pacific Railway company please express our sympathy to the people of Helena on account of the great catastrophe which has befallen them, and assure them of our readiness to transport free all Red Cross supplies."

[Helena Independent; October 23, 1935]

TAKING CARE OF THE BRYANT STUDENTS IS STUDIED BY OFFICIALS

Possibility that the eight grades of the Bryant school will be handled at Broadwater and Central was announced last evening by City Superintendent R. O. Evans, following a meeting in the afternoon of school principals.

No definite plan was adopted, Mr. Evans said, but the proposal most favored was to have the first four grades attend school at Broadwater, and the upper four at Central. Those in the first four grades would be taken to Broadwater by bus.

Bryant school was a total loss as a result of the major quake last Friday.

[Helena Independent; October 23, 1935]

WHAT A MESS!

What a mess the taxpaying citizens of Helena have created in a city, which for more than seventy years, has been considered conservative, by listening to and doing the bidding of non-taxpayers and trouble makers.

The recent earthquakes have done some damage, but it is nominal compared to the mess into which this city is getting deeper and deeper by turning its affairs over to men incompetent, unfaithful to their trust, sometimes we think mentally unbalanced. Last Saturday--the day following the major earthquake, Commissioners Shellady and Evans saw the necessity of having an emergency declared in the city that officers might move freely to enforce regulations and that a commission might be appointed to deal with the federal government. The City Attorney and another lawyer of eminent standing, drew up the necessary special ordinance. Commissioner Shellady called on the Mayor at his home. The Mayor flatly refused to sign such a resolution, saying that when he got ready he would draw up an ordinance himself.

Saturday was the Mayor's Sabbath, so nothing could be expected from him--homeless people, citizens living in tents expecting every moment to experience the final crash, could not be permitted to interfere with the Saturday devotions of His Honor.

Senator Murray came to Helena and offered to take a plane to Washington and present Helena's case to the Relief Administrator in person, if he could get a commission of reputable citizens appointed on whom the government could depend.

All day Sunday Senator Murray waited.

Norman Weinstein, president of the Chamber of Commerce, conscious of the pressing need, spent all of Sunday afternoon and evening hunting for Mayor Bausch. He had disappeared.

Senator Murray agreed to wait over until Monday or Tuesday if necessary that a committee or authority might be named to handle the rebuilding and housing work in Helena. Monday morning dawned. The nerves of the people were all shot. Hundreds were homeless. Snow began falling and the temperature dropping. Misery, suffering, even death faced scores of families.

Mayor Bausch appeared at the city hall with a resolution declaring an emergency existed and said he was willing to sign it on the condition that it be accepted as written and on the further condition that Noble P. Evans, commissioner in charge of streets, be given the entire job of handling the departments of public safety, fire and police, as well as streets, parks and the relief work.

At that moment the City Attorney moved in and informed the Mayor that such a resolution was not only ridiculous but illegal.

After a quarrel lasting nearly all day, during which the Mayor denounced his enemies, cried, orated, pleaded and otherwise made an ass of himself, an ordinance was passed in regular order as suggested by the City Attorney. Noble Evans was not placed in charge of the city as proposed by the Mayor, but a committee of nine citizens and business men, with former Gov. S. V. Stewart as chairman, was named.

Some idea of the efficiency of Noble P. Evans may be gleaned from his own actions during the three days.

The first thing he did Monday morning was to take a big crew of city employees and begin tearing down a one-story stone building, located behind the Marlow and the Federal Reserve Bank--a building formerly belonging to Pat Smith, condemned years ago, not occupied since; an eye-sore but if it had fallen down it would not have caused the loss of a

dollar nor damage of fifty cents.

To this old building Noble P. Evans, street commissioner, devoted the first hours of Monday morning, until an Independent photographer began taking pictures of his "rescue squad." Then he explained that he was trying to make more parking space for automobiles.

More parking for automobiles!

What a humanitarian thought!

Why not take a crew of men with ladders and start up Fifth avenue or Breckenridge street; or Rodney street, or Lyndale or Boulder and inspect every flue and throw down every dangerous brick?

Why not pitch 100 tents and bank them up so terrified people would have some shelter? No. Noble P. Evans never thought of finding places for families to park. His only thought was to give jobs to eight or nine of his political friends, and he gave them jobs tearing down a harmless old building, which would have made room for parking at least five automobiles.

Ye, gods, what an idea!

Tuesday morning broke bright and warmer, so Noble P. Evans thought of the leaves blowing around among the earthquake ruins, and he put out a crew of men to sweep up the leaves in the gutters.

Leaves are so much lighter to gather up than bricks, so Noble P. Evans put the boys to boon-doggling with some rakes and push brooms.

What a mess!

That made by the earthquake is not a circumstance to what we are going to have if we continue to place incompetent men in charge of our public affairs.

[Helena Independent; October 23, 1935]

WATER FILLS HOLES AFTER EARTHQUAKE

One of the queer things accomplished by last Friday night's large earthquake was the opening of a good-sized spring on the ranch of Frank O. Gumprecht, between Birdseye and Silver.

The Gumprechts last spring dug two shallow holes in a low piece of ground in the hopes of finding water but none was forthcoming, and they forgot about the matter.

After the quake, the holes filled with water, the flow of which is not heavy but seems to be continuous.

Although a thorough inspection of their land has not been made, no cracks in the earth have been discovered in the immediate vicinity of the holes.

[Helena Independent; October 23, 1935]

SEISMOGRAPH HAS BEEN SET UP HERE BY U.S. OFFICIALS San Francisco Men In Helena Represent U.S.C. And G.S.

Instruments for the recording of earthquakes and tremors were set up in Helena yesterday morning by representatives of the U.S. Coast and Geodetic survey, who arrived here from San Francisco.

The two men are Dean S. Carder and Franklin P. Ulrich, both of whom have had extensive experience on the west coast in operating the seismographs.

They will remain here for several days, depending on the activity in this area.

From Frisco

Instruments brought here are from the U. S. Coast and Geodetic survey station at Golden Gate Park in San Francisco.

One of the machines is a "strong vibration" instrument, and will only record a quake of some intensity. The other is a "vibrator" and will measure a vibration of much lesser intensity.

It is not possible for the public to see the instruments, as they are carefully covered, and if light were allowed on them it would expose the sensitive paper on which the recordings are made. On these types of machines the activity of the quake is recorded by light on a paper similar to that used in making photographic prints, contrary to public belief that a sensitive needle records the tremors on paper with ink.

The "strong vibration" instrument requires a fairly heavy quake to record. A pendulum is suspended inside of a platinum ring, and if the tremor is strong enough to cause the pendulum to touch the ring, the machine begins to operate, and will record the activity for several seconds. There are 51 of these machines in California, located at various points.

Center At Craig

From their study yesterday, the San Francisco men said the epicenter of the major quake here last Friday was about 10 miles east of Craig. The epicenter is the point over which the quake originates.

The material on the earthquakes is gathered by the U. S. Coast and Geodetic survey not only for the various reports that are compiled, but also for the benefit of engineers and builders who desire such information in constructing houses and buildings in an earthquake zone.

The instruments are in the basement of the federal building, placed there in order to avoid the vibration of the building when tremors occur.

[Helena Independent; October 23, 1935]

HELENA'S NEEDS TAKEN UP AT MEETING OF OFFICIALS CALLED BY THE GOVERNOR

Helena's needs following the major earthquake last Friday night were presented to Governor Cooney, federal officials and Red Cross officials at a meeting called by the chief executive at the capitol yesterday morning. This meeting was preliminary to the one yesterday afternoon where the recommendations of the general meeting were carefully analyzed.

Governor Cooney presided at the meeting. He opened by saying that there were two main things to be accomplished--the rebuilding of homes for those who owned them, and the immediate relief of the needy. Because the county hospital was destroyed he strongly recommended that the transients now being housed there be sent to other parts of the state so the aged people of this county can be taken care of.

Barclay Craighead, state director of the Federal Housing administration, explained that his agency could not help in relief cases, but that it can perhaps increase the credit possibilities of individuals whose property was damaged by the quake. He explained briefly how loans can be made through the FHA, both for the individual, and for commercial places.

Already Organized

Stewart Bingham, state manager for the Reconstruction Finance corporation, explained the act of congress appropriating \$5,000,000 for earthquake relief, and said that a corporation in this state, to be known as the "Earthquake Rehabilitation Corporation of Montana" had already been organized, and that articles of incorporation would be filed yesterday afternoon.

He said that he had asked the RFC for \$150,000 as an initial advance for repairing quake damage. This agency expects to loan money to people to rebuild their homes, running over not more than a 10-year period, although the government prefers five years. Money loaned under these conditions will bear 4 per cent interest.

T. O. Hammond, Helena banker, said he did not believe the federal agencies, for the most part, would reach the people who most need help. He suggested an outright grant of a million dollars from the Federal Emergency Relief administration to meet the situation. He said that a direct appeal to the FERA should eliminate a lot of "red tape."

Governor Cooney said, however, that the money could only be used for relief, and he believed that FERA funds for building homes was out of the question.

Red Cross Part

- A. T. Hibbard, Helena banker, told of what the national Red Cross has done so far in the stricken area. He said that it has taken over the actual relief situation, and that it is making valuable surveys as to losses. He declared that the Red Cross would expend thousands of dollars for those who are entitled to it, and for those unable to help themselves.
- E. S. Transue of Denver, representative of the Red Cross, said that his organization was interested only in the family and home problem. He does not believe that the "home problem" here will be as complicated as was anticipated.

He said that there are two classes of people who suffered from the quake--those who can, and those who cannot take care of themselves. In case of the latter, he said that the customary investigations would be made, after which the Red Cross would begin to spend the money. The matter of how much will be expended, he said, does not come into it, as the emergency such as is in Helena is exactly what the organization handles.

There was considerable discussion in regard to public institutions and near-public

institutions that were damaged by the quake. The most tangled problem presented was in regard to getting aid for such places as St. John's home, the Deaconess school and similar institutions.

In 30 Days

Red Cross officials say that their task in Helena should not take more than 30 days to complete.

J. F. Seeley of Los Angeles, representing the RFC, said that under the set-up of his agency; loans perhaps could not be made for long terms, but said he believed the application for funds would go through with the least delay.

He assisted in handling the earthquake loans at Long Beach, and said that 650 loans were made for two and one-half million dollars in between 12 and 14 days. The first application for \$150,000, he said should be approved in four days time. The RFC will then be in a position to accept applications for loans from those who can give a first lien. Seeley said that there is still about three to five million dollars in the federal earthquake fund. RFC loans can be made on any type of real property where a valid lien can be obtained, and the property does not necessarily have to be inside the city limits.

Later in the meeting, Mr. Seeley said that he had talked over long distance to a member of the RFC board in Washington, and he assured him that the agency would act immediately in the Helena matter, approving requests by wire where possible.

WPA To Help

Ray Hart, administrator of the WPA, said that his agency could only do work on public enterprises, although assistance could be furnished in wrecking hazardous buildings. Administrator Rufcorn of the FERA offered his co-operation, while F. H. Marvin of Washington, D.C., special representative of the FERA, said that he would do what he could to get accommodations for transients in other parts of the state so that the quarters at the fair grounds can be occupied entirely by those from the county hospital. He said he had wired Washington for authority to act in this matter.

It was then proposed that one agency be designated to act in the emergency, and assign those who suffered losses to one of four agencies as follows:

- (a) The Red Cross, for those who have no means of rebuilding.
- (b) The RFC, for those with credit on the "border-line," requiring long terms.
- (c) The FHA, for those who wish to have their loans insured by this agency.
- (d) The banks, for those who prefer to deal directly with these institutions.

Not Charity

It was emphasized that those consulting these agencies were asking for information and not charity.

It was generally believed that the Red Cross could handle the situation better than any other organization, because it has the necessary workers available.

FERA clients who suffered by the quake will be helped by the FERA.

Col. E. H. Williams, state adjutant general, emphasized the need of temporary shelter for those whose homes are uninhabitable. He said that it was getting too cold to use the tents at Camp Cooney, where about 500 are being cared for.

Alex Cunningham, treasurer of the Montana Life Insurance company, said that every mortgage his firm is holding on Helena property is being checked, and that the Montana Life will be willing to increase loans on property damaged by the quake on which it holds mortgages. He said also that the company had resources to make loans for repairs.

J. H. Rowe, representing Frank Walker, suggested a meeting in the afternoon for the

consideration of the recommendations made, and the general meeting adjourned. **[Helena Independent; October 23, 1935]**

BOYS SHOW COURAGE AND ENTERPRISE IN TEARING DOWN RUINS

Courage and initiative were displayed by Helena boys Monday and yesterday when there was a temporary shortage of men for the task of taking down quake chimneys which were considered hazardous.

Boys, many of them only of high school age, equipped with ropes, picks and other instruments, canvassed houses all over the city looking for jobs tearing down damaged chimneys.

Some chimneys, considered extremely hazardous, had been taken down by the Helena fire department, and some by the home owners themselves.

It was, however, difficult to locate grown men in sufficient numbers to make much headway, so the boys stepped in and filled the bill satisfactorily.

Some of the boys were reported as doing well in their emergency jobs, many of the thankful residents generously rewarding them for their brave services.

Fire Chief Juhl was kept continually on the run yesterday as house-holders all over the city called the station house and requested an inspection of flues or chimneys.

Toward last afternoon a number of men and boys, estimated by some people at 100, were busy in all sections of the city climbing ladders or ropes, ridge-walking roofs and leaning far out of adjacent windows in the task of taking down the ruined chimneys.

[Helena Independent; October 23, 1935]

STATE LIQUOR STORE OPENED BY SHELLADY; TRAFFIC BAN LIFTED

Helena's state liquor store and the beer parlors, in buildings which were in safe condition, reopened yesterday by permission of Councilman Amos Shellady, commissioner of public safety. Business was good.

The ban on automobile traffic on Main street was lifted with the exception of that portion between Broadway and State streets.

No automobile traffic is yet permitted in the vicinity of the cathedral, in an area near the Northern Pacific station, on parts of State and Jackson streets and several other places where danger of buildings falling still exists, Mr. Shellady said.

Motorists must come to a full stop in front of buildings where the sidewalk has been roped off and pedestrians are obliged to walk in the streets, according to the order.

"This rule will be rigidly enforced," Mr. Shellady stated, "and violators will be severely dealt with in police court."

Theaters, churches and other public gathering places will remain closed until they have been officially inspected and pronounced safe by Oscar Baarson, city engineer and temporary building inspector.

Inspection work is being carried out as rapidly as circumstances will permit.

[Helena Independent; October 23, 1935]

DISASTER IS NOT NEW TO HELENA HISTORY SHOWS; EACH TIME CITY HAS ARISEN WITH RENEWED VIGOR

Although the latest has been by far the worst, disaster and misfortune are nothing new to this city, once one of the richest gold mining camps ever opened and now the political center of the state.

Nestled among the foothills of the Rocky mountains, self reliant and optimistic, Helena has always taken pride in its ability to stand on its own feet and come back with renewed vigor and determination after each serious reverse.

Seventy-one years ago, Last Chance gulch was discovered by pioneers as rugged as the Rockies towering around the city. With unquenchable spirit, they forced the gulch to yield its gold and created the city that became the capital of Montana.

Meet Each One

Each successive disaster was met with that same pioneer spirit and each time the city has been rebuilt sturdier and better than ever. It will be the same this time, and already reconstruction plans are under way, out of which a new and stronger Helena will arise. Today the rugged buildings of the business section of Main street, many of them erected when the city was an infant, show scarcely the semblance of a mark of the great earth disturbance, reflecting the massive strength of the surrounding mountains and the spirit of the pioneer prospectors.

Already federal and private relief agencies are rallying to the assistance of the stricken city. They will provide the initial and immediate impulse to set reconstruction in motion. From that point the city will carry on itself, and it is confident of its ability to do so.

Four Fires

Since its beginning, Helena has been ravaged by four major fires that struck through the business and residential sections, and each time the work of rebuilding started before the embers cooled. A flood nearly carried the town away on another occasion and gales have torn at its roof tops in years gone by. Previous quakes, too, have caused some damage, and heavy, wet snows have crushed weak structures and ripped limbs from trees. With each disaster the loss mounts higher, but with each disaster comes improvement in building construction and a firmer determination in the minds of the people.

The terror of Friday night's earth-bouncing is leaving, and the people who stared at the walls about them and wondered which would go out first or if it would be a tie between the ceiling and the floor, were today smiling through the ruins and knocking together some sort of an abode before snow flies and the temperature slumps to the small figures on the scale.

On April 28, 1869, four years after the town was founded, a fire broke out in a Chinese gambling house, say the histories, and raged through the lumber shacks, log cabins and the few stone buildings then in "Last Chance" gulch. There was no figure on the loss at that time. The Helena theater was destroyed and a San Francisco theatrical company lost its entire wardrobe.

The town was rebuilt.

On an August afternoon in 1872, fire started at the rear of a Main street hotel near Broadway and raged eastward for six blocks and part of another. Forty men operated the water pump and finally the blaze was controlled. The next afternoon ox-carts began hauling away the ashes and the banging of hundreds of hammers could be heard. The town was rebuilt.

In 1874, on a bitter cold January morning, another fire started in a Chinese gambling house. Half of the business section went up in flames for a loss of about \$850,000. Feeling ran high against the Chinese in this fire and residents armed with six-shooters cowed most of the orientals and made them man the big pump. The ice in the fire reservoir was broken and the pumpers had to stand in that water. Sheriff Seth Bulock arrived to quiet the crowd that was abusing the Chinese as they pumped. The town was rebuilt.

Then The Biggest

Then Helena bought a steam fire engine, but nevertheless a bucket brigade was called into action in several subsequent early-day fires.

On July 16, 1926, the fourth of the disastrous fires occurred. It destroyed a number of buildings on one side of the main street business section for a loss of a million and a half dollars.

The town was rebuilt.

Frances Marie Antoinette Rose, in "Army Letters From an Officer's Wife," tells of the flood that ravaged Helena in August, 1878. There were a few drops of rain, she wrote, a blinding flash of lightning, "then the deluge." Oceans of water poured down the gulch, her account said, and the little gold-washing stream became a "roaring, foaming, black river." Shacks, cabins and furniture swirled down the gulch.

The town was rebuilt.

There is record of an earthquake of five seconds duration on December 10, 1872, and another of about the same length the following day. Another was felt here in 1925 but the damage was nominal.

More than 80 per cent of the 3,500 homes in the Capital city suffered from the quakes of last week, said E. S. Transue of Denver, Red Cross disaster director. The value of the average home is about \$5,000 and the average damage to each is more than \$100. The loss to the owners individually, however, runs from total to none. One home suffered \$10,000 damage. The entire quake loss is two and one-half to three million dollars. The town will be rebuilt.

[Helena Independent; October 23, 1935]

EARTHQUAKE DAMAGES HELENA'S CEMETERIES

Buildings, gravestones and monuments in Helena's cemeteries came in for their share of damages during last Friday night's giant earthquake.

Many small stones were tipped over while the larger monuments, although some were twisted on their bases, seemed to have weathered the shake better than the small ones. The granite arch over the main entrance at Forestvale suffered numerous cracks, the top row of blocks being shattered into bits.

The west wall of the Sexton's house was cracked to such an extent that it may have to be torn down, and the chimney and stone pillars on the front porch were damaged.

[Helena Independent; October 23, 1935]

HELENA QUAKE TOTAL REACHES 372 SINCE BIG ONE ON FRIDAY

Up to midnight last night a total of 372 tremors had been reported by the Helena weather bureau including and since the major earthquake on last Friday evening. The last one was recorded at 10:59 last evening, and was described as a long rumble, lasting for two or three seconds.

There were only five tremors between 6 o'clock last night and midnight, all but the last being very light. Others were recorded at the weather bureau at 7:11, 8:08, 10:18 and 10:30.

This brings the total since October 12 to 432, which number includes 60 before the big earthquake. A check on the records yesterday revealed that the big one was the 61st since October 12, and not the 60th as previously reported.

[Helena Independent; October 23, 1935]

CITY'S RESIDENTS THRONG STREETS AS STORES OPEN Business Houses Enjoy Lively Trade From Purchasers

Helena's downtown business section yesterday took on an appearance which closely resembled that of normal times as thousands of people, in acute need of foodstuffs, wearing apparel, drygoods and numberless other articles, went about their shopping as though nothing had ever happened.

Some folks displayed absolute composure by visiting dentists' offices to have dental work performed, and, in some cases, to have teeth pulled.

Nearly all of the city's business establishments were open for business, and nearly all enjoyed a good trade. A few buildings as yet not inspected, remained closed, but displayed signs signifying their intentions of opening as soon as they were given an O.K. by the building inspector.

As Usual

Sixth ward merchants carried on business behind boarded windows, and used, for the most part, rear entrances for customer entryways.

Wholesale houses maintained a lively pace, supplying the retailers with needed merchandise.

Cafes and lunch counters enjoyed rushes of customers larger in numbers and larger in appetites than on ordinary days.

Hotel registers became once more pieces of paper covered with names, and the fact that the signers have overcome their timidity was proven when it was shown that the legibility of the names was the same as usual.

There were still many visitors in the city, and as they asked directions from Helena citizens they marveled at the orderly and composed manner of the people going about their daily tasks

[Helena Independent; October 23, 1935]

QUOTES ON THE QUAKE

John Mountjoy, former state fire marshal, was returning to his home in Boulder the night of the quake. As he was approaching the overpass this side of Clancy, the major tremor rumbled through the valley. "Such a cloud of dust arose I had to stop the car until it passed," he said.

One of the Helena Chinese was brave enough to continue selling vegetables on Saturday, following the big quake and was putting up quite a sales talk to Mrs. J. Burke Clements of 11 S. Benton avenue when one of the medium-sized temblors rocked the porch.

"Carrots. Holy Clee. Lettuce. Clistamighty. Aspasaspasagusags " the Chinese shouted as he leaped from the porch and headed for his truck.

M. J. O'Leary, proprietor of a South Main street barber shop, declares that a man rushed into his shop Saturday morning shouting out, "Helena's been turned around completely by the earthquake." The man, unidentified, insisted that the barber shop was now on the wrong side of the street and that the sun was setting instead of rising.

Speaking of quakes. Here is a portion of the newspaper account of one occurring in Helena December 10, 1872, according to the Helena Daily Herald of December 11 of that year. "The quaking was experienced in all parts of the city alike, and was accompanied by a rumbling noise, resembling that of a heavy freight train rolling through the streets. . . . The massive granite building in which The Herald office is located, shook as violently as the frame work of a gaunt Hoosier, assailed by a fit of Wabash ague. . . . Considerable alarm was felt for some moments by numbers of our citizens, who conceived a notion of the efficacy of an airing, outside their houses and places of business."

The same quake in 1872 in Deer Lodge "broke chinking from some of our oldest houses. There was a general jingling of glassware in the drug stores, and the liquid contents of the furniture slopped up against the sides of the jars like so many little seas. . . The courthouse swayed first to west, and then rocked back and forth until court, jury and spectators made a complete stampede from the building."

Al Andreason, who operates a grocery store on North Rodney, is not conducting the inventory he figured upon. When the quake struck Friday night, he decided that his entire store and stock must have been ruined. He found this damage: Four eggs broken, one can of milk toppled from a shelf.

Leave it to Los Angeles to send up the nuttiest suggestion on the Helena earthquake. One M. E. Twining expended a few of his hard-earned shekels to send the following telegram to Secretary O. C. Lamport of the Helena Chamber of Commerce: "Send for F. J. Bielsky, 924 N. Western avenue. Will stop earthquakes."

From Seattle to Mayor Bausch came the offer of a hotel range for possible use in feeding the homeless.

It was from Frank Lang, a former Helena citizen.

Montana Boy Scouts through Gordon A. Day district Scout executive, offered "any assistance our organization can give."

One tourist camp proprietor notified the building inspector he would help relieve the housing situation by immediately erecting eight or ten three-room houses.

The earthquake was credited with speeding the cause of justice today when eight federal prisoners confined for months in the well-torn Lewis and Clark county jail asked that they be permitted to plead guilty to various offenses and were taken to Butte for arraignment. When the quake struck, residents of the Charles H. Morrison home dashed to the street. They remained outside quite a while and later returned to find this had taken place:

Dishes in the pantry had fallen to the floor and were broken. A full box of matches tumbled out of a cupboard and was ignited. Every match burned. A sack of sugar spilled over the flaming matches and put the fire out.

One of the afternoon shocks toppled a portion of the rear wall at the city hall. The fallen section left a hole 25 feet long and 12 to 14 feet high extending from the top of the two-story structure to the top of the first story.

[Helena Independent; October 23, 1935]

CITY CONDUCTS SELF IN ORDERLY MANNER, LAW OFFICERS SAY

In contrast with the disorder which usually follows a major disaster, discipline in Helena since Friday night's giant earthquake has been commendable, due to the co-operation of the people with the police force, the highway patrol, the national guard and American Legion volunteers.

Only two cases of theft have been reported to the police. One was that of a pocketbook from the wrecked home of Policeman Martin Foley while he was on duty down town. The other theft was that of a bicycle belonging to Prescott Towle.

Police officers investigated two reports of prowling, one at 535 Breckenridge street and the other at 710 Power street. No one was found who could be connected with the reports. One slight car accident, with no one hurt, was reported between E. V. Colwell and Donald J. Rowe.

Bobby Smith and a man giving the name of John Doe were arrested yesterday afternoon for drunkenness and fighting on Main street. They were taken to the county jail and later released on \$10 bonds. They are scheduled to appear in police court this morning. **[Helena Independent; October 23, 1935]**

BAUSCH AND EVANS REFUSE TO HAVE BUILDINGS INSPECTED AT CITY EXPENSE

COMMITTEE TAKES OVER HELENA RECONSTRUCTION

Mayor Seeks To Block Rehabilitation During Gravest Crisis City Ever Has Faced; Score Of Engineers Engaged By Committee, To Make Inspection Of All Damaged Buildings

With the city facing its gravest situation since the major shock, by reason of Mayor C. J. Bausch's refusal to permit City Engineer Oscar Baarson to employ engineers to inspect damaged buildings or to expend money for their transportation about the city, Helena's Emergency Reconstruction committee took over complete charge of rehabilitation affairs yesterday at a special meeting called to consider the new emergency.

Stepping into the breach, the committee, of which S. V. Stewart is chairman, on its own initiative and responsibility, wired outside points and secured the services of nearly a score of competent engineers and building experts. Several of them arrived last night and before tonight at least 15 will be on the job.

Mayor Out

The action of the committee leaves Mayor Bausch completely out of the picture insofar as administration of emergency activities are concerned, and similar procedure will be followed when any future emergency arises, O. C. Lamport, secretary of the committee, announced.

"What we want now is action," asserted Mr. Lamport. Human life is at stake. We do not know how many buildings in the city may be so badly damaged that they are likely to collapse at any time.

"It is imperative that every structure in the city suspected of having sustained damage, and particularly the larger business, public and semi-public buildings, be inspected at once to determine whether or not they are dangerous.

"This must be done! Hang the expense. We are not interested at this time in who will pay the engineers, the city or the government or some other agency. They will be paid alright, whether by the city or not. They are glad to help us out on that assurance and the main thing is to get the work done and prevent a possible further loss of life."

Swamped

Swamped by applications from property owners, who incidentally are taxpayers, for inspections of their property to determine whether or not it is safe, City Engineer Baarson appealed to the mayor for authority to employ several additional competent engineers to assist in the inspections. He also asked for an allowance for gasoline and taxis, if necessary, to transport them about the city in making the inspections.

Both requests were flatly refused by Mayor Bausch, who said that the city had no funds for this purpose, that no allowance for it had been made in the budget and that therefore no city money could be used. He apparently forgot momentarily that employees of the water department, and many other city employees, regularly have been filling their private cars with city gasoline and obtaining other city supplies for their personal use.

It was pointed out to the mayor that an emergency had been declared and that the council had full authority to appropriate money for this or any other purpose it deemed imperative or necessary, but the city chief remained adamant.

"You can have all the engineers you want if the government will pay for them, but the city cannot pay for any assistants," he informed Mr. Baarson.

Evans, Too

The mayor was supported in his stand by Noble Evans, commissioner of streets and parks. Evans yesterday stated that he flatly opposed the hiring of engineers to expedite the great task of restoring order from the chaos caused by last Friday night's earthquake. "Those in charge of city expenditures cannot allow the taxpayers of the city to be plunged into indebtedness," Mr. Evans stated, "but, if the WPA, the highway commission and cities in the state want to send engineers here on a no charge basis, it's all right with me. "Senator Murray stated that he would secure funds for the rebuilding of the city; the WPA and the Red Cross can give us money for this work, so why should the city go into debt?" he added.

In conclusion he said, "The streets of the city are in passable condition and that is as far as my work goes."

With several hundred property owners waiting for inspections, and pressing for action, with more filing requests every hour and with only four full-time volunteers to help him City Engineer Baarson in desperation finally appealed to the Emergency Reconstruction committee and a meeting was hastily called.

Get Action

Although Mayor Bausch had several suggestions to offer, regarding various ways of obtaining federal funds to pay the engineers, these were brushed aside for the time. It took only a short time for the committee to size up the seriousness of the situation, to authorize on its own responsibility that as many competent engineers as were needed be retained and to instruct its secretary, Mr. Lamport, to immediately wire all available within quick reach of Helena.

This was done and by the middle of the afternoon, Mr. Lamport had assurance that nearly 20 would be on their way to Helena as soon as they could get ready to leave. Fully half a dozen had arrived last evening and the remainder will reach the city this morning. Wires also were sent to the war department in Washington and to Senator Murray asking the services of as many of the army engineers at Fort Peck as could be spared. Word from this effort is expected today.

When informed of these developments, City Engineer Baarson breathed a tremendous sigh of relief and said, "A great burden has been lifted from my mind; for the first time in three days I am able to see light."

Already For Job

Among those who arrived yesterday in response to the appeal were Professors Dye and Therkelson, structural engineers from the engineering department of Montana State college at Bozeman. Prof. Dye has arranged to stay here some time, not only for the purpose of assisting in the emergency but for the purpose of studying the effects of the earthquake on the different types of buildings. He expects to compile data which will be invaluable for use in designing quake-resistant buildings, and his findings will be published for future reference.

Others who have arrived or will be here to inspect damaged structures include: G. E. Osterberg, chief designing engineer for the A. C. M. at Butte; the city engineer of Livingston; Carl Nepper, Butte contractor; the city engineer and one or two others from Billings; Art Cooke, city engineer of Great Falls; two engineers, one the city engineer, and two contractors from Missoula; Mr. Lovering of the contracting firm of Lovering-Longbotham of St. Paul, builders of the First National Bank and Trust company building and other structures; and Carl Johnson, a partner in the West Coast Construction company.

In addition, Mr. Baarson has the assistance of Sigvald Berg, supervising architect of the Federal Housing administration, who has had wide experience in the earthquake centers of California, and two structural engineers from the bridge department of the state highway commission. These have been on the job from the start.

Others Volunteer

The Boy Scouts of Helena offered their assistance and will act as guides for the incoming engineers by taking them about the city on their inspection trips so that no time will be lost in finding buildings and homes to be inspected. Special appreciation of this offer was expressed by Mr. Baarson.

John Grosse, a member of the high school faculty, offered his time and that of an assistant for clerical work in the city engineers's office. The office has been swamped with appeals for inspections and other assistance and their help will relieve a tremendous burden. Yesterday one of the tremors shook down a large chimney at the home of R. J. Quigley on the west side. The chimney crashed through the roof and destroyed practically all the furniture in the living room, including an expensive piano.

"This is a good example of the seriousness of the situation," Secretary Lamport pointed out. "Had we had sufficient engineers, this could have been averted. An inspection of the place would have resulted in an order to take the chimney down. It is only a miracle that no one was in the room. Had there been, it is almost certain that more fatalities would have been chalked up."

[Helena Independent; October 24, 1935]

WORK IS TO BE BEGUN ON DISMANTLED BUILDINGS FERA Will Supply Labor And Operations Are To Start Today; Several Tremors Are Felt; Reconstruction Forces Open Effort To Avert Further Casualties By Quake

As an FERA project, the city of Helena will this morning commence actual work on a broad scale in dismantling damaged buildings, removing hazardous chimneys and walls, and starting this quake-distorted municipality back on the road to normalcy, it was announced last evening by Amos M. Shellady, commissioner of public safety.

Commissioner Shellady received word yesterday that F. H. Marvin, director of transient relief, had been given authority by Washington to supply relief labor for such projects, and immediately afterwards called the city council into session at the water department. Director Marvin was present at the meeting and informed the council that he would have at least 50 men ready for work by noon today. Although the city has not officially applied for the project, the ERA director said that he would supply the labor at once and the council could follow with its project.

Remove Hazards

Commissioner Shellady said that the men would be divided into crews and would be placed at work at once in removing dangerous properties in the city. With the mayor declining to spend a nickel of city money to supply labor to do this work, all barriers apparently have been removed by the quick cooperation of the FERA and the city can now proceed to aid the city in its destitute circumstances.

Marvin yesterday gained authority by long distance call from A. Williams, assistant administrator, to use relief and transient labor in dismantling damaged buildings, private or public, tearing down hazardous walls and chimneys, and removing the debris from the city. "We are ready to furnish this labor as soon as the city or county file formal applications asking for aid," Director Marvin said.

With the city, county and possibly the reconstruction committee scheduled to file applications for such projects, actual work of rehabilitation will swing into action shortly.

Proceed With Job

With lesser tremors rumbling through the city yesterday morning, those in charge were undaunted and proceeded with the work of surveying and inspecting damaged properties and of ordering taken down hazardous walls and chimneys.

State Fire Marshal Arthur C. Parsons; his assistant, Jack Carney, and Acting Fire Chief Martin Juhl have been busy almost continuously since the major quake last Friday night and have either taken down or ordered the demolition of more than 200 chimneys. "Helena has been extremely fortunate so far in that there has not been a fire of any consequence. We are trying to remove every possible hazard created by the earthquake," the state fire marshal said.

Lack of Cooperation

Handicapped by a lack of labor and with apparently no cooperation from Mayor C. J. Bausch, the state fire marshal is working without a crew. A crew of 10 was given the state fire marshal late Saturday by the mayor and the men worked until Sunday afternoon, when they were laid off. "I was told by the mayor that there was going to be some other kind of a setup," State Fire Marshal Parsons said.

Where chimneys knocked down or damaged by the quake are found and where the owners are in poor financial condition, the fire truck with the hook and ladder are being used to remedy the situation, while others are notified to do their own work, but the names of available workmen are supplied, the state fire marshal explained.

Word Today

U.S. Senator James Murray at the instance of the local reconstruction committee yesterday wired an appeal to Secretary of War Dern to assign from the Fort Peck dam project as many army engineers as possible to inspect Helena's larger buildings. He also wired Secretary of Interior Ickes and Frank Walker of the NRA offices regarding the necessity of securing capable engineers and architects. In a long distance call to The Independent last night he said action could be expected today and that the reconstruction committee would hear direct from Washington.

Recurrent earth movements added little loss to Helena yesterday although they developed several hazardous structural defects in buildings previously rocked. Helena's reconstruction forces moved quickly to avert further fatalities or injury by an accurate check of possible hidden dangers lurking in some of the larger buildings. Skilled engineers from Butte, Great Falls, Livingston, and Missoula volunteered their services while three of the cities, Livingston, Missoula and Great Falls, voluntarily assigned their city engineers to the Helena reconstruction committee without cost. They will begin today, with City Engineer Oscar Baarson, an exhaustive survey of the entire city.

Army Engineers

It is also expected that today will bring a favorable response from Washington relative to the transfer of army engineers from Fort Peck. S. V. Stewart, associate justice of the supreme court and chairman of the reconstruction committee detailed the extent of the existing emergency to the secretary of war in a dispatch appealing for army engineers. Up to a late hour last night he had not received a response, although like U.S. Senator Murray, he expected a favorable response during the day.

That some buildings not damaged, as far as the eye could see, would be found with structural defects was indicated in the case of the Gans-Klein building, at the northeast corner of Main and Broadway, and the Kohler art store building. At the time there appeared danger of collapse and the area was roped off and traffic halted. Pedestrians were warned to not walk near the builds. The Gan-Klein building was found weakened with one wall on the Broadway side bulging out. Contractors and architects, however, who inspected the building said that it was not a great hazard and there was no danger of its collapse.

Needed Inspection

The walls threatened to crash following the tremors in the Charles R. Quigley home, 825 Madison avenue, when a chimney weakened by the Friday night quake was jarred loose and crashed through the roof and into the living room nearly demolishing a piano and most of the other furnishings. Fortunately no one was in the room at the time.

With various state and government agencies ready to cooperate in lending money for the rebuilding and repair of damaged property, the newly organized Montana Reconstruction corporation completed its set-up speedily and yesterday held a meeting, explaining to the public its system of loans under the RFC, it was said by Norman Winestine, one of the directors.

Many inquiries were received by it and applications for loans will commence shortly. Mr. Winestine said that the \$150,000 applied for would be "earmarked" in Washington and forthcoming in a few days. Several big loans are being contemplated in the city from the RFC offspring. Application blanks have been printed and the new headquarters of the corporation in the office of the RFC on Edwards street will be open today.

Could Have Been Averted

Had the city been in a position to assist City Engineer Oscar Baarson, swamped with early inspections, the Quigley damage might have been averted, O. C. Lamport, secretary of the

reconstruction committee, emphasized last night. He at the time extended the city's thanks to the contribution of engineering help scheduled to assist Baarson today.

The latest gyrations of the earth failed to make any further imprint on an already hardened citizenry and the chore of rehabilitation went steadily ahead. Lineman were stringing new wires for the utility companies; furnaces were being placed in useable condition; nearly every house had a brick mason or carpenter at work and load after load of material was being hauled out of building supply depots.

As heavy as was the earth movement, only three homes thus far have been found with broken plumbing connections.

E. S. Transue, Red Cross disaster field worker, estimated that 90 per cent of the distressed householders would be back in their homes within 10 days. He believed one of the major problems was in determining the structural defects in the business section. "Helena was exceedingly fortunate for it seemed the earth movement was of a vertical type instead of from side to side," he said.

Though Helena's schooling problem remains acute one situation was solved when it was determined that several departments might be moved back to the old city auditorium. There was no indication schools generally would be resumed before two weeks. To provide accommodations for its many trainmen in view of the uninhabitable condition of Sixth ward hotels and rooming houses where they generally stay, the Northern Pacific moved in 10 bunk cars, all heated and equipped for immediate occupancy. Though scores of nerve-racked persons who left town Friday and Saturday had returned, the tension was tightened somewhat by yesterday's tremors but in spite of it the Camp Cooney refuge center sheltered but a relative few last night.

[Helena Independent; October 24, 1935]

RED CROSS OFFICE HAS TOTAL OF 75 REGISTERED HERE Most Of Them Asking Aid In Repairing Their Homes

About 75 persons have registered at the Red Cross headquarters set up at the old National Bank of Montana building, most of whom are seeking aid in repairing their homes, E. S. Transue, disaster relief representative of the American Red Cross, said yesterday. Three investigators are supposedly on their way here from St. Louis, and when they get here it is the plan to begin on the home repair and replacement problem. An accountant is also on his way here from Washington, D.C., Transue said.

Self Reliant

The Red Cross representative characterized the people here as most "self-reliant" and said that under similar circumstances in past disasters there would have been more persons registered than there have been in Helena.

About two of the heads of families who have called at the Red Cross this week have been looking for temporary shelter, while others wanted assistance of other types. It appears, Transue said, that the emergencies arising in other disasters just did not occur in Helena. He said that Mrs. A. T. Hibbard is organizing a motor corps to aid the Red Cross investigators when they arrive here. The investigators will be taken from place to place by people somewhat familiar with the situation here at the present time.

Homes Destroyed

A survey being conducted by the Red Cross reveals to date that 29 homes were completely destroyed by the big quake last Friday, said Transue. He believes that 90 per cent of the people injured will be back in their homes comfortably in 10 days time. A total of 338 houses were investigated in the area where the most damage was done, and besides the 29 houses demolished there were 36 damaged, 13 slightly damaged, 94 that could be classed as medium wreckage, and 45 badly damaged.

Chimney damage was found on 213 places; 146 had interiors damaged; 31 foundations damaged, and three had plumbing in disrepair.

Transue estimates that 80 per cent of Helena's 3,000 homes were damaged by the quake, many of which can be repaired at a moderate cost.

[Helena Independent; October 24, 1935]

PERFECT ORDER KEPT AT THE DEACONESS SCHOOL BY BOYS

Two lads at the Montana Deaconess school, through their calmness and courage during the major earthquake at that institution last Friday, proved that they had the "stuff" to do the right thing during a crisis when they kept perfect order among 17 boys who witnessed the great disturbance from the top floor of the institution. Both are Boy Scouts.

The boys were John Roach, 13, of Wenatchee, Wash., and Arthur Kennedy, 14, of Plains, both of whom are "captains" in the school government. When the building began to rock and rumble, some walls falling in and others falling out, the captains got the boys together with the instructions, "Wait for the house mother."

Use Ammunition

Two of the youngsters, heavy sleepers, had to be awakened by "ammunition." Captains Roach and Kennedy seized a fire extinguisher and doused them, and they rolled out of their beds in a hurry.

One of the officials at the school, from a floor above, heard one of the captains say, "Stay where you are or I'll knock the tar out of you."

The children at the school, about 60 in all, left the building in perfect order, and it was entirely evacuated in six minutes' time. All of this was done in the dark, and not a single child even so much as cried.

Break Into Song

When all were out safely, community singing started, and kept up until the owners of the "Shanty" offered the school the use of the place until quarters could be located. No reflection on the singing, however.

Besides the 60 children, there were 12 women, house mothers and school officials, occupying the building.

Miss Helen C. Piper, principal of the school, said yesterday that the Salvail home on North Madison avenue is being put in shape for the school, and it is expected that they will be all settled by Saturday.

She said that there is now no need for furniture or bedding at the Deaconess school, as every bit was saved.

Despite the violence of the earth shock, which made the school building uninhabitable, not even so much as a dish was broken, Miss Piper said.

[Helena Independent; October 24, 1935]

TOWNSEND PROPERTY DAMAGE EVIDENT BUT RATED SLIGHT

Townsend, Oct. 23--Property damage in Townsend resulting from the major quake of Oct. 18 was slight. Plate glass windows in the Connors' mortuary and Tony Peterson's barber shop were broken and a few chimneys were shaken down, including one on the Guild hall and the old bakery building.

The Methodist church, Holy Cross church and St. John's church were not damaged. The Star printing office suffered the most damage. The south wall was cracked somewhat and part of the fire wall on the west side bulged out so that it will have to be replaced. The office of E. H. Goodman, adjoining the Star office was badly cracked as was also the State bank building on the opposite side of the printing office.

The high school has been inspected by Carl Hov and one door is temporarily braced. The damage to the public school building has been estimated at about \$300 by Supt. H. C. Good. The chimneys were unhurt but the plaster in many of the rooms has fallen. No quakes have been felt here since Friday and Helena residents have been welcomed in many homes, commuting to Helena for their work.

[Helena Independent; October 24, 1935]

CHILDREN ASKED TO FOREGO HALLOWEEN

County authorities are appealing to the better nature of Helena youngsters and their parents in an effort to halt any pranks which might be played as Helena draws near to Halloween.

The officers said they had received no reports of depredations as yet but they asked the cooperation of all residents of the city that they keep their children from "celebrating" this Halloween in the traditional fashion.

"Sufficient damage has been done and more than enough suffering has taken place in Helena already," County Probation Officer Frank Thefault said, "without youngsters of the city causing any more discomfort and disturbance."

With the city just recovering its nerves and making the first attempts to bring some order out of the wreckage where homes have been destroyed, authorities were of the opinion that needless pranks were not to be tolerated.

Apprehensions and stringent discipline for any offenders caught, were promised by officers.

[Helena Independent; October 24, 1935]

VIEW OF SCIENTIST ON HELENA TREMORS

Bozeman, Oct. 23--(AP)--Montana has again been spotlighted on the earthquake map of the nation by a series of tremors entailing millions of dollars of damage at Helena, in the first major earth disturbance in the Treasure state since Three Forks and Logan quakes of June, 1925.

The recent shocks at Helena, according to Professor Erick Therkelsen of the Montana State college engineering department, in charge of the delicate seismograph, are much milder than those of a decade ago.

The 1925 quake in Montana, he said, ranks with major known quakes in the nation for intensity and had the region been heavily populated widespread property damage and loss of life would have resulted. Prof. Therkelsen believes.

Helena's first shock at 12:51 on the morning of October 12, when the current series of disturbances began, was clearly recorded by the State college seismograph, but the succeeding tremors were of such short duration and mild nature that they failed to register distinctly on the apparatus.

[Helena Independent; October 24, 1935]

HOUSE LAUGHED AT PETERSON FOR HIS QUAKE INSURANCE

Bozeman, Oct. 23--The law providing state insurance on all public buildings contains no earthquake coverage, but it is through no fault of State Representative E. A. Peterson of Bozeman, who sought vigorously to have the much-disputed bill amended to cover that hazard, when the bill was before the house of the last legislature.

"We'll never have another earthquake," they shouted at him when he moved the amendment. With grim memories of damage wrought in Gallatin county by the earthquake of 1925 Mr. Peterson stuck by his guns, but drew considerable jest and raillery for the attempt.

The motion to amend was defeated and Lewis and Clark county, at least, must now wish it had passed.

[Helena Independent; October 24, 1935]

HOMELESS PEOPLE SPEND THE NIGHTS IN N. P. COACHES

Many quake refugees have enjoyed the comforts of home, at least as far as sleeping quarters are concerned, during the last few nights as a result of the Northern Pacific Railway company's placing seven or eight coaches and a number of bunk cars in their yards for the use of homeless Helena residents.

The coaches are heated by steam and the other cars are equipped with stoves. They have been filled each night by homeless folks and railroad employees who must lay over one night here.

There is no charge for the use of these cars.

[Helena Independent; October 24, 1935]

POLICE AND FIRE DEPARTMENTS ARE IN NEW QUARTERS Firemen Go To Garage, Police Are In The Black Maria

When the rear wall of the city hall collapsed Tuesday afternoon, the problem of finding safe and well-located quarters for the city's police and fire departments was quickly solved by Otto Krieg, proprietor of the A-A garage, who generously donated space for the department in his establishment. It has been partitioned off.

The A-A garage, which was damaged little by the quake because of the steel framework supporting the structure, now houses the fire trucks, firemen's beds, signal boxes and the balance of the fire-fighting equipment.

Also headquartered in the A-A are the national guardsmen who patrol by night the city's danger zones.

When asked last night how the fire department was making out in its new quarters, Acting Fire Chief Martin Juhl gazed fondly up at the strong steel girders supporting the roof of the building and said, "Swell."

Roger Smith's police headquarters were transferred to the Black Maria, which was parked in a vacant lot across the street from the city hall.

Telephone and light service were quickly installed and the back end of the "wagon" now serves as a small office with room enough for the desk man and one or two officers. It was stated last night that the department was contemplating moving into the empty building next door to the A-A garage.

[Helena Independent; October 24, 1935]

Section 3

Articles 101-150 (10/24/1935 to 10/31/1935)

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Headline: NRS Sets Up Labor Office Where Help May Be Obtained

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Headline: Placer Hotel Found To Be Structurally Sound By Engineers

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Headline: Cathedral Sound And Is Ready For Safe Occupancy

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Info Categories: B

Headline: Bozeman Canning Co. Sends 100 Cases Of Peas To Sufferers

Date: 10/24/1935

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Headline: Camp Cooney Is Sheltering 79 Persons; All Is Orderly

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Headline: Park County High School Building Is Damaged By Quake

Date: 10/24/1935

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Headline: City Schools May Be Renovated By PWA, Says Romney

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Headline: Appeals To Public

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Headline: Not Charity But Justice

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Headline: Report Shows The Tremor Frequency Here Is Lessening

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Headline: Drink; "Earthquake Shudder" Is New Highball

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Headline: Movement Is Under Way For Creation Of Housing Authority In

Helena Many New Homes Are Necessity

Date: 10/25/1935

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Headline: 100 Register For Aid At Red Cross Office In Helena

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Headline: Banks Of Helena Offering Full Resources For Loans To Residents

By FHA Plan

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Headline: City Plans Building On New Basis

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Headline: Independent Building Carefully Inspected; Untouched By Quakes

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Headline: Earth Opening Near Wolf Creek Caused By Landslide, Not Quake

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Headline: Only Two Tremors Are Recorded Here in 15-Hour Period

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Headline: Much Snow Falls In Alberta After Shocks Are Felt

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Headline: New Student Union Building Undamaged

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Headline: Sam Goza Tells Of Hectic Trip Home After Earthquake

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Headline: Quake Refugees Are Invited To Take Free Baths At Y.M.C.A.

Date: 10/25/1935

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Headline: Bet; Larry Heller Tired Of These Rumors

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Headline: <u>City Starts On Big Task Ahead Of It</u>

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Headline: New Code Prepared For City

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Headline: Important Problems Of City To Be Presented Monday At Meeting

Of Helena Council

Date: 10/27/1935

Info Categories: P, R

Headline: Record 499th Earth Tremor In The City

Date: 10/27/1935

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Headline: Bishop Hayes To Arrive By Plane Monday Morning

Date: 10/27/1935

Info Categories: I, N

Headline: Says That Federal Building Is Without Structural Faults

Date: 10/27/1935

Info Categories: B

Headline: Helena High Gets \$75,000 For Repairs From PWA

Date: 10/27/1935 <u>Info Categories</u>: A, B, E, I, R

Headline: Western Union Has One Of Its Busiest Weeks After The Quake

Date: 10/27/1935

Info Categories: L

Headline: New Corporation Receives Number Of Loan Inquiries

Date: 10/27/1935

Info Categories: A, P

Headline: Red Cross Advisory Group To Make Rebuilding Awards

Date: 10/27/1935

Info Categories: A

Headline: Damage Wrought By Quake In E. Helena Now Being Repaired

Date: 10/27/1935 Info Categories: B, P, R

Headline: Think Quake Center In Nelson Country

Date: 10/27/1935

Info Categories: E, S

Headline: Rebuilding Activity In Full Swing

Date: 10/28/1935

Info Categories: A, B, E, G, I, P, R, S

Headline: Earthquake Damage To Public Library Found To Be Slight

Date: 10/28/1935

Info Categories: B, N

Headline: Earthquake Causes Collapse Of Casing In Cut Bank Field

Date: 10/28/1935

Info Categories: G

Headline: Earth Tremors Rise To 530 As Mercury Falls To 10 Above

Date: 10/29/1935

Info Categories: E

Headline: Repairs Begun On Sound Portion Of New High School

Date: 10/29/1935

Info Categories: R

Headline: Proper Methods For Rebuilding Chimneys Outlined By Baarson

Date: 10/30/1935

Info Categories: A, R

Headline: Will Repair Damage At Federal Building

Date: 10/30/1935

Info Categories: R

Headline: Quake Ordinance In Full

Date: 10/31/1935

Info Categories: A

Headline: <u>Harbingers Of Disaster</u>

Date: 10/31/1935

Info Categories: A

Headline: Building Permits Issued To Repair Damage Of Quake

Date: 10/31/1935

Info Categories: R

Headline: Earth Tremor Now Stands At 560

Date: 10/31/1935

Info Categories: E

Headline: Helena Theaters To Reopen Next Sunday With Matinee Shows

Date: 10/31/1935

Info Categories: I, N

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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WELL AT NISSLER TURNS FROM COLD TO HOT IN QUAKE

Butte, Oct 23--(AP)--A freak of the Friday night earthquake which shook Butte was reported today by a Nissler resident who said that since the quake, which caused \$500 damage to his home, his well has been gushing forth hot water in great quantities. "On Friday afternoon there was about three feet of ice cold water in the well," recounted Henry Calcaterra, Station 4, Nissler, whose home was damaged by the quake. "On Saturday morning I found the yard flooded with hot water which was issuing from the well. "Although it is now nearly five days since the quake occurred, the well water is still lukewarm."

Appearance of the hot water in the well was explained by the fact that many years ago there were hot springs in the area. It was thought that the force of the temblor caused an internal disturbance, forcing the hot water to the surface.

[Helena Independent; October 24, 1935]

NRS SETS UP LABOR OFFICE WHERE HELP MAY BE OBTAINED

Helena householders, who need men to tear down weakened walls or chimneys or to repair damaged homes or other buildings, can secure skilled or unskilled labor by calling the national reemployment service office at the Chamber of Commerce in the Placer hotel building, it was announced yesterday by O. C. Lamport, secretary.

Mrs. Edith Freeze is in charge of the office, and the telephone number is 37.

Mr. Lamport stated that there is sufficient skilled labor in Montana to take care of Helena's needs, and labor will not be brought in from other cities until the demand warrants such action.

Not Free

Those desiring to obtain labor for this work are urged to personally call at the Chamber of Commerce and outline the work to be done.

The labor furnished by the NRS must be paid for by the property owner on whose property the work is done. House holders who are unable to pay for the labor should make application at Red Cross office, located in the old National Bank of Montana building.

[Helena Independent; October 24, 1935]

PLACER HOTEL FOUND TO BE STRUCTURALLY SOUND BY ENGINEERS

The Placer hotel was declared to be "structurally sound" by a group of engineers who made a careful examination of the building yesterday. With the exception of a few plaster cracks the big building suffered no damage whatsoever. Those who made the inspection yesterday were Professor E. R. Dye of the structural engineering department at Montana State college; City Engineer Oscar Baarson, and S. L. Berg, supervising architect for the Federal Housing administration. The three men reached a unanimous decision that the Placer hotel building was perfectly safe, and undamaged.

[Helena Independent; October 24, 1935]

CATHEDRAL SOUND AND IS READY FOR SAFE OCCUPANCY Three Engineers Pass On Building, No Cracks Found

There are no structural defects in the St. Helena cathedral and a certificate of occupancy will be issued to Helena's splendid Catholic edifice today by City Engineer Oscar Baarson following a careful and thorough examination last night.

Despite rumors to the contrary the building is in sound condition, apparently unhurt by the quakes. "The whole structure is built up of structural steel. The stone on the spires is fastened to the steel and while a few cracks occurred between the stones, there is no damage to the building whatever," City Engineer Baarson said.

The building was inspected by G. E. Osterberg, designing engineer for the A. C. M. company in Butte; Art Cook, city engineer in Great Falls and former inspecting engineer for the PWA, and Mr. Baarson. Not a single crack was found in the basement.

Ropes were put up around the cathedral as a precautionary measure to avert possible injury from small pieces of falling stone, the city engineer said.

A group of competent structural engineers will go over the entire building today and a certificate of occupancy will be issued to Father Tougas in the afternoon, he said.

[Helena Independent; October 24, 1935]

BOZEMAN CANNING CO. SENDS 100 CASES OF PEAS TO SUFFERERS

One hundred cases of canned peas for earthquake sufferers in Helena will be trucked today, a gift of the Bozeman Canning company, according to notification received Wednesday afternoon by Governor F. H. Cooney from C. L. Kirk, an officer of the company.

Governor Cooney immediately informed the Lewis and Clark county chapter of the Red Cross and arrangements have been made to store the peas at the Hovet Wholesale company, where they will be issued on order of the Red Cross. The governor and the officials of the local chapter of the Red Cross expressed themselves as being deeply grateful to the Bozeman Canning company for its help.

[Helena Independent; October 24, 1935]

CAMP COONEY IS SHELTERING 79 PERSONS; ALL IS ORDERLY

The earthquake refugee shelter at Camp Cooney west of the city was orderly, organized and quiet last night.

Of the 300 who were cared for at the shelter in the first few days after the Friday night quake, only 79 remaining last night.

Those who left the camp said they could stay with friends now, had arranged for use of log cabins at Unionville or Marysville or other nearby communities, planned to fix up sheds, chicken houses or garages for temporary abodes, or could go back to their homes which were not damaged as badly as they first believed.

People Calm

The people were calm and rested. Mothers were feeding their babies milk that had been especially heated by the camp cook. For the smaller children the event is a huge picnic. Impromptu childhood games are organized. Dogs, brought along somehow, enter into the play.

All are carefully and fully clothed and when they get cold, it is only a step into the recreation halls, the kitchen, the office or the infirmary--each of which is heated. The refugees are housed in national guard tents, erected in regular rows. Blankets are plentiful and additional ones may be had for the asking. There is no heat in the tents but electric lights are provided.

Officials in charge yesterday had difficulty in dissuading a motion picture photographer from posing the refugees around wind-swept tables in front of the tents. The photographer howled and threatened, even remarked he would "get the officials jobs" if he weren't allowed to take the posed pictures.

Faked Stuff

"His representation of what is going on at the camp would have been absolutely false and we prohibited him from taking such pictures," one woman in charge said. "The people here never have had to eat in the open. Their meals are served in the warm buildings." Three plentiful meals are served every day, each made up of substantial energy-giving food, the official explained. The cooking is done by a man from the transient camp who, on his feet many hours at a time, several times during the last four nights has risen to heat milk for any one of the babies in camp.

Two trucks are on duty at the camp at all times. They make trips to and from town whenever their services are required. A nurse is on duty constantly but patients have been comparatively few. One baby was slightly ill; two women suffered from shock and a few other persons were treated for minor ailments.

Drafted To Help

Men from the transient camp, drafted as kitchen helpers, laborers, guards and for other tasks, have worked hours on end, many of the men far from suitably clothed. Milk has been donated to the camp by numerous dairies of the Helena vicinity as there is

full realization of the number of babies at the camp. Laundry is done by a man who volunteered to do all of it for no charge at all.

Just below the general camp are the tents being used to house many of the administrative staff members from Fort Harrison. There, too, quiet prevails. Another group of tents has been erected on the fort grounds proper to care for those employees driven from their homes by the quake.

Everything is calm and orderly as the stricken people make the best of a bad situation. No one whines, no one makes a disturbance; all help whenever possible. Chiefly they talk

about the quake and swap experiences.
[Helena Independent; October 24, 1935]

PARK COUNTY HIGH SCHOOL BUILDING IS DAMAGED BY QUAKE

Livingston, Oct. 23--Park county's high school building may have to be given repairs, chargeable to earthquake damage, if a bulge that has developed in the south wall of the new portion of the structure shows any tendency to further spreading, it was noted Monday.

Word that the Wilsall high school building had been abandoned brought the comment that Park high also suffered slightly from the tremor of last Friday night. The new aperture was noted Saturday morning by school authorities and the board appraised of the fact. An investigation was immediately made and the building authorities declared there was no immediate danger as a result of the split wall unless another quake should further weaken the structure.

A constant inspection has been ordered by the authorities and the bulge will be watched with diligence, it was said yesterday.

[Helena Independent; October 24, 1935]

CITY SCHOOLS MAY BE RENOVATED BY PWA, SAYS ROMNEY Frank C. Walker Will Take Matter Up With Agency

Miles Romney, state director of the national emergency council, yesterday stated that he was certain the federal government will take over the rehabilitation of Helena's shattered schools, the new high school and the Bryant grade school.

He was convinced of this, he said, after he had been assured by Frank C. Walker, executive director of the national emergency council, that he would confer with government officials to effect final arrangements yesterday.

Mr. Walker was scheduled to meet yesterday with Assistant Administrator Aubrey Williams who today will confer with Administrator Harry Hopkins and Harold Ickes, secretary of the interior, and urge that the PWA speedily cooperate with Helena in the city's great rehabilitation problems.

It was pointed out by Mr. Romney that the new high school building was constructed under the old loan and grant ratio of 30-70 per cent. Later PWA loans were made on a 45-55 per cent loan and grant basis. Thus if an amended application is approved by the PWA officials this school district would be entitled to 15 per cent more of the original sum as a further grant.

This additional 15 per cent, according to Mr. Walker, would be ample to use in starting repair work.

[Helena Independent; October 24, 1935]

AS OTHER SEE US Editors Of Montana Have Comment On Quake

Sympathy and regret for the blow suffered by Helena in the earthquake was mingled with praise of the spirit shown by the residents of the city in the editorial comment of the papers of Montana during the last few days. Unanimously they asserted that the city will rebuild with new strength and carry on without halt.

Some of the comment follows:

The Missoulian, Missoula, under the title, "rebuilding the capital," said:

"Helena will overcome what has happened and with the aid of the federal government and other agencies the visible effects of what happened Friday night will be removed at an early date."

The Leader, Great Falls

"The people of Great Falls deeply sympathize with those of the Capital city which has borne the brunt of the most damaging series of earthquake shocks in the history of Montana."

The Democrat-News Lewistown

"All of the people of Montana will, of course, readily respond to any appeal for help made in behalf of their stricken capital and it people. Helena must be entirely restored and if its own resources are not sufficient for that purpose, other communities must join hands to see that the necessary work is speedily and adequately done. Such occurrences serve to remind us of how puny are the works of man when compared to the mighty forces of an unleased nature."

The Tribune, Great Falls

"Certainly the city of Helena has frankly and honestly given out full and accurate details of the various quakes which visited them. The press agencies there have not tried to hide the facts from the world. That is a commendable attitude and it is all the more unfortunate then that wild rumor and gross exaggeration have pictured many phases of the disaster as worse than they were. \in \in The radio over the country has been largely responsible for some most unnecessary anxiety on that score."

The Enterprise, Livingston

"Sympathy flows from Livingston to the people of Helena who have suffered in the recent series of quakes. € € € Those who saw the results of the devastating quakes returned to impress neighbors with the fact the press reports did not exaggerate the losses in any sense."

The Inter Lake, Kalispell

" € € It gave Montana the unenviable reputation of being in the quake zone. It is a misfortune to the Capital city but it will not be a permanent injury. Helena, like San Francisco and Los Angeles, will be rebuilt and with structures which will withstand earthquake shocks."

Butte Daily Post

The Post, Butte, under the caption, "Helena's Sun Reappears" said, in part: "The Capital city will recover; it will remove the scars and rebuild more magnificently and enduringly than ever before. And in the midst of it all there will shine that fine old Montana spirit which knows not defeat, looks to the heights and carries on."

Bozeman Chronicle

The Chronicle, Bozeman, referring to the quake as a "state calamity," said:

"The spirit with which Helena is facing the future is typical of the old days in Montana when

the present site of the capital was Last Chance gulch. € € € Helena, instead of being destroyed, is on the threshold of becoming a bigger and better city." [Helena Independent; October 24, 1935]

APPEALS TO PUBLIC

Deprived of all forms of transportation by the refusal of Mayor C. J. Bausch to furnish it for his office, City Engineer Oscar Baarson, ex officio building inspector, yesterday afternoon appealed to the public for help.

"I need several cars, with drivers who are acquainted with the city, to transport the engineers we expect to arrive here today to do inspection work," Mr. Baarson told The Independent.

The cars must be donated, Mr. Baarson pointed out, because no city funds to pay for such transportation will be granted. He expressed hope that the public would respond to his appeal, so that the work of inspection might be facilitated.

The handicaps under which the building inspector is operating in this emergency because of lack of support by Mayor Bausch are grave. If Mr. Baarson had assistants and transportation, he could accomplish much more.

[Helena Independent; October 24, 1935]

NOT CHARITY BUT JUSTICE

Helena is not asking for charity from the people of the state or from the generous of other states, but justice at the hands of the federal government.

This city is entitled to funds from the many millions appropriated for public works and housing; we are entitled to federal aid for rebuilding such structures as the Lewis and Clark county hospital, the high school, Bryant school and other public buildings.

This city is entitled to federal funds to rebuild and repair homes, loans or outright gifts. If loans the terms must be generous, the interest must be low, the repayments in small installments covering a long term of years.

The people of Helena are widely credited with having a high courage and have met disasters in the past independently. Surely, the sons of the men who built this city and state have the old blood still in their veins and will not desert the community in an hour when manly fortitude is needed.

The most necessary thing is prompt action. Any day may see the weather change from a bright, warm fall to a severe winter; soon a blizzard may sweep down from the north, which would cause widespread suffering. Every bright day is precious time; every hour of moderate temperature is needed.

It is nothing short of criminal for public officials to neglect their duties; it is worst than criminal for them to delay, hinder and quarrel over who shall do the work, who shall have the honors, who shall select the workmen.

There is no honor today for anyone who fails to cooperate with the people in distress, with the federal authorities and Red Cross workers. Dishonor and disgrace await those who seek to play petty politics when women and children suffer in the cold nights, their vitality weakened by fear.

Let us take hold like the men and women of old; like those pioneers who lived through the winters when we were very young. If public officials refuse to help, the citizens will throw them out of office and replace them with men who have cool courage and who think straight.

We repeat, the people of this community do not want charity but justice; we are entitled to the tax dollars which we are paying into the federal government; taxes which the rich and poor are paying every day on most everything we eat, wear or use in the ordinary walks of life. This assistance we demand as a community and demand it NOW.

[Helena Independent; October 24, 1935]

REPORT SHOWS THE TREMOR FREQUENCY HERE IS LESSENING

Frequency of earth tremors in Helena was decidedly lessened between 1:30 o'clock yesterday afternoon and midnight, it was reported at the Helena weather bureau. Four hours and 36 minutes elapsed before another one was recorded at 6:06 o'clock last night. Then four came in an hour and four minutes, up to 7:15 o'clock.

From 7:15 until midnight there were none recorded at the weather bureau, although a man on Ewing street called the office and said that there was a slight one at 11:45. This will not be used in the record unless it was felt by at least one other person, the weather bureau said.

There was a sharp tremor at 10:56 o'clock yesterday morning, with a duration of about two seconds, and only six recorded over the period of 13 hours and four minutes following, which terminated at midnight.

The tremor at 7:15 o'clock last evening was the 390th, including the major disturbance last Friday. Since October 12 the score now stands at exactly 450, according to the weather bureau recordings.

[Helena Independent; October 24, 1935]

DRINK* * * * * * * * *

"Earthquake Shudder" Is New Highball

Helena bartenders have concocted a new drink, "The Earthquake Shudder," and according to W. O. Whipps, secretary of the Montana Highway commission, it works with surprising effect.

Mr. Whipps and a party of friends were driving around the city Sunday evening when a series of tremors occurred. The party decided a little nerve tonic would help.

They drove into a roadhouse north of the city and ordered whisky straight. The bartender served up four drinks and as many chasers. The whiskies were tossed off and the chasers followed.

The four in the party shuddered, shook their heads, braced their feet, gritted their teeth and for a full minute were silent. Then peaceful smiles came over their faces.

The chasers had been straight gin!

So the "Earthquake Shudder" came into being.

[Helena Independent; October 24, 1935]

MOVEMENT IS UNDER WAY FOR CREATION OF HOUSING AUTHORITY IN HELENA MANY NEW HOMES ARE NECESSITY Is Solution

Matter Again Will Be Brought Before Council

A movement is under way in Helena for the creation of a housing authority, as authorized by the last legislature, and if a commission is appointed by Mayor C. J. Bausch, many believe that one of the gravest problems facing the city as the result of the earthquake, that of providing homes for the needy, would be solved.

With severe weather likely to arrive at any time, an acute housing problem is facing the city. Several hundred homes have been so badly damaged that extensive repairs will have to be made. A large number will have to be almost entirely rebuilt.

Many Homes Needed

The persons who live in these homes will require quarters which will give them protection in severe weather, or much suffering and distress will ensue. Even before the quake, Helena was far under-built and the need of additional housing was glaringly apparent. Destruction caused by the earthquake has greatly accentuated this serious problem, and it is conservatively estimated that more than 100 new homes are needed immediately to take care of the present situation. When the number of homes that must be rebuilt is determined, it is pointed out that it may take 200 or more new dwellings to meet the requirements.

Amos M. Shellady, commissioner of safety, said last night that he would present the matter again to the council in the hope that favorable action might be obtained. The city council is scheduled to hold a special meeting this morning in the water department office and Commissioner Shellady said he would bring the important matter before the council for consideration.

By Committee

The housing authority question has also been discussed informally among members of the emergency reconstruction committee, of which S. V. Stewart, associate justice of the supreme court, is chairman, and it will be considered officially by that body at the first opportunity. The committee may ask the city council under its emergency resolution to take such action.

Under the act adopted by the last legislature municipalities were given easy access to government funds for slum clearance and housing projects. The mayor is authorized to appoint a housing authority commission, which in turn receives a charter from the secretary of state. The Housing authority acting in the capacity of a municipal corporation then files application with the PWA. If the project is approved the authority uses the loan and grant from the government for the construction of new homes and apartments, which it rents at reasonable rates or sells on easy contracts to reputable persons.

Up Before

Sensing that with cold weather approaching and many families shelterless there will be an acute housing problem in Helena, the need of such an authority seems paramount to many at this time. Although the matter was before the council on several occasions in the past the mayor has heretofore strongly opposed its creation.

Commissioner Shellady said last night that it was his opinion that the ban on public gatherings would be lifted some time the first of next week. Many of the churches now are being inspected by the city engineer's crew and this work is expected to be finished by

Saturday. Two church buildings have been declared ready for occupancy, the St. Helena cathedral and the Presbyterian church.

Need Labor

Some difficulty was encountered yesterday in obtaining relief labor as contemplated under the new city FERA project but Commissioner Shellady said he had been assured that a crew would be available today to continue the work of removing hazardous properties, removing chimneys, and hauling away debris.

Although FERA officials were given authority to furnish transient and relief labor to the city for such purposes, but two men were obtained yesterday and the work was curtailed. Commissioner Shellady said that the relief laborers were either out of the city or were working on their other jobs.

Without labor to conduct the project, rebuilding and repair work went ahead in Helena nevertheless yesterday and there was a healthy atmosphere in the city as its residents proceeded with the task individually, healing the scars of last Friday's quake.

[Helena Independent; October 25, 1935]

100 REGISTER FOR AID AT RED CROSS OFFICE IN HELENA Expenditures So Far Chiefly For Food, Says Transue

About 100 registrations have been made at the Red Cross headquarters here by heads of families representing in the neighborhood of 400 people, E. S. Transue of Denver, disaster relief representative for the national organization, said yesterday.

During the two-day period that the office has been open here, expenditures have been chiefly for food and medical care, Transue said. The orders for groceries have been occasioned by people who have not yet found their bearings, a few of whom have lost their jobs, he stated.

Get Medical Care

Medical care was provided for two people yesterday. Transue said that hospitalization was not required, but that many unfortunate people have suffered from earthquake shock or injuries.

As the survey is being made of property losses, people without means are being referred to the Red Cross offices, said the national representative. Yesterday the organization was fully settled in its new quarters in the basement of the old National Bank of Montana building.

Mr. Transue said that the home rebuilding program should be well under way by the first of next week, and he hopes that by next Wednesday that the Red cross will be ready to make awards for the construction of houses.

Houses do not necessarily have to be reconstructed on the places where they fell, he said and people may use their own judgment as to the kind of materials they want. It is just another case of "meeting the individual need," which characterizes Red Cross work, he asserted.

Local Group

Actual awards for construction are finally approved by a local committee of five persons, said Transue. The Red Cross merely makes recommendations, giving the history of a case by number, and the amount allowed an applicant is determined by the committee. He emphasized the fact that the Red Cross is principally concerned with "families who cannot meet their own needs."

Until the trained workers arrive, all in need of help are urged to call at headquarters. Transue expects that one of the workers will get here today, two more tomorrow, and still another on Monday.

[Helena Independent; October 25, 1935]

BANKS OF HELENA OFFERING FULL RESOURCES FOR LOANS TO RESIDENTS BY FHA PLAN

Banks of Helena have rallied to the aid of the unfortunate home owner who finds himself confronted with the necessity of making expensive repairs to his property by reason of damage sustained in the earth shocks of the past week, and have announced that they will provide means of financing repairs or reasonable construction to all persons who can qualify as to credit standing under the modernization credit plan of the Federal Housing administration.

Hundreds of homes, business and industrial structures in the Capital city are in need of repairs or partial reconstruction, and in many instances the owner is not possessed of immediate funds sufficient to meet this expense. The means of financing such expenditures has been provided by the Federal Housing administration, which does not itself furnish the money but will insure banks and other lending agencies to the extent of a goodly percentage of the loan, believed ample to protect them against any loss which might be sustained.

More Consideration

Earthquake damaged properties come into the picture upon the same basis as loans have heretofore been made for modernization of structures, and quake sufferers will be given even more consideration by the lending agencies than would have been extended the ordinary borrower who merely desired to improve his property.

While loans for the repair or reconstruction of dwellings and other small structures will be insured by the FHA up to \$2,000 on any one piece of property, the maximum limit for which insurance will be granted upon business or industrial structures, hotels, apartment houses, hospitals, schools, colleges and churches has been fixed at \$50,000. The major requirements of the FHA are that the borrower shall be a credit risk acceptable to the banking institution and that the loan be repaid in monthly installments extending over a period not exceeding five years at a cost not in excess of the maximum interest rate fixed by the FHA.

Staff Called In

The Federal Housing administration has been greatly pleased at the willingness of the Helena banks to extend their facilities in the relief of the property owners of the city through means of FHA insured loans and the state director, Barclay Craighead, has called in all members of his field staff to assist the banks and the prospective borrowers in completing the details of the negotiations leading up to the granting of loans.

It is recognized that it will not pay to rebuild many of the structures that have been badly damaged by the recent series of quakes and that in those instances complete new construction will be required. It is here that the FHA mutual insured mortgage loan is best adapted, as it gives the borrower the advantage of a long-time loan, bearing a low rate of interest and payable upon the monthly installment plan.

Material aid to new construction projects has been extended by the Reconstruction Finance corporation through the medium of the RFC Mortgage company, which has been set up to take care of the existing emergency. S. A. Bingham, manager of the Helena office of the RFC Thursday mailed to each bank, building and loan association and the Montana Life Insurance company, a letter advising them that the mortgage company would purchase from them, without a moment's delay, all FHA insured mortgages taken by them for the purpose of financing new home construction.

Few Limitations

Under this plan the RFC Mortgage company will purchase mortgages given for this purpose, under only those limitations imposed by the Housing administration, which includes loans for sums up to 80 per cent of the appraised value of the mortgaged property and with maturity dates not in excess of 20 years. Under the FHA plan loans will be restricted to a maximum of maturity date, which may be 20 years after the date of its issuance.

Mr. Craighead cites as an example of the distribution of costs the figures of an average loan of \$5,000 amortized over a period of 20 years. This would entail a monthly payment of \$48.53, probably no more than the rental cost of such a residence, made up of the following items: Principal and interest \$33, mortgage insurance fee \$2.08, taxes \$10.42, fire insurance premium 97 cents, service charge \$2.06.

With the great degree of liquidity offered to banks, building and loan associations and other lending agencies by the RFC Mortgage company it is the confident belief of Mr. Craighead that the construction of homes in Helena and other cities of the state will be given a great impetus.

[Helena Independent; October 25, 1935]

CITY PLANS BUILDING ON NEW BASIS For Safety New Building Code To Require Quake Resistance

While inspection of damaged buildings and plans for reconstruction were being rushed with all possible speed yesterday, a special committee of experts was preparing a new "earthquake" building ordinance for presentation to the city council this morning. The committee was named yesterday morning by City Engineer Oscar Baarson and its members labored on the ordinance all day and until far into the night. A joint meeting was held with the city board of examiners and appeals, who supervised the building code, at 8:30 o'clock last night at the Placer hotel and all the important provisions of the new ordinance were discussed.

Leading Engineers

Members of the committee which prepared the ordnance are: Harry D. Lovering, of Lovering Longbotham company of St. Paul, chairman: Sigvald L. Berg, supervising architect for the Federal Housing administration in Montana, and a former prominent Berkeley, Cal., architect; Professor E. R. Dye, head of the structural engineering department at Montana State college; A. L. Strong, representative of the Portland Cement association; A. J. Cook, city engineer of Great Falls; Mr. Cortez, city engineer of Livingston; W. H. Swearingen, designing and maintenance engineer for the state university at Missoula; G. E. Osterberg chief designing engineer for the A. C. M. at Butte; Charles Forbis, architect, Missoula; Gus Forseen, Missoula contractor; Professor E. Thorkelsen of the mechanical engineering department at Montana State college; W. M. McClean, construction engineer, Helena; Floyd Hamill, city engineer of Butte, and H. E. Engle of the Board of Fire Underwriters, San Francisco.

After California

These men outlined the specifications for the construction of earthquake resistant buildings in Helena in the future. The new ordinance is modeled after those adopted in the earthquake centers of California.

Mayor C. J. Bausch will be requested to call a special session of the city council this morning when the ordinance is completed. The council will be asked to adopt it as an emergency measure, making it effective immediately on final passage. No building permits will be issued until the ordinance has been finally approved and passed, the city engineer announced.

The new regulations will apply particularly the brick walls and chimneys, Mr. Baarson said. In the future, chimneys of brick must be reinforced with iron rods. In formulating the provisions of the ordinance, the committee will have the advice of several structural engineers with wide experience in the earthquake areas of California.

In the meantime, Mr. Baarson stressed, property owners who intend to repair or rebuild should inform themselves as fully as possible regarding earthquake resistant construction before proceeding. There is no common sense in rebuilding a brick wall or a chimney if it is done in the old way and the next earth shock will tumble it down.

Cement Needed

In relation to rebuilding of chimneys, Mr. Baarson pointed out that pure lime mortar will not do. Portland cement should form a good proportion of the mixture that ties the bricks together, he said, and details as to the proportions can be obtained at places where the cement is sold.

Furthermore, Mr. Baarson advocates rehabilitating chimneys temporarily by raising the

brickwork about a foot above the roof and attaching a galvanized iron top thereto. This method will better resist earthquakes, and later the chimneys can be carried on up under an approved shock-resisting type of construction.

With nearly 15 outside engineers and construction experts available yesterday, in response to the appeal of Mr. Baarson and the efforts of the Helena Emergency Reconstruction committee, composed of leading business men and executives of the city, inspection of damaged buildings went ahead rapidly. It will continue at even a faster rate today.

Start Work

Yesterday morning, the engineers met in a group and listened to technical talks on specific points to observe in inspection work of this kind. These talks were given by experts in specialized construction. Thereafter, the entire group went to the Gans and Klein building and the Marlow theater, where the points were demonstrated. Following that, the engineers were divided into groups of two and sent out on regular inspections. All will submit reports and recommendations to Mr. Baarson. In event a certificate of occupancy does not follow, another group will make a re-examination of the building in question.

Private homes, Mr. Baarson said, will be inspected as soon as possible, but inspection of larger structures housing numbers of people should come first, he emphasized. Five government engineers are expected to arrive here soon, and others in private or public business are also expected to donate their services.

Results of all inspections will be filed in Mr. Baarson's office, where they will be available to owners of the property. Eventually, Mr. Baarson added, every structure in the city will undergo careful inspection. All this will be done as rapidly as possible.

Baarson Commended

A report on the situation up to Thursday morning was given by City Engineer Baarson at a meeting of the Emergency Reconstruction committee yesterday morning at the Placer hotel. At the conclusion he received the earnest commendation of that group for his splendid work under severe handicaps.

"We think, Mr. Baarson, that you have done mighty good work in the last 24 hours," commended former Gov. Sam V. Stewart, chairman of the reconstruction committee. Later Mr. Stewart added that "it seems to me Mr. Baarson is hitting the ball just 100 per cent." The city engineer also told the committee that the city council, at a meeting last night with F. H. Marvin, state director of the ERA, had appointed Councilman Noble P. Evans to have charge of the razing, with ERA relief labor, of dangerous walls and chimneys throughout the city.

When the question of inspecting private homes was brought up, T. O. Hammond of the First National Bank and Trust company suggested that it could wait until the larger buildings had been disposed of.

Are Cautions

"It is my impression," Mr. Hammond said, "that home owners are over-cautious rather than undercautious. In other words, they are carefully looking after their own safety and doing a pretty good job of it."

It was also brought out that the Montana Power company's gas department is "doing a fine job" of inspecting gas installations and chimneys. It was reported that the company has 30 or 35 inspectors at work, some of them brought here from other communities.

In relation to financing the expenses of engineers who are here from outside and donating their services to earth-stricken Helena, the committee went on record as in favor of raising

money for that purpose. No city funds, it was explained, are available, so the work must be done privately.

Chairman Stewart appointed a committee, composed of Hugh R. Adair, Mr. Baarson and C. V. Wilson, to look after the matter. He suggested that while no inspection fee is charged, owners of building inspected might feel impelled to donate to the fund for meeting the expenses of outside engineers.

[Helena Independent; October 25, 1935]

INDEPENDENT BUILDING CAREFULLY INSPECTED: UNTOUCHED BY QUAKES

City Engineer Oscar Baarson announced Thursday that the building of The Independent was among the first inspected by his office, both Mr. Baarson and Architect Berg; in fact, The Independent holds "Certificate of Occupancy" No. 2, dated Monday, October 21. State Fire Marshal Arthur Parsons also looked over the building. The owner of the building, George G. E. Neill, also had his own contractors look over the building and placed one upright 8x8 under the floor in a place where heavy machinery stands on the floor above. While the building occupied by The Independent is an old one, it was built in the days of honest architecture, when craftsmen took a pride in their work, and as a result of this construction, not a brick, nor piece of stone was knocked from the building. Loose rocks from part of a wall, the remains of an old liquor warehouse, north of the building, fell off as they have been doing for a number of years since the late George Hansen, proprietor of "The Old Stand," had the building torn down.

The Independent building has a wide cornice of terra cotta on the front of the building. Not a piece of this cornice was disturbed. The building has been gone over in every detail and there is no sign whatever of damage of any kind.

[Helena Independent; October 25, 1935]

EARTH OPENING NEAR WOLF CREEK CAUSED BY LANDSLIDE, NOT QUAKE

The huge opening in the earth about a mile this side of Wolf Creek was caused by a land slide, started about two years ago, and not by the earthquake last Friday night, officials of the maintenance department of the highway commission have announced. It is possible, however, that the quake aggravated the situation.

The following statement was issued in regard to the huge opening:

"While there is evidence of recent mild activity over the whole slide area, we are convinced that there are no new crevices which might have been induced by the recent earthquake in the Helena region.

"The only new condition at the slide occurred in two small areas where there was unmistakable evidence of overthrusting which appeared to affect some one to three feet of the surface. This we interpreted as indicating that some blocks of the slide had encountered subsurface resistance, probably a reef of bedrock in place, which made this particular block more difficult to move than the surrounding yardage.

"Through the canyon no rock of any size had been displaced from the cliffs, and we doubt if in more than one spot had any crevices been materially opened by this earthquake condition. The riding surface of our highways suffered no damage whatever."

[Helena Independent; October 25, 1935]

ONLY TWO TREMORS ARE RECORDED HERE IN 15-HOUR PERIOD

Up to midnight last night there had been only two tremors recorded at the Helena weather bureau over a period of 15 hours, the fewest that there have been over such a long time in a week.

There were nine felt in the 24-hour period that ended at midnight. One at 4:33 yesterday afternoon was quite noticeable, as was the one at 11:25 last night, the latter described as a jolt followed by a rumbling sound.

A period of seven hours and 31 minutes elapsed between the disturbance felt yesterday morning and 4:33 yesterday afternoon.

At midnight last night the shock count stood at 464 since October 12, and 404 since and including the major earthquake a week ago today.

[Helena Independent; October 25, 1935]

MUCH SNOW FALLS IN ALBERTA AFTER SHOCKS ARE FELT

Lethbridge, Alta., Oct. 24--Lethbridge and southern Alberta felt tremors that shook Helena, carrying death and property damage to that city. There were no losses reported but large buildings in the city shivered and dishes rattled. The tremors recurred Oct. 21 but were not so pronounced. In the Y.M.C.A. dormitory men rushed out of their rooms as the large brick building shook. This is the second time southern Alberta has been shaken, along with Montana.

[Helena Independent; October 25, 1935]

NEW STUDENT UNION BUILDING UNDAMAGED

Missoula, Oct. 24--Rumors are foundless that the new student union building on the State university campus was damaged by the earthquake last Friday night, according to M. L. Kingsley, resident engineer. Immediately following the shocks he went through the building inspecting it thoroughly without finding any indication of damage.

Installation of furniture and equipment is going forward without delay. Seats have been installed in the auditorium with but one carload being needed to finish the work. Five pianos have been installed in various parts of the building. Each ballroom has a piano as does the orchestra pit and the stage. Rugs, lamps and soda fountain equipment are being placed.

[Helena Independent; October 25, 1935]

QUOTES ON THE QUAKE

One of the best quake experiences yet is told by Art Sampson, waiter at the Weiss cafe. Saturday morning about 5:30 o'clock, after he had somewhat recovered from the shock, Sampson went home and turned on his radio to see if he could pick up any reports on the disaster.

After a few minutes, there came a knock at his door and an irritated voice said, "Say, would you mind turning off that thing and let a fellow sleep?" "Brother, if you can sleep at a time like this, that's good enough for me," Sampson replied, and off went the radio. A good example of how some of the weird tales get started:

A certain woman entered the telephone booth in the Harvey hotel lobby (note that fact) and placed a long distance call to some friends or relatives in Great Falls. After giving them a rather lurid description of what had happened, she said, "And there is not a single hotel in Helena left standing!" The remark was overheard by several persons in the lobby and was not at all well taken.

Postmaster Harry Hendricks sat anxiously in his office yesterday afternoon at 2 o'clock. No one came in. It was the date for opening the bids for a long list of repairs to the old assay office on Broadway and Warren street. Not a single bid was submitted by a contractor. On next Tuesday bids will be opened for erecting a wrought iron rail on the post office steps. Postmaster Hendricks is hopeful that he will have at least one bidder.

Oh, no. Letha O'Neill, the new stenographer at the post office, does not get excited when an earth tremor rolls through the city. While boasting of her calmness a day or two ago before postal employees, one of the temblors passed through the city. Letha swallowed her chewing gum and had to open a brand new package.

If someone would just come along and throw him a thermos bottle full of coffee and a couple of sinkers, Carl W. Carlson of 335 North Rodney street could have breakfast like a millionaire. Instead of leaving his paper on the porch of his apartment, it is tossed through an opening on the second floor where once there was a wall.

So violently did the store teeth of an employee at the state capitol chatter during the big earthquake Friday night, that his plates were broken. It appears that dentists will have some rebuilding to do in Helena as well as brick masons and plasterers.

J. E. Norris, secretary of the state organization of the Montana Society of Pioneers, said yesterday that any oldtimers who are in need should get in touch with him. The society, he said, has funds to help its members during an emergency such as the one in Helena. While Mrs. A. T. Hibbard and Mrs. Fred Sheriff were driving on the airport road yesterday they spied an energetic news photographer of the "scoop" type from outside the city snapping a picture of the old abandoned Carey school house near the highway. Building was started years ago, was never completed, and for several years has looked like the last rose of summer, worse than any earthquake wreck in the city. "Scoop" might also take a picture of the Parchen house and the Conrad house for his paper. The latter is especially good because it is leveled.

Another popular sport among the outside news photographers is getting the people at Camp Cooney to leave their shelter and stand around small camp fires, shivering and nibbling on a crust of dry bread. Some pictures of the big fire in 1928 might be dug up to add to the sensationalism of the earthquake story for outside consumption.

[Helena Independent; October 25, 1935]

SAM GOZA TELLS OF HECTIC TRIP HOME AFTER EARTHQUAKE

Sam D. Goza, member of the state board of equalization and state beer board, told yesterday of his hectic trip home from Oklahoma City, where he was attending the 28th annual national conference on taxation, after the big earthquake here last Friday night. Mr. Goza left Oklahoma City Saturday morning, and was in fear of his family's safety when he purchased a newspaper in Kansas City and read that the town was in ruins. He called his home by long distance when he arrived in Denver, and his wife greated him by saying "Hello, Lucky."

The tension was somewhat relieved when he found that his folks were all right, but he was made uneasy again when he had dinner with W. E. Lowell, former Associated Press correspondent in Helena, and heard stories of the great disaster.

He tried to telephone his home again but could get nobody. Then he telephoned the home of Judge J. J. Greene, fellow member of the two boards, and talked to the Judge's son, who informed him that the city's residents were departing in great numbers. That information added to his worries until he later heard that the situation had been less disastrous than reported.

It was only when he reached home that he really felt relieved and was able to appraise the situation.

[Helena Independent; October 25, 1935]

QUAKE REFUGEES ARE INVITED TO TAKE FREE BATHS AT Y.M.C.A.

People who were made homeless by the earthquakes, and who would like a good hot bath are invited to come to the Y.M.C.A. and use the shower room there, it was announced yesterday by B. V. Edworthy, secretary.

This invitation is extended to boys, girls, men and women, and there is no charge for the baths, but those who take them are asked to furnish their own towels.

The "Y" has also offered office space to the corps of engineers who are coming here from adjoining cities and from Fort Peck to take part in the building survey.

[Helena Independent; October 25, 1935]

BET ******

Larry Heller Tired Of These Rumors

Almanac-stricken Helena residents who have feasted on a current rumor that Helena is going to have another bigger and better quake tonight don't want to be on that, do they? Larry B. Heller of 515 Eighth avenue, a clerk for the Montana Relief commission and a prominent young man of the city, is tired of hearing of the rumor and is willing to take as many wagers as his meagre purse will allow.

"These wild rumors have gone far enough but I have a little money that isn't a rumor. If any almanac-eaten and quake-foretelling resident of this bailiwick wants to 'lay it on the line,' I will be ready to take it," the young FERA clerk said.

His bet is that there will not be a quake tonight as severe as last Friday night as some Helena "rumorists" allege the almanac states.

[Helena Independent; October 25, 1935]

CITY STARTS ON BIG TASK AHEAD OF IT Work Rushed Activity Is Seen In All Sections Of The Community

With a renewed spirit of confidence and optimism for the future, Helena yesterday bent seriously to the task of rehabilitation and scores of men were engaged in the work of removing the ugly scars left by the devastating earth shock just a week ago.

Reconstruction activities were proceeding at full blast in all parts of the city and there was difficulty in obtaining laborers and skilled craftsmen to meet the demand.

The city was much calmer, after 24 hours comparatively free from earth disturbances, and nerves badly frayed by days of intermittent rocking and rumbling had begun to quiet down but people were still wary, remembering that the big shake came just a week after the first severe one on October 12.

This feeling was not helped by reports, which have run wild through the city that an almanac had predicted the two previous major quakes and further predicted a more serious shock for last night.

Widespread inquiry failed to uncover one of the almanacs and no one could be found who had actually read the dire predictions, but many persons took the rumors to heart and drove out of town for the night. Others watched their clocks apprehensively as the zero hour approached.

Feelings were considerably relieved when midnight passed and nothing happened. Only four or five distinct tremors were recorded yesterday for the lightest earth activity in two weeks and most residents of the city were coming to the belief that shaking was about over.

No Delay

In the meantime, the wariness of the citizenry did not prevent it from getting work under way with all possible dispatch. Damaged chimneys were being torn down and rebuilt, walls were repaired, weak points bolstered up and in a number of instances reconstruction of buildings was actually started.

Street Commissioner Noble Evans had several crews of men at work carting away debris and removing hazards. Two or three private dwellings, so badly damaged that they must be rebuilt, were pulled down by his crews at the owners' request. In this connection, Evans urged that persons making similar requests arrange to have any plumbing fixtures and other property they wish to save removed before demolition is started.

Inspection of buildings to determine the extent of damage and state of safety was gaining momentum as a staff of nearly 20 engineers working out of City Oscar Baarson's office swung into action. Twenty-nine certificates of occupancy had been issued last night and it was expected that many more would be granted today.

Ban Is Lifted

Amos M. Shellady, commissioner of public safety, yesterday noon lifted the ban against public meetings to the extent that gathering may be held in buildings that have been properly inspected and granted certificates of occupancy.

All of the churches have been inspected, it was stated, yesterday and certificates have been, or will be issued today to all but two, the First Lutheran and St. Paul's Methodist. Repairs will be required at the latter two before certificates are issued, and arrangements were being made to hold their services Sunday elsewhere.

Offers of assistance continued to come from neighboring communities and State Senator Frank Buttleman of Bozeman dropped in to assure the Capital City that Gallatin county

would do anything in its power. The county remembers with deep appreciation the aid contributed by Helena in the quake that damaged that section severely in 1925.

Send Beds

As army convoy from Fort Missoula arrived last night about 11 o'clock with 200 blankets, 100 cots and 100 mattresses which were placed at the disposal of the Salvation Army. From Anaconda's mayor, Frank Provost, came the offer to "call upon us for any assistance you think we may be able to give."

The tapering off process was in line, seemingly, with the forecast of scientists both here and on the west coast. The quake total was 475 since October 12th.

Reconstruction and demolition went on hand-in-hand today despite the off repeated and jittery rumors and by nightfall the American Red Cross field headquarters had the application of 125 distressed for assistance, and expected 200 before Saturday night. Schools were not to resume for at least another week but Supt. R. O. Evans announced that a portion of the \$500,000 high school, the north wing of which was demolished, would be put in use and that pupils of other destroyed buildings would be cared for. He said the high school might not resume for weeks.

Masonic Home

Engineers today found that the Masonic Home in the Helena valley was damaged to the extent of \$4,000 to \$5,000 and that the new front wall probably would have to come down. There were no casualties there and the occupants were taking the situation with a smile. The national re-employment service reiterated that brick masons and other skilled laborers should refrain from coming to Helena until they are called. The service had placed 15 men but had no shortage of manpower at that time.

Union bricklayers, it was announced, had not decided whether they would work on a sixday basis in view of the apparent shortage in this trade. They expected to make their decision later.

The injured, still hospitalized, were reported improving and there had been no further casualties except later cases of shock most of which were privately treated and were not of a major character.

[Helena Independent; October 26, 1935]

NEW CODE PREPARED FOR CITY By Engineers Awaits City Council Gathering For Approval

Helena's city council will be called upon to take action on a proposed ordinance requiring earthquake resistant construction, according to the latest approved methods, in the erection, enlargement, alteration and repair of all buildings having masonry construction. The proposed ordinance was drafted at a meeting of engineers, architects and others Thursday night and was to have been presented to the council yesterday. Because of the press of departmental affairs, the council did not hold a session as per schedule and the ordinance was passed over. It will be presented, however, at the first opportunity, either today or Monday.

After Long Beach

Patterned after the Long Beach, Calif., emergency building ordinance adopted after the disastrous earthquake there in 1933, it has been revised and altered to suit this locality, climatic conditions and methods of construction. "The types of construction required are the nearest approach to earthquake resistance available anywhere in the world today," Sigvald L. Berg, supervising architect for the federal housing administration, said. Sponsors of the proposed project were on hand yesterday to present it to the council but other matters kept the councilmen away. Mr. Berg said that the ordinance, being patterned after the Long Beach regulations, represented study by experienced engineers, and was proving of great benefit in California.

Provisions

The principal provisions of the ordinance follow:

All mortar for all types of masonry including exterior clay tile partions shall be cement mortar composed of one part Portland cement and three parts sand by volume with an allowable addition of lime, putty or hydrated lime not to exceed 50 per cent by volume of the cement content.

All masonry units shall be laid with full shoved mortar joints with all head, bed and wall joints solidly filled with mortar.

All brick work shall be laid with full header courses bonded through walls not more than every fifth course in height.

All masonry veneer and facing shall be full bonded, except that masonry veneer or facing may be applied in front of steel or reinforced concrete members or walls when tied or anchored thereto by the equal of nine gauge galvanized iron wire spaced 12 inches on centers vertically and 16 inches on centers horizontally.

No used or secondhand masonry units shall be used unless they are sound and at least 90 per cent whole, and have been thoroughly cleaned of all adhering matter.

Tied In

All new masonry shall be definitely tied into old or existing masonry by means of reinforced concrete, steel or other means which will be adequate, in the opinion of the building inspector, to meet the special condition.

All walls or parts of walls which are shattered or in which the bond between the mortar and the bricks is ruptured shall be taken down to a point where the wall is tight and well bonded.

Except on two-family dwellings and private garages, the exterior walls of masonry construction shall be tied vertically and horizontally with reinforced concrete ties. In lieu of concrete ties and belt courses, structural steel ties may be used when approved

by the building inspector.

Lintels over openings more than 10 feet in width which are of structural steel shall be encased over top and sides with concrete or masonry. When the ends of lintels are less than 18 inches apart they shall be effectively tied together.

Rebuilding

All masonry parapet walls shall be not more than 36 inches in height above the roof adjacent thereto. A horizontal belt course tie of reinforced concrete shall be placed at the top of all parapet walls.

In rebuilding chimneys they shall be taken down below any point of possible fracture and rebuilt, using the mortar specified herein. In each of the corners of new chimneys plant at least one one-half inch round bar every 18 inches on center of vertical height place a one-quarter inch tie laid in the mortar joint. Where chimneys are built of one thickness of brick with flue lining, the vertical reinforcing bars may be placed between the flue lining and the brick and such space shall be well filed with mortar.

Penalty for violation of any provision of the ordinance would be a fine of not exceeding \$500 or by imprisonment in the city jail for not more than six month, or both such fine and imprisonment.

All ordinances and parts of ordinances in conflict would be repealed. The measure would be an emergency one on the ground that it is urgently required for the immediate preservation of public peace, health and safety.

Authors

The code bore the names of the following building engineers, contractors, material men and architects, who have viewed the wreckage in Helena and were of one mind in effecting provisions to avoid such future wide-scale losses:

- H. D. Lovering, of Lovering and Longbotham, St. Paul, chairman of the emergency building inspection staff; A. B. DeKay, Helena contractor; J. A. Bryson, Helena brick contractor; Floyd Hammill, city engineer of Butte.
- C. Raymond, brick contractor; Normal B. DeKay, architect; John H. Morrison, A. Lyall House, Gust Forseen, Missoula contractors; C. J. Forbis, Missoula architect; W. H. Swearingen, designing and maintenance engineer for the state university at Missoula. Prof. E. R. Dye, head of the structural engineering department at Montana State college; A. G. Osterberg, chief designing engineer for the A. C. M. at Butte.
- A. L. Strong, representative of the Portland Cement association; Sivald L. Berg, supervising architect for the FHA; Roscoe Hugenin, Butte architect, and Ray Bray, brick manufacturer.

[Helena Independent; October 26, 1935]

IMPORTANT PROBLEMS OF CITY TO BE PRESENTED MONDAY AT MEETING OF HELENA COUNCIL

Several vital matters in connection with the Helena earthquake will be presented and discussed at the regular weekly meeting of the city council next Monday morning, including an earthquake resistant building ordinance, a supplemental emergency ordinance specifying amounts to be expended by the various municipal departments, a proposal for the construction of a new city hall, and a request for the appointment of a housing authority commission.

The ordinance prepared Thursday night at a meeting of structural engineers, architects and others of the office of Oscar Baarson, city engineer and ex officio building inspector, is patterned after the Long Beach, Calif., ordinance, but has been revised to meet Helena's individual needs, embodying the latest types of quake-resistant construction known to experts.

Take or Leave It

Sigvald Berg, supervising architect for the federal housing administration in Montana, will present the ordinance to the city council. "They can take it for leave it," Mr. Berg said. He added that he was not going to take part in any political or factional controversy. The ordinance was not prepared by outsiders but was drafted after the Long Beach ordinance and then adapted to this climate and local construction methods.

Most of the engineers who came from outside points to help Helena in its great disaster have left the city. At Thursday night's meeting, it is said, Mayor C. J. Bausch indicated he was opposed to outsiders "coming in and telling Helena people what to do," and made other remarks that caused them to feel they were not wanted. However, the majority of the engineers stuck through it until most of the major buildings were inspected.

Need Funds

It will be necessary for the council to pass a supplemental emergency ordinance so that the amounts each department may expend will be set forth. Neither the mayor nor Councilman Noble Evans, have had to spend any to date, it is understood, but Commissioner Amos M. Shellady, taking the reins in his hands for the safety of Helena and its citizens, must find funds to pay the national guard, which was deputized to patrol the business and residential sections, and also to meet the cost of moving the fire and police departments to new quarters when a portion of the city hall collapsed. While the FERA was to provide relief labor to the city for various work projects, labor was scarce. Finding that Commissioner Evans had utilized what few relief laborers were available to tear down weakened walls, other departments of the city found it necessary to hire labor for their work. What sums the various departments will be authorized to spend to aid Helena in its catastrophe will be set forth in the supplemental emergency resolution. Commission Shellady said that he would ask the council to back the plan to have a housing authority in the city to aid the many unfortunates facing the winter without adequate shelter. He also will urge the council to submit an application to the government under a loan and grant agreement for the construction of a new city hall.

[Helena Independent; October 27, 1935]

RECORD 499TH EARTH TREMOR IN THE CITY

At midnight last night Helena's total of earth tremors since Oct. 12 had reached 499, it was reported at the Helena weather bureau. There were 19 recorded at the weather bureau over the 24-hour period ending at midnight. All were described as "weak" except the one at 9:13 o'clock last night, of about two seconds duration, which was characterized by the weather bureau as "moderate."

From 6 o'clock last evening until midnight there were seven tremors felt in the city, the last being between 10 and 11 o'clock. A tremor at 7:34 last night lasted for about two seconds, but was more of a rumble than a vibration.

[Helena Independent; October 27, 1935]

BISHOP HAYES TO ARRIVE BY PLANE MONDAY MORNING Will Hold Meet With Consul Of Diocese About Repairs

Bishop Ralph L. Hayes will arrive here tomorrow morning by plane from Pittsburgh to meet with the diocesan consulators in regard to taking necessary steps to repair damage wrought by the earthquake on October 18, it was announced yesterday.

The carrara marble crucifix over the back of the tabernacle of the main altar at the Cathedral of St. Helena was smashed through the marble platform and steps of the altar without even so much as scratching the latter.

It was estimated that the damage done at the cathedral will not exceed \$5,000, while Carroll college will be fully repaired for about \$10,000. To repair the church at East Helena it will cost about \$2,000. A preliminary estimate made yesterday places the injury done at St. Mary's parish in Helena at from \$5,000 to \$1,000.

Heavy Loss

It may require \$50,000 to restore St. Joseph's home in Helena valley. Funds will also be needed to repair St. Vincent's academy and the Home of the Good Shepherd.

For three successive nights, the sisters and the pupils of St. Joseph's Orphan home slept in the cow barn. The cows were out in the pasture. A few calves were kept in the barn. As there was not a spark of fire in the barn these cold nights, the sisters and children returned to the house Tuesday night.

The sisters and the children of the Good Shepherd fled from their building and took refuge in the open summer pavillian on the children's playground. They remained there until Friday. On that day the residence of the late Senator T. C. Power was put at their disposal by Msgr. Day. At the present time they occupy the Power residence at night and return to the monastery of the Good Shepherd in the morning. The work in classrooms and the laundry goes on as usual.

[Helena Independent; October 27, 1935]

SAYS THAT FEDERAL BUILDING IS WITHOUT STRUCTURAL FAULTS

After a day's investigation, P. L. Hein, inspection engineer for the treasury department, said yesterday afternoon that there is not a "structural fault in the entire federal building." Hein was sent here by the treasury department from Chicago.

He was directed to inspect the buildings under the custody of Postmaster Harry Hendricks, which are the federal building and the assay office. His inspection of the assay office will take place Monday.

Besides these two buildings, Hein also plans to inspect other larger buildings in the city damaged by the big earthquake, and will submit a report to the treasury department on the types of buildings in this earthquake zone that best withstood the terrific jolt.

At the federal building here, plaster cracks in the partitions and walls constituted the entire damage, with the exception of a chimney that was knocked over.

Hein described the big building as "very well designed for rigidity, and well able to withstand earthquake shocks."

[Helena Independent; October 27, 1935]

HELENA HIGH GETS \$75,000 FOR REPAIRS From PWA Four Army Engineers Reach City From Fort Peck

Helena high school will receive an additional grant of approximately \$75,000 from the Public Works administration for repairing its damaged building, Governor Frank H. Cooney was notified last night in a telegram received from Frank Walker, chairman of the federal emergency relief council in Washington.

The action of the PWA was in response to appeals for assistance made by Senator James E. Murray and Governor Cooney. Senator Murray is now in Washington to expedite federal assistance for quake-stricken Helena.

Bryant, Too

While no definite action has been taken as yet by PWA officials, Mr. Walker informed the governor that it was almost certain the government would also supply funds for rebuilding the Bryant school and repairing the damage to other public schools.

In authorizing funds for repairing the damage to the new high school building, the PWA gave Helena school district No. 1 an additional grant of 15 per cent. The high school, a public works project, was built under the original 70 per cent loan and 30 per cent grant plan. When the new appropriation for public works was made by congress last spring, the federal grant was increased to 45 per cent. The bars were raised to permit the high school to benefit by the increased grant.

May Be Less

At first it was estimated that it would cost \$150,000 to repair the high school, but after a later inspection it was stated that it might not cost more than \$90,000. It was indicated that if the new grant is not sufficient for the purpose it is possible the PWA will provide additional funds. Otherwise, the school district will have to make arrangements to borrow the balance, probably from the RFC.

Again yesterday, "the day was saved" for City Engineer Oscar Baarson by the arrival of four army engineers from Fort Peck, headed by Captain Henry Chorpening. The others are Engineers H. H. Dunhas, A. H. Buckley and G. B. R. Gloyd. They arrived by motor late yesterday afternoon.

Start This A.M.

Reporting to Mayor C. J. Bausch under orders last night, they informed him they had been assigned to duty here for as long as their services are needed. Captain Chorpening told The Independent that additional engineers would be available if required and that he would make a survey first thing this morning with the city officials to determine the amount of inspection work to be done.

Later in the evening, Captain Chorpening wired his headquarters for another engineer and a stenographer-clerk.

This morning, the army men will start an inspection of all the school buildings in the city. When that is finished, they will be assigned to the larger buildings, that have not yet been examined.

Lift Burden

Arrival of the army engineers took a great load off the city engineer who yesterday was without the services of most of the outside engineers, architects and contractors who had responded to the appeal for aid sent out by the Helena emergency construction committee. Most of them left Friday night or Saturday morning. Their departure was occasioned, according to the best information obtainable, by the attitude and remarks of city officials

which made them feel they were interlopers and were not wanted.

Before they left, however, they inspected a number of the more important structures and assisted in drawing up the new building ordinance which will require earthquake resistant construction in buildings erected in the future. The city council could not be got together for a meeting yesterday so the new ordinance will not be presented until Monday morning. Mayor C. J. Bausch could not be located for a conference with the army engineers until quite late last night.

Work Praised

Yesterday the staff of engineers assisting City Engineer Baarson was composed of A. G. Osterberg, chief designing engineer for the A. C. M. At Butte; Sigvald Berg of Helena, supervising architect for the federal housing administration in Montana; A. R. Strong, representative of the Portland Cement association; W. M. McClean, Helena, construction engineer; and E. F. Moyle and Maxwell Mason, Helena, architects and engineers of the state highway department.

City Engineer Baarson especially expressed his appreciation of the work done by Moyle and Mason, whose services were voluntarily donated by D. A. McKinnon, chief engineer of the highway commission. They were on the job Saturday morning after the devastating shock and have worked continuously ever since.

Ready To Go

With large sums already made available by the federal government and the American Red Cross for relief and reconstruction, Helena yesterday was prepared to start its tremendous reconstruction program without delay. It will enter its greatest era of building since the boom days when it was transferred almost overnight from a seething gold camp into a city. Much work was under way here yesterday as crews rushed to repair damaged business blocks and commercial enterprises.

The reconstruction of homes will be a slower process, it appeared, as the financing of this work presented some complications. However, the Red Cross expected to start the repair and rebuilding of homes sometime this week.

As civic directors and reconstruction officials looked upon the picture, just one week after Helena's only major disaster, only a feeling of security for the years ahead was reflected.

New Determination

"Helena was suffered greatly in loss of life, injury and destroyed property. Business also has taken its losses, but out of it all will come a renewed determination to go ahead," said Sam V. Stewart, associate justice of the Montana supreme court, and chairman of the Helena Earthquake Reconstruction committee.

His viewpoint was reflected in the vast program of rehabilitation already under way. In all sections of the torn city were the scars of the terrifying 35 seconds of October 18 being erased.

Old buildings, many of them doomed long before the earth began its violent trembling, fell under the blows of workmen; new and temporary abodes were going up here and there; chimneys and roofs torn by the quake were being replaced, and existing dangers lurking in twisted walls were being hunted out by a corps of engineers.

In the heart of the Helena business district there was little left to remind one of the disaster except along South Main street, where old buildings tumbled or were twisted and jumbled about. New fronts were going into several stores and debris was being removed from others. Only the bulging wall of the building at Main and Broadway remained in a restricted area, and engineers were expected to decide momentarily on what should be done to correct this hazard.

Business As Usual

Business went on about as usual Saturday and only a few places remained closed. Theaters, however, were to stay dark until exhaustive examination had proven them safe for occupancy.

To carry on its vast program of re-building Helena, had the resources of the Red Cross, the Federal Housing administration, Helena banks, which offered generous assistance, and the Reconstruction Finance corporation, which was to have \$150,000 of federal funds to loan through the local reconstruction committee.

As it forged ahead with its phase of the rebuilding plan, the Federal Housing administration, through S. L. Berg, supervising architect, suggested that it might prove more economical to many of the homeless householders to erect new places rather than to rebuild.

Many structural weaknesses have been found and these are difficult to correct. The FHA also suggested that it might prove economically prudent for many to build anew in different locations.

While private property owners looked forward to new homes, city authorities also saw in the disaster the probability of a long-needed new city hall.

The ancient quarters of the city administration just off South Main street were shattered and later evacuated as the walls began to crumble and fall.

[Helena Independent; October 27, 1935]

WESTERN UNION HAS ONE OF ITS BUSIEST WEEKS AFTER THE QUAKE

Helena's Western Union office experienced one of its busiest weeks on record following the big earthquake on October 18, W. H. War, manager said yesterday. It was perhaps the biggest week since the fire in Helena in July, 1928, which threatened to burn down the office.

When the power failed during the major earthquake, the Western Union's emergency power plant was placed in operation, thus putting the office here in contact with the outside. All employees of the big office here were immediately summoned to work, and all responded splendidly, Mr. War said.

Emergency Office

"During this period of excitement and chaos an emergency office was established in an outlying section of the city in the event that anything happened at the main office, so that telegraph service could be carried on," said Mr. War.

"By 9 a.m. Saturday the local forces were augmented with operators, clerks and managers from Billings, Great Falls and Butte, who were rushed here to assist in handling the great volume of messages and press matter. Every regular and as many additional messengers as could be obtained, likewise taxicabs and drivers were placed in the service for use in picking up and delivering messages, which was difficult under the chaotic conditions throughout the city.

"Superintendent U. G. Life of Denver said the loyalty and courage displayed by our people and the long hours worked throughout the ordeal, was phenomenal.

Press Messages

"All press files and messages were handled on the wires within the schedule time. In the commercial office there were from 10 to 15 clerks used constantly on counter, delivery and telephone work during Friday, Saturday, Sunday, Monday and Tuesday. Night and day shifts were employed.

"Of the several thousand messages sent and received, all were handled in an entirely satisfactory manner.

"Great assistance was afforded by local customers and friends in giving the telegraph company information as to the whereabouts of people who could not be located at their homes.

"Mr. Life predicts Helena will be back stronger and better than ever within a short time. He adds that he has never seen Montanans with their heads down and right now they are up and going about the job of rehabilitation in their usual stable, smiling and energetic way." [Helena Independent; October 27, 1935]

NEW CORPORATION RECEIVES NUMBER OF LOAN INQUIRIES Applications Expected To Start Within Few Days

Norman Winestine, president of the newly-formed Montana Reconstruction corporation, yesterday announced that the agency had received about 40 inquiries from persons whose property was either damaged or totally demolished by the giant earthquake, concerning loans to be used for rehabilitation of homes or business buildings.

"The inquiries we have received," he said "involve sums ranging from slightly over \$100 to \$70,000, but it is a trifle early yet for the filing of formal applications.

"We feel gratified, however, at having so many people show their interest in the corporation, and are confident that many loans will be made through our office.

Not For New Work

"One point we wish to place emphasis on," he added, "is the fact that the work for which funds will be loaned through this office must be strictly of a replacement nature. We cannot loan money to be used in building new structures or additional to old structures." The reconstruction finance corporation must be given a clear first mortgage on all properties on which money is loaned for rehabilitation work, according to Mr. Winestine. The loans will be at 4 per cent interest. He said, however, that in the case of school districts, their bonds or tax anticipation warrants serve as satisfactory collateral.

[Helena Independent; October 27, 1935]

RED CROSS ADVISORY GROUP TO MAKE REBUILDING AWARDS

The advisory committee of the Red Cross for Lewis and Clark county will act as the award committee when funds are made available for repairing homes, E. S. Transue, disaster relief representative of the American Red Cross, said yesterday.

R. E. Towle is chairman of this committee, while the members are Dick Tobin, John Gough and J. D. MacKenzie of East Helena, and Quay Painter. Sam Roberts, chairman of the Lewis and Clark chapter of the Red Cross, and A. T. Hibbard, secretary, will aid the committee.

Red Cross workers will make the recommendations to the committee, which may either approve, disapprove, or amend such recommendations. In making the recommendations they will be presented to the committee by case number instead of by name, Transue said.

Take Four Weeks

He said that as far as the Red Cross is concerned, its work should take not more than four weeks. After the awards are made for rebuilding homes, the American Red Cross turns the whole matter over to the local advisory committee.

Miss Frances Blackburn, a disaster relief case worker, is expected to arrive in Helena today for active service, while Paul T. Carlson, field representative for Montana, whose headquarters are in St. Louis, will leave today.

Mrs. Florence Martin, a case worker, arrived here yesterday to help in the Red Cross work. Miss Henrietta Wilkins was the first to get here, arriving from Los Cruces, N. M. on Friday. Transue said that the heads of more than 150 families have registered with the Red Cross so far.

[Helena Independent; October 27, 1935]

DAMAGE WROUGHT BY QUAKE IN E. HELENA NOW BEING REPAIRED

Rehabilitation in East Helena is progressing in good shape following the big earthquake a week ago Friday night, and most of the store fronts in the Smelter town have been either temporarily repaired or have been torn away to speed up permanent repairs.

In most of the stores, business went ahead last week as usual. While the business district of East Helena suffered considerably, residences, generally, were undamaged, except for wrecked chimneys. Most of the houses in East Helena are frame, and therefore withstood the big shock in good shape.

Two casualties were checked up in East Helena due to the major quake. They were Mrs. Sam Koich and her daughter, Dorothy, who were injured when they were struck by falling bricks. Both are recovering in good shape.

[Helena Independent; October 27, 1935]

THINK QUAKE CENTER IN NELSON COUNTRY

Franklin P. Ulrich of the U. S. coast and geodetic survey, who came to Helena last week with Dean S. Carder, also of the U. S. C. and G. S., to study the disturbances in the Helena area, said yesterday that he believed the epicenter of the big quake was in the vicinity of Nelson. Although there are few buildings there to test the strength of the earthquake in that neighborhood, residents said that it was more violent than it was in Helena.

Ulrich said that he is scheduled to deliver a radio talk over a coast-to-coast network Thursday evening, November 7, at 7:30 o'clock, M. S. T. Although he will discuss earthquakes as a general topic, it is expected that he will speak extensively on the Helena temblors.

[Helena Independent; October 27, 1935]

REBUILDING ACTIVITY IN FULL SWING City Revives Helena Scans Picture And Finds Only Optimism

Having scanned every dark aspect of the picture presented by its present distressing plight, Helena yesterday still found abundant room for confidence in the future and this week will have its reconstruction program in full swing, unmindful of the recurrent earth disturbances which occur at intervals.

Even the pronounced tremor at 12:22 p.m., yesterday, one of longer duration than any since the destructive shock of October 18, failed to disturb this quake-conscious city more than moderately.

The tremor lasted fully five seconds but was peculiar in that it was not as sharp, or of as high frequency as most of those preceding it. It appeared to be a slow rocking movement, traveling east and west, and was accompanied by only a slight rumbling.

Is Encouraging

Scientists studying the Helena earthquake take this fact as nearly definite proof that the movement has about reached its climax, that the growing pains in the belly of the earth are being rapidly relieved and complete quiet will prevail soon.

Sunday brought literally thousands of curious visitors to the city to view the stricken homes and business buildings. They came from all parts of the state, and but few of the 56 counties were not represented. Hundreds of cars were here from Great Falls, Butte and Anaconda, while Missoula was only slightly behind. The streets were filled with sightseers and traffic was congested all day long.

The heavy tremor shortly after noon discouraged some of the visitors and sent them dashing from the city, but hundreds of others continued to pour into the city during the afternoon. Anticipating just such a situation, the state highway patrol was on duty in force on the highways leading into the city and traffic was kept in order.

Already Started

Much rebuilding activity was evident yesterday and far more will get under way during the coming week. Business buildings damaged by the shakes are being repaired as rapidly as possible. Reconstruction work has not proceeded as rapidly as it would otherwise, due to difficulty in obtaining certain types of skilled labor.

A crew of 50 men is at work at the Kessler brewery, repairing damage to brick walls and the boiler room. In the meantime, a Northern Pacific locomotive is furnishing the steam to run the plant.

Workmen have been engaged several days tearing down loose brick at the new high school building. Repairs will be started as soon as a thorough inspection of the building is completed.

H. Walter Larson, who has started reconstruction of his badly damaged business block and apartments in the Sixth ward, announced yesterday that the job would be completed in about 10 days. A large crew of men have been working since immediately after the major quake. In the older part of the building, the brick front walls have been taken down and are being replaced by heavily reinforced frame and stucco structure. The newer part was not damaged to any great extent and only the brick parapet will have to be replaced. On the interior, several of the second-floor apartments will have to be replastered.

South Main street was a busy scene yesterday as the fronts in several damaged buildings were being replaced. The work at the Exchange Tavern was almost completed. Home owners throughout the city were also busily engaged in rebuilding chimneys and

repairing walls not too badly damaged. Most of them, however, are waiting until their property can be inspected to determine the exact extent of damage.

Little damage has been done by the tremors that followed the main show 10 days ago, although in a few cases loose bricks and weakened chimneys have toppled down. During the coming week, the Red Cross will start its rebuilding program for those left without resources to do the work themselves.

Army Engineers

Yesterday the four army engineers from Fort Peck, headed by Captain Henry Chorpening, started a minute inspection of the new high school building. They will go over the building with a "fine-toothed" comb and will prepare an elaborate report on their findings. When they have finished that job, they will begin on the other school buildings. They are expert structural and architectural engineers, selected for this assignment.

P. L. Hein, government structural engineer, who was sent here from Washington to examine the federal building, yesterday offered his services to City Engineer Oscar Baarson and will spend several days here making inspections of some of the more important buildings.

This morning, an important research project will be started by Dean S. Carder and Franklin P. Ulrich of the U. S. Coast and Geodetic Survey. They will install their seismograph on the top of several of the higher buildings of the city for the purpose of studying the amplitude and period, or wave frequency, of the earth shocks. Their data will be compiled in a government bulletin and will be invaluable for use in future construction of buildings in this area.

The buildings on which the tests are to be made, selected by City Engineer Baarson, are the state capitol, the Montana club, the Placer hotel, National Bank of Montana building, the Power block and the old Gans and Klein building.

It was reported yesterday that the earthquake had increased the flow of water in the Eureka well and the Bed Rock system materially but this had not been confirmed by measurement, as far as could be learned. A new spring flowing 15 inches of water was discovered on the Gumprecht ranch north of the city.

City crews under Commissioner Noble Evans were proceeding with the work of tearing down walls and buildings deemed unsafe. Sagging walls have been pulled down from several old buildings on State and Wood streets during the last two days and several dwellings have been torn down at the request of the owners. Today, the old building on South Main street, where David Harris was killed when the front wall fell out, will be demolished completely.

At midnight last night, the tremor total for the current epidemic stood at 522. Twenty-three occurred in the preceding 24-hour period. The shock at 12:22 yesterday noon, lasting five seconds, was the only heavy one recorded although two lasting about two seconds were chalked up shortly after 2 o'clock and at 9:09 yesterday morning. The others were de [?]

Helena, for the most part, was becoming case-hardened to the repeated seismic motions of the earth and the entire city had resumed its normal functions. Scores who had been away since last Friday night or early Saturday were flocking back into the city and many homes unlighted for a week were opened Sunday night for the first time.

Through the entire and widely separated quake sections of the city scores tramped on foot where restrictions prevented the use of automobiles. The crowd of visitors was far greater than a week ago when the earth was in almost constant motion.

Highway patrolmen, guardsmen and police again kept a tight rein on the stricken sections,

but by sundown most of the great army of sight-seers had taken off for home. Main street again was hushed for the theaters have not been permitted to resume operations pending final and complete structural examinations.

Many of the earthquake jaded journeyed to Great Falls or Butte for a movie or a dinner, or into the mountains to release a pent up feeling.

Churches, those habitable, were well filled with Sunday worshippers and in several the text of the sermon dealt with the city's major disaster in 72 years of activity, all centered in the narrow confines of Last Chance gulch. All places of worship had been closed since the disastrous quake.

St. Peter's procathedral (Episcopal) which escaped with only loosened cement and plaster in the ceiling of its arched auditorium roof, extended an invitation to the congregation of St. Paul's Methodist church to use any portion of its church property for religious purposes. The latter church, Broadway and Ewing, was badly damaged and will require much reconstruction.

Several other churches deferred further congregational sessions until next Sunday or later, while some met in improvised quarters as they considered plans for the future.

[Helena Independent; October 28, 1935]

EARTHQUAKE DAMAGE TO PUBLIC LIBRARY FOUND TO BE SLIGHT

Slight earthquake damage was suffered by the new Helena public library, Mrs. Mabel T. Miller, librarian, announced at the regular monthly meeting of the board of trustees. The building itself received no structural damage, and only a few cracks appeared on the inside, and these are believed to be superficial, she said.

A few books were thrown from their racks on the main floor, but hundreds of them tumbled out on the floor of the balcony.

An old stone chimney, no longer used, was cracked and has been taken down, according to Fred S. Sanden, president of the board of trustees. It has not been decided yet whether or not it will be rebuilt.

Members of the board expressed gratitude that this important city institution had been spared.

The library was reopened Wednesday and has since been visited by hundreds of Helena people.

[Helena Independent; October 28, 1935]

EARTHQUAKE CAUSES COLLAPSE OF CASING IN CUT BANK FIELD

Great Falls, Oct. 27--The major earthquake of Friday night, Oct. 18, caused collapse of an eight-inch casing 2,550 feet underground of the Tarrant well on the Thacker Bond and Mortgage company farm in the south end of the Cut Bank oil field, according to O. I. DeSchon, editor of the Montana Oil and Mining Journal.

The collapse of the Tarrant well casing was the only damage reported by operators in the field after a survey by Mr. DeSchon. Many operators did report, however, a slight variation in the production of their wells in Cut Bank field which generally has been attributed to the quake.

The Tarrant well is located in the northwest quarter of extension 27, township 32, range 5 west, in Glacier county. On Friday, Oct. 18, drillers had reached the 2,550-foot level and cemented the eight-inch casing. Saturday morning when they resumed drilling the casing had collapsed, which was very unusual. There is little question but what the collapse was caused by the quake of Friday night, according to word received by Mr. DeSchon. Reports from the Kevin field indicated that no damage or variation in production has taken place as a result of the quake.

After the major quake on June 27, 1925, where the epicenter was in the vicinity of Lombard and Three Forks, an oil well near Cody, Wyo., that had been unproductive for several years "blew" considerable gas and oil for a few days after the earthquake. From 1909 to 1924 it production probably did not exceed 200 barrels, but on the following day the well threw a column of mixed oil and water 30 to 40 feet in the air. The flow of gas was estimated at about 5,000,000 cubic feet a day and oil and water at 1,500 barrels a day. After a few days it again became inactive.

[Helena Independent; October 28, 1935]

EARTH TREMORS RISE TO 530 AS MERCURY FALLS TO 10 ABOVE

Earth tremors hit the 530-mark and the mercury hit the 10-mark, it was reported at midnight by the Helena weather bureau.

There were a total of seven earth disturbances reported for the 24-hour period ending at midnight, the last one, described as "very weak," being recorded at 9:47 last night. The weather came into the spotlight as the moderate cold wave sent the thermometer down 50 degrees in the 24-hour period ending at midnight. It was exactly 60 at midnight Sunday.

At 4 yesterday morning the recording was 47, and at 6 a.m. it was 48. By 11:40 yesterday morning the mercury had fallen to 36, and at 4:30 in the afternoon the reading was 25. The temperature was 22 at 5:30 in the afternoon, and 16 at 8:30 last night.

The weather bureau reported that there was a trace of moisture. A few flakes of snow fell between 9 o'clock last evening and midnight.

[Helena Independent; October 29, 1935]

REPAIRS BEGUN ON SOUND PORTION OF NEW HIGH SCHOOL Application Is Filed For Additional \$80,000

As workmen yesterday toiled at the task of preparing for occupancy the 30 rooms of the new high school, which were not badly damaged by the earthquake, the school board prepared and filed with the PWA application for an additional grant of \$80,000 to be used in rebuilding the shattered portion of the structure. Classes will be resumed in two or three weeks, officials said.

"We have secured the services of E. J. Decker, construction superintendent for the West Coast company," E. M. Hall, chairman of the Helena public school board stated, "and he is supervising the work of preparing those rooms which were not seriously injured for the resumption of classes."

R. O. Evans, superintendent of Helena's public schools, yesterday stated that crews are repairing the heating, plumbing and lighting equipment of the building, while other workmen are removing the furniture and fixtures from the rooms which must be vacated. "As only part of the building was damaged by the earthquake," Mr. Evans stated, "the school board itself is undertaking the task of repairing the remainder of the building as we are anxious to resume classes as soon as possible."

There are sufficient rooms to accommodate the students in actual class work, but a different plan has been worked out for the study periods, he said.

The small study hall, the library and, during some hours, the cafeteria will be used as a study hall, but students who have study periods during the first period of the morning or afternoon, will not be required to come to school until time for the actual class work. Students who are assigned to study periods for the last period of the morning or afternoon will be allowed to go home.

Inspection Made

Inspection of the city's remaining five grade schools has been completed, and as the inspection disclosed that they are structurally sound, repair work has been started under the supervision of Linn Smith, general contractor.

The equipment of the demolished Bryant school is being removed, and only two rooms yet remain to be stripped. Most of the furnishings in the principal's office were damaged beyond repair, Mr. Evans said.

Workmen are installing additional blackboards in the rooms in the Broadwater school which are to be used for classrooms for the first four grades of the Bryant school. Grade schools in the city will be ready for use about November 4, according to Mr. Evans.

[Helena Independent; October 29, 1935]

PROPER METHODS FOR REBUILDING CHIMNEYS OUTLINED BY BAARSON

Oscar Baarson, city engineer and ex officio building inspector, yesterday stated that in the rebuilding of chimneys damaged by earthquake, the brickwork must be raised to a point at least one foot from the nearest part of the roof, and that in all brickwork, mortar containing one part of cement should be used.

"My attention has been called to chimney brickwork has been raised only a foot above the lower slope of the roof," Mr. Baarson said, "and when a jack is put on such a chimney the metal touches, or nearly touches, the shingles on the upper side.

"This practice is not in compliance with city ordinances and is hazardous, as when the metal jack becomes heated it might set fire to the roof. Neither should stacks be nailed to the wood of roofs, as this too is likely to result in a fire.

"In order to safeguard against fires, five or six courses of brick should be laid above the nearest part of the roof, and chimneys should be capped with cement."

[Helena Independent; October 30, 1935]

WILL REPAIR DAMAGE AT FEDERAL BUILDING

Postmaster Harry Hendricks said yesterday that the treasury department had authorized the calling of bids for repairs to earthquake damage done at the federal building and the assay office, both of which are under his custody. Specifications will be drawn up by P. F. Hein, treasury department engineer, who came here to investigate the damage. The treasury department instructed Hendricks to let the work on the buildings on two separate contracts. The principal damage at the federal building is a wrecked chimney and plaster cracks in the wall partitions.

[Helena Independent; October 30, 1935]

QUAKE ORDINANCE IN FULL

Provisions of the city building ordinance, amending the present building code to require earthquake resistant construction in certain types of structures, are given below in full for the information of persons planning repairs or new buildings which involve brick or masonry construction.

The ordinance was passed Tuesday on first reading by the city council and will be up for final passage next Tuesday. It will become effective immediately upon passage as an emergency measure.

The complete text of the ordinance follows:

Section 1--It shall be unlawful for any person or persons, firm, corporation, society or association or organization to erect, construct, enlarge, alter or repair, or cause or permit the erection, construction, enlargement, alteration or repair of any building or structure wherein masonry, as defined by the building code, is used in the city of Helena, without fully complying with the following specifications relative to the use of masonry in connection with such erection, construction, enlargement, alteration or repair:

Mortar

(a) All mortar for all types of masonry, including interior clay tile partitions, shall be cement mortar composed of one part of Portland cement and three part of sand by volume with an allowable addition of lime putty or hydrated lime of not to exceed 50 per cent by volume of the cement content. All measurements shall be box measurements and all mortar shall be thoroughly mixed. All mortar shall be used within one hour after the addition of the Portland cement, and no mortar shall be retempered.

Workmanship

(b) All masonry units shall be laid with full shoved mortar joints with all head, bed and wall joints solidly filled with mortar.

Bond In Masonry

(c) All brick work shall be laid with full header courses bonded through walls not more than every fifth course in height.

Veneer and Facing

(d) All masonry veneer and facing shall be fully bonded as herein provided, except that masonry veneer or facing may be applied in front of steel or reinforced concrete members or walls when tied or anchored thereto by the equal of nine gauge galvanized iron wire spaced 12 inches on centers vertically and 16 inches on centers horizontally. In veneering on wood frame (type V) construction, the veneer shall be tied to the studding by 30D common nails driven to a two-inch penetration not more than 12-inches on center vertically, nor more than 16 inches on center horizontally. Corrugated clips and other forms of ties are prohibited unless approved by the building inspector. Veneering on wood frame, (type V) construction will not be permitted except on residences, duplexes and private garages.

Used Masonry Units

(e) No used or secondhand masonry units shall be used unless they are sound and at least 90 per cent whole, and have been thoroughly cleaned of all adhering mortar.

Wetting

(f) All masonry units shall be thoroughly wetted not more than one hour before laying and shall be damp at time of laying, except during freezing temperatures.

Connections

(g) All bonding surfaces of old or existing masonry to which new masonry is to be added shall be thoroughly cleaned of all old mortar and the surface thoroughly wetted and cement grouted at time new work is built.

All new masonry shall be definitely tied into old or existing masonry by means of reinforced concrete, steel or other means which will be adequate, in the opinion of the building inspector, to meet the special condition.

All walls or part of walls which are shattered or in which the bond between the mortar and the brick is ruptured shall be taken down to a point where the wall is tight and well bonded.

Concrete Ties

(h) Except on two-family dwellings and private garages, the exterior walls of masonry construction shall be tied vertically and horizontally with reinforced concrete ties as follows: Horizontal belt course ties shall be placed under the floor joists of each floor above the first floor and under the ceiling joists or roof rafters. Vertical ties shall be placed at each corner of the building and not more than eight inches in any dimension and in no case more than four inches thinner than the wall. The depth of horizontal ties shall be at least equal to the wall thickness minus the width of a brick, but in no case less than eight inches. Each vertical and horizontal tie shall be reinforced with four reinforcing bars of the size shown in the following table:

Stories -- 4 3 2 1 4 4" 0 3 4" 0 4" 0 2 4" 0 4" 0 4" 0 1 4-1" € 4" 0 4" 0 4" 0

(Note) "0" means "round." "€" means "square."

All vertical and horizontal bars shall lap 40 diameters of the bar but in no case less than 24 inches. Vertical ties shall extend to the top of the parapet wall. All vertical and horizontal bond ties shall be banded with one-quarter inch round hoops not more than 18 inches on center.

In lieu of concrete ties and belt courses structural steel ties may be used when approved by the building inspector.

Lintels over openings more than 10 feet in width which are of structural steel shall be encased over top and sides with concrete or masonry: When the ends of lintels are less than 18 inches apart they shall be effectively tied together.

Parapet Walls

(i) All masonry parapet walls shall be not more than 36 inches in height above the roof adjacent thereto. A horizontal belt course tie of reinforced concrete shall be placed at the top of parapet walls. All terra cotta, cast stone or other material used in addition for coping ornament or appendage shall be securely anchored by steel rods or angles into the brickwork and concrete ties. Such ties shall be reinforced with at least one one-half inch round bar continuous. Horizontal parapet wall ties shall be not less than two courses of brick deep and shall be at least eight inches wide. All masonry parapet walls shall be reinforced with three-eighths inch round bars not over 18 inches on center extending into the belt course tie below and hooped around the horizontal reinforcing bar in the top capping. Such vertical bars shall be placed four inches from the roof side of the wall.

Chimneys

(j) In rebuilding chimneys they shall be taken down below any point of possible fracture and rebuilt, using the mortar specified above.

In each of the corners of new chimneys place at least one one-half inch round bar and every 18 inches on center of vertical height place a one-quarter inch tie laid in the mortar joint. Where chimneys are built of one thickness of brick with flue lining, the vertical reinforcing bars may be placed between the flue lining and the brick and such places shall be well filled in with mortar.

Penalties

Section 2--Any person, firm, corporation, society, association or organization, whether as principal, agent, servant or otherwise, violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by fine not to exceed \$500 or by imprisonment in the city jail of the city of Helena for a period not exceeding six months, or by both such fine and imprisonment.

Section 3--All other ordinances and parts of ordinances in conflict herewith are hereby repealed and this ordinance shall supersede all part of the building code of the city of Helena in conflict herewith.

[Helena Independent; October 31, 1935]

HARBINGERS OF DISASTER

Governor Frank H. Cooney Tuesday evening condemned in no uncertain terms the harbingers of disaster in the Helena earthquake situation, in a radio address over a Butte broadcast, warning the people against the danger lurking from the lips of self appointed "seers and soothsayers."

The Governor was speaking to the people of the State of Montana about the Helena earthquake and telling them a sane and truthful story about the disaster, without color. He also appealed to the people to cooperate with the Red Cross and other agencies which are bringing aid to the people of Helena for their immediate needs and encouragement for rebuilding and repairing their homes and business houses.

"I would not leave the subject without expressing the hope that the people of other portions of the state may not be influenced by wild, irresponsible stories of havoc and devastation that seem to spring out of the idle minds in emergencies such as this," said the Governor. "The situation in Helena is a serious one, of course, but it is not as harrowing as many of these stories would have you believe."

Governor Cooney reached a large audience on the air and his address is much appreciated by Helena citizens, business men, bankers and especially by those who have friends elsewhere who have been mislead and caused much anxiety by the wild stories peddled by the sensational papers. The Governor's reprimand to the harbingers of disaster is taken to include the editors of a local publication who predicted "another eruption," and expressed the fear that a plague of disease would follow the earthquake, more dreadful in its consequences than the earthquake itself.

Governor Cooney has the thanks of every right thinking person in Helena and the friends of the city outside.

[Helena Independent; October 31, 1935]

BUILDING PERMITS ISSUED TO REPAIR DAMAGE OF QUAKE Total Represents But Portion Of Work Under Way

Eighteen building permits for construction totaling \$7,875, have been issued since October 18, the date of the destructive earth shock, the records of City Engineer Oscar Baarson reveal. Nearly as many more had been issued during the period from October 12, when the first severe quake was felt, and October 18.

The permits are chiefly for repair of damage caused by the quakes but two or three have been for new dwellings to cost from \$1,000 to \$2,000. October's building total will probably set a record for this month of the year in Helena.

Small Part

City Engineer Baarson admitted that the permits issued to repair earthquake damage represent only a small proportion of the construction work actually under way at the present time.

"Because of the emergency situation, we are not inclined to be strict about the matter of obtaining permits at this time," he said. "In the case of dwellings, it was imperative in many instances that repairs be made at once to chimneys and walls so that they might be inhabited.

"On the other hand we have been so busy with the imperative work of inspecting buildings that it would have been impossible for us to have checked on all building operations to determine permits had been obtained. This will be done later, when we are able to get a breathing spell, in order that we may have a complete record of the work done here."

Most Recent

Those issued since Oct. 18 are:

S. A. Fisher, 820 Sixth avenue; remove porch and add room, 16 by 32, stucco, with cedar shingle roof, at that address, \$1,000.

Mrs. W. C. Whaley, 532 Breckenridge street; repair chimney and brick work of dwelling at that address, \$100.

Ray Perkins, 809 North Warren street; erect temporary dwelling, 12 by 14, frame, with composition roof, at that address, \$50.

Joe Plattenberg, Canyon Ferry; remove back brick wall and replace with brick veneer at residence at 914 Fifth avenue, \$300.

Herrmann and company stucco funeral home building at Broadway and Rodney street \$700.

Bert Warfield, 16 North Rodney street pull down walls and partly rebuild south wall of flat at 14 and 16 North Rodney; \$500.

F. S. McCoskery, 725 Eleventh avenue; move Blue Mill service station, at Eleventh avenue and Roberts street, parallel with Eleventh; \$175.

Warehouse Repairs

Nash-Finch company; rebuild end walls and repair roof of company's stone warehouse building; \$900.

George Gabisch of Townsend; remove brick on second story and replace with metal imitation brick on business building at 136-138 South Main street \$250.

LaReau brothers, 421 Fifth avenue; general repairs to chimneys, windows and walls at 522 Breckenridge street; \$50.

Monticello Apartments, Inc., Josiah Bowden, agent; replaster walls of apartment building at Broadway and Warren street; \$100.

John Phillips, 101 South Main street; rebuild front and stucco building housing the

Exchange Tavern at that address; \$800.

Power-Townsend company; repair west wall of stone warehouse at National and Argyle avenues; \$300.

Frank A. Newton, 117 Pine street; replace brick wall of residence at 11 North Rodney street; \$100.

Leona M. Jones, Denver block; straighten and build up wall of Denver block; \$350. J. P. Dickson, 114 Broadway; straighten wall of Central block on Broadway; \$200. Reed Collings, 1225 Leslie avenue; erect one-story four-room dwelling on Wilder avenue, lots 28-32, block 98, Ming addition; 26 by 24 feet, frame with composition roof; \$1,000. Mrs. Emma Mayer; masonry and trim work on hotel building at 122-124 South Main street; \$1,000.

[Helena Independent; October 31, 1935]

EARTH TREMOR SCORE NOW STANDS AT 560

A few earth tremors yesterday, most of which were weak, brought the grand total since October 12 to 560 at midnight last night. The most noticeable disturbance yesterday was at 8:18 in the morning, but those which followed were barely noticeable. They occurred at 3:14, 3:32, 6:54, and 11:58.

At midnight last night the Helena weather bureau reported that the official temperature was 1 below zero. Snow began to fall shortly after 1 o'clock last evening, and by midnight .01 of an inch was recorded by the weather bureau.

[Helena Independent; October 31, 1935]

HELENA THEATERS TO REOPEN NEXT SUNDAY WITH MATINEE SHOWS

Helena's theaters, thoroughly inspected by engineers and pronounced untouched by the earthquake, will reopen Sunday afternoon with matinees, it was announced yesterday. The Marlow was carefully inspected a week ago by the entire staff of 17 engineers, who had responded to the first call for assistance in examining buildings to determine whether or not they were safe for occupancy. Later Capt. C. H. Chorpening and his three army engineers from Fort Peck also went over the building.

Their reports were unanimous in pronouncing the structure 100 per cent safe. Only a few plaster cracks were discernable. The same was found to be true at the Antlers which was inspected subsequently.

Held Off

Although free to open, upon proper inspection, when Commissioner of Public Safety A. M. Shellady lifted the ban against public meetings, the managers of the show houses of their own record have refrained from opening in order to give the general nervousness a chance to subside. In the meantime, the Marlow has been extensively renovated on the interior and portions repainted and redecorated.

The Rio theater was inspected thoroughly Tuesday and was issued a certificate of occupancy yesterday. It was entirely undamaged. With all three houses given a clean bill, the managers decided to reopen Sunday at 2:15 p.m. In this they have the approval of the city officials who feel that the operation of places of amusement will have a good effect on the general morale of the city.

[Helena Independent; October 31, 1935]

Section 4

Articles 151-200 (11/01/1935 to 11/03/1935)

Back to Overview

Headline: Another Devastating Earthquake In Helena Kills Two; Does Much

Damage

Date: 11/01/1935 <u>Info Categories</u>: A, B, E, I, N, P

Headline: Sixth Ward Again Is Hit Very Hard

Date: 11/01/1935

Info Categories: I, N, P

Headline: Casualties By Shock; Two Killed, Some Seriously And Many Only

Slightly Injured

Date: 11/01/1935

Info Categories: I, P

Headline: East Helena Has Serious Loss; Grade School Is Gone And City

Hall Is A Wreck

Date: 11/01/1935

Info Categories: B, I

Headline: East Side Homes Suffer Severely By Latest Shock

Date: 11/01/1935

Info Categories: B

Headline: New Police Station Melts From Shock

Date: 11/01/1935

Info Categories: B

Headline: Capitol Building Bears Shock Well

Date: 11/01/1935

Info Categories: B

Headline: Lewistown Plans To Give Aid To Helena

Date: 11/01/1935

Info Categories: E

Headline: Relief And Work Chief To Come To Helena's Aid

Date: 11/01/1935

Info Categories: A

Headline: Visitors Warned To Avoid Helena

Date: 11/01/1935

Info Categories: A

Headline: <u>Great Falls Is Extending Offer To Help Helena</u>

Date: 11/01/1935

Info Categories: A

Headline: Three Have Close Call; Warehouse Falls In Debris

Date: 11/01/1935

Info Categories: B, P

Headline: Shrine Temple Is Hard Hit By Seismic Shock

Date: 11/01/1935

Info Categories: B

Headline: Guard In Other Cities Ready To Come To Helena

Date: 11/01/1935

Info Categories: A

Headline: Kessler Brewing Plant Ruined; Two Men Are Killed

Date: 11/01/1935

Info Categories: B, P

Headline: Shock Not So Violent As Big One Of Oct. 18

Date: 11/01/1935

Info Categories: E, S

Headline: School Opening Swept Aside By Fresh Temblors

Date: 11/01/1935

Info Categories: B, I

Headline: I.U.C. Must Move From This City Or Else Close Up

Date: 11/01/1935

Info Categories: B, I

Headline: Helena Loss By Temblor Told In Gist

Date: 11/01/1935

Info Categories: B, I

Headline: <u>Total Now 702</u> Date: <u>11/01/1935</u>

Info Categories: E

Headline: Survey Of Relief Needs Is To Be Made

Date: 11/02/1935 Info Categories: A, B, I

Headline: High School Damage Will Total 75 Per Cent Entire Structure,

Engineers Say

Date: 11/02/1935

Info Categories: B, I, N

Headline: <u>Just Some Of The Things Last Shock Did To Helena</u>

Date: 11/02/1935

Info Categories: B, N

Headline: City Grits Teeth, Pauses To Face Stark Reality Of Present Serious

Situation

Date: 11/02/1935 <u>Info Categories</u>: A, B, I, P, R

Headline: City Again Starts to Repair Damage

Date: 11/02/1935

Info Categories: A, R

Headline: Railroads Respond Quickly To Appeal For Help For City

Date: 11/02/1935

Info Categories: A, B

Headline: Peculiar Case Of Quake Victim Here

Date: 11/02/1935

Info Categories: A, P

Headline: In The Wake Of The Tremor

Date: 11/02/1935

Info Categories: A, B, G, H, I, N, P

Headline: Other Communities Want To Aid Helena

Date: 11/02/1935

Info Categories: A

Headline: Federal Agencies To Help Montana

Date: 11/02/1935

Info Categories: A, I

Headline: Dillon Buildings Cracked By Quake No Real Damage

Date: 11/02/1935

Info Categories: B

Headline: Deer Lodge Greatly Alarmed Over New Quake On Thursday

Date: 11/02/1935

Info Categories: A, I

Headline: Estimate Quake Takes Ten Seconds To Reach Butte After Hitting

Helena

Date: 11/02/1935

Info Categories: E

Headline: Believe The Center Of Minor Quakes Is 3 Miles From Here

Date: 11/02/1935

Info Categories: S

Headline: Patrol; Wanted: Men To Work Without Pay

Date: 11/02/1935

Info Categories: A, I

Headline: Temblors Total 765 In The City; Mercury Stays At Zero Mark

Date: 11/02/1935

Info Categories: E, I

Headline: School Board Will Meet Either Today Or Next Monday

Date: 11/02/1935

Info Categories: B, R

Headline: Helena Remains At The Same Altitude

Date: 11/02/1935

Info Categories: G, I

Headline: Reconstruction Program Is Organized

Date: 11/03/1935 Info Categories: A, P, R

Headline: A.C.M. Plant Has A Thermometer Which Records Earthquakes

Date: 11/03/1935

Info Categories: E, I

Headline: Laborers And Trucks At Work Mopping Over Zone Of Quake

Damage

Date: 11/03/1935 Info Categories: A, B, E, I, R

Headline: Helena Given Assistance By Government; National Guard

Eliminated From Patrol Duty

Date: 11/03/1935 Info Categories: A, B, I, P

Headline: <u>Total Now 791</u>
Date: 11/03/1935

Info Categories: E

Headline: City Engineer To Clamp Down On Racketeering By Outsiders;

Warns Public

Date: 11/03/1935 Info Categories: A, B, I, R Headline: Earthquake Nearly Lifts Train From Tracks

Date: 11/03/1935

Info Categories: I, L, P

Headline: Temporary Quarters Of Deaconess School Are Pronounced Safe

Date: 11/03/1935

Info Categories: A

Headline: Cracks In Butte Postoffice Are Widened By Shake

Date: 11/03/1935

Info Categories: B

Headline: In The Wake Of The Tremor

Date: 11/03/1935 <u>Info Categories</u>: A, B, H, I, N, P

Headline: N.P. Coaches And Bunk Cars To House City's Needy; 200 Cared

For During Night

Date: 11/03/1935

Info Categories: A, L

Headline: Sen. Murray To Ask Installation Here Of A Seismograph

Date: 11/03/1935

Info Categories:

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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ANOTHER DEVASTATING EARTHQUAKE IN HELENA KILLS TWO; DOES MUCH DAMAGE

ADDITIONAL LOSSES IN PROPERTY TO BE MILLION

Two Men Killed At Kessler Brewery When Scaffolding Falls; Score Or More Hurt About City; Main Shock Lasts Five Seconds; Many Stores And Business Houses Stay Open And There Is Little Panic

Helena can still take it!

This city yesterday survived a third devastating earth shock, nearly as severe as that of Oct. 18 which caused property loss of more than \$3,000,000. The tremor struck with terrifying suddenness at 11:37 a.m., the movement lasting approximately 20 seconds. The quake took a toll of two lives, both workmen on a scaffolding engaged in repairing the Kessler Brewery, a score or more of injured and additional property damage probably approaching \$1,000,000. Most of the damage, however, was to previously ruptured structures.

Several of the injured were reported to be in serious condition. Two of them were thrown from a scaffolding while at work at St. Mary's school.

Several Occur

The main shock lasted five seconds but the movement continued with lesser intensity for 15 seconds more. It was followed by several sharp tremors at intervals of a few minutes during the next half hour. After that shocks were felt at gradually lengthening periods. It caught off guard a city lulled into the belief that the worst had passed and that the disturbing tremblings of the earth were gradually dying out. Much of the terror of the preceding three weeks was relived.

Despite that fact, there was little evidence of panic although many women and elderly persons collapsed from the shock and were given treatment at the hospitals. Ambulances were kept busy several hours answering emergency calls.

Leave City

As was the case following the disaster of two weeks ago, many persons left the city in their cars, some temporarily and others for an extended stay. However, the movement out did not appear to be as great as before and many persons could be seen returning to their homes

A large proportion of the stores and business houses remained open yesterday afternoon and served a surprisingly large number of persons in view of the circumstances. Even clothing accessory stores enjoyed good patronage.

Again the main business section of the city, from Broadway north, escaped with slight damage, and the west side suffered the least of any of the residential sections. However, a large section of the business district was roped off as a safety precaution as it was believed that many building copings had been loosened and might fall if another sharp shock came.

Stand Up Well

Many of the principal buildings which came through the other quake unscathed suffered cracked plaster this time but it was not believed there was any structural damage. A number of plate glass windows were shattered. Almost the only damage in the Placer hotel was a small section of plaster that fell from the ceiling in the quarters being used by City Engineer Oscar Baarson.

Plaster cracks appeared in the Power block and a number of other buildings but these were of minor significance. At the federal building, some new cracks appeared in the

plaster of the partitions but it again withstood the shock nobly.

The west side damage again appeared to be confined chiefly to fallen chimneys although the Hawthorne school was hard hit. The upper portion of a gable on the east side of the building fell out and it was reported that there was considerable damage to the interior. The same situation prevailed at the Central school, on Warren street, it was understood, but no definite information could be obtained as school officials made no attempt to inspect the structures yesterday.

Mostly Old Damage

On the east side and in the Sixth ward, the sections that suffered the brunt before, the damage was aggravated. Many homes had been partially destroyed and the latest tremor completed the demolition. Some were utterly collapsed.

City Engineer Oscar Baarson after a flying survey of the city expressed the belief that the damage was largely confined to buildings and homes cracked and weakened by the previous earthquakes, and as more extensive check was made it appeared that this belief was justified. Only a relatively small amount of damage was done to structures that were unhurt prior to Thursday.

Aid Offered

Last night the Helena emergency reconstruction committee gathered itself in readiness to take charge of the situation in Helena and appeals for aid were broadcast by the Red Cross and other agencies. Offers of aid were pouring in from many outside points. Last night Joseph D. Scanlan, publisher of the Miles City Star, wired Chairman S. V. Stewart of the reconstruction committee, to express the sympathy of his city for Helena's plight and to announce that the chamber of commerce there was forwarding a check for \$500 for relief purposes.

Dr. David T. Burg last night announced that he had received a wire from Claire Flint, publisher of the Livingston Enterprise, in Livingston, stating that the Windsor and Lott hospitals had offered several extra beds to the hospitals here, should they be needed. Dr. Berg also received a wire from the Missoula Hospital association offering nurses, supplies, hospitalization, or anything that might be helpful to the city.

Monaghan Helps

Congressman Joseph P. Monaghan of Butte, who materially assisted Helena during its first period of stress, urged Aubrey Williams, assistant FERA director, to provide necessary transportation to other cities for those refugees whose state of mind warranted departure. His message to Williams read:

"Another serious earthquake struck Helena today as the temperature stood at six below zero. Two were killed and scores injured and damage of every sort was rampant.

"Necessarily people are in a dreadful state of mind and it is urgent for immediate authorization of transportation to other cities for all who desire to leave.

"Suggest establishment of emergency camps in available buildings in other cities as weather cold throughout Montana."

The following message was addressed by the congressman to Colonel Hooper, Fort Missoula:

"Please take immediate steps to replenish needed supplies in all offices and advise." In answer to the latter Monaghan was assured by Captain Knutson of Missoula, that 5,500 blankets, 200 cots and tents with stoves would be supplied.

Use Judgment

Fortunately the casualty lists were kept at a minimum by quake-hardened citizens who judged their movements by the initial shaking which resulted in death for five; injury to a

hundred and property damage of more than \$3,000,000.

Instead of dashing into the streets to be hurled to the ground by falling cornices, bricks and porches, those suffering the brunt of the second disaster to visit Last Chance gulch remained inside until the tempestuous earth had settled down.

Those on the casualty lists in the hospitals tonight were largely workmen caught in the falling debris of wrecked buildings they were repairing.

Again scores of persons suffered minor injuries and were treated at home, in doctors' offices or applied remedies to care for themselves.

At East Helena

Much additional damage was done at East Helena although the little municipality was rocked from side to side and many of the buildings damaged by the initial shake were reshaken with vigor, bricks and copings falling to the ground and cracks appearing where they had not been before.

In the first Helena quake the uppermost top of the East Helena smelter stack was knocked off, and yesterday's tremor, while not causing additional loss to the smelter, loosened many bricks and the plant, for minutes, tossed backed and forth. The smelter had been closed down and there was little chance for loss of life. "The plant planned to reopen Monday, and this will not be altered," according to J. D. MacKenzie, manager of the plant.

At Fort Harrison

At Fort Harrison it was a different story. The quake-ridden suburb of Helena, which during the past few weeks has borne the brunt of all Helena's tremors, stood up against the new ones, but because of the unrest at the institution, it was thought advisable to evacuate all buildings. H. C. Watts, manager of the institution, said that all disabled veterans remaining at the hospital would be immediately transferred to Walla Walla, Wash., and Roseberg, Ore. Officials at the hospital made very attempt to get the disabled away from the hospital last night, and by 9 p.m., when the last train departed for the west, upwards of 80 veterans, many unable to walk, were taken to the train.

The tall chimney on the new heating plant was cracked and as a result the heating plant could not be used. Quarters of both the officers and nurses were damaged and Dr. Watts said they could not be entered.

At High School

Helena's new half-million dollar high school, considerably damaged by the shock of last Friday night, again was rocked, and practically the entire north side collapsed from the quick, sudden jerk of the subcrust tremors. While many persons were working on the building, from 25 to 30, there were no injuries and the building was soon evacuated. E. J. Decker, superintendent of the West Coast Construction company, contractors of the building, was in the school at the time of the shock. It was through his efforts that the men were kept in place and no injury resulted. "Stay inside," he shouted, as the workers, terrified by the shock, ran towards the door.

The school, greatly damaged by last week's quake, was even more so yesterday. The quick, terrifying shock took the construction unaware. With a great upheaval, it leveled the north side of the building, sending rock and brick far into the lot. Fortunately, the workmen were away from the spot and were not injured.

Great damage occurred at the high school and Superintendent Decker said that it appeared as if the re-construction work this time would have to start from the basement. Giant cracks appeared in the front of the beautiful edifice while at the back on the north side, the building crumbled, roof, stage, walls and all. Archie Bray, Helena building material contractor, was on the stage platform at the time of the quake, and although debris fell

over him as the building crumbled, he escaped with but minor injuries.

The Federal Reserve bank at the intersection of Edwards street and Park avenue was for the second time struck and the building was cracked in two places form the force of the shock. Employees of the bank left in an orderly fashion, although at least two of the women workers fainted and were carried out.

In Business District

While the main portion of the Helena business district again kept its head aloft and withstood the great tremor, lessor bricks and tile dropped to the pavement beneath, and the district was soon roped off, to protect the citizens and to eliminate unnecessary traffic. With one crash the Woolston well pump shack at the fairgrounds was leveled, catching six city employees beneath it. Through the efforts of Dan Cloninger, one of the six and others, the men were dragged from the fallen shack and taken to safety. While the pumps and shack were said to be completely destroyed, no one was injured. The front gate at the fairgrounds, where the pumps are located, was cut from the ground almost as cleanly as if by a gigantic scythe.

Damage in the Sixth ward, as in the last quake, was especially severe. Holes were knocked in the Northern Pacific depot. Workmen repairing the N. P. roundhouse and St. Mary's school were shaken from the scaffolding and several were injured. Intermountain Union college, established 11 years ago by a union of Montana Wesleyan college with the old College of Montana of Deer Lodge, saw its three buildings almost entirely wrecked. New holes came in the walls of the gymnasium completed only last winter and Helena hall and Mills hall, classroom and dormitory buildings, were declared unsafe. College officials were to decide today whether to move the institution to Great Falls or to close it. It had been reopened in the First Presbyterian church only Tuesday. Both the Great Northern and Northern Pacific brought bunk cars and Pullmans to Helena and placed them at the disposal of the refugees. Children from St. Joseph's orphanage in the Helena valley were housed by the Southern Pacific. Shirley Garrity attended to securing Great Northern cars from Great Falls for the homeless.

Temporary housing was necessary for girls at the Florence Crittenton home, at 22 Jefferson, where preliminary examination indicated the structure was damaged beyond repair.

East and west walls of the newer addition to Carroll college were damaged and classes were suspended for an indefinite period. Estimate of the damage there had not been attempted last night.

While Great Falls and Bozeman companies of the Montana national guard were held in readiness to come to Helena to assist, 50 members of the Helena headquarters company continued their patrol of the streets of the Capital City. National guard trucks were pressed into use to move the belongings to the homeless. Col. E. H. Williams, Montana adjutant general, announced that his office is open both night and day for service to Helena people. The Kessler brewery, home of Loreiel beer, was a mass of wreckage, but 30 men who were working to put it into condition after the October 18 quake, escaped uninjured, with the exception of the two who were killed in the fall of the chimney. Most of the stack fell on the boiler room and late indications were that the plant was damaged beyond repair. While the tall minaret of the Shrine temple was still standing, much of the upper portion of the west wall and coping around the entire structure was destroyed.

Courthouse Bad

The county courthouse was badly damaged on the third floor and in the attic and the cost of repairs may run into many thousands of dollars, it was indicated yesterday afternoon.

City Engineer Baarson said the clock tower would have to come down as well as the rest of the ornamental stone work around the coping. There was a possibility that the third story might have to be taken off.

Severely shaken and wrenched, the county jail was evacuated and the prisoners were released. About a score of men and women were confined, all on minor charges. Many chimneys repaired as late as yesterday morning were a tumbled heap of bricks and mortar.

Robert Kerr, Montana Power company manager in Helena, said the work of inspecting hundreds of natural gas services would have to be duplicated to afford the maximum safety.

Evacuate Hospital

Two large structures, St. John's hospital, South Ewing street, severely shaken October 18th, was evacuated during the afternoon. Patients were taken to St. Peter's hospital, less severely damaged, and to hospitals in Butte, Deer Lodge, Missoula and other points. Army ambulances from Fort Harrison with National Guard attendants assisted in the orderly removal of patients, many of them carried from the building on litters. Those in offices and stores, however, made a hasty though orderly exit to the street. None was hurt in the jam of Hallways and stairs and immediately thereafter there was a general cessation of business.

The latest quakes came on the eve of Helena resumption of all normal activities including opening of the theatres and movies scheduled for Sunday. The three motion picture theatres had been inspected and found habitable. All suffered some damage yesterday but none were believed as severely shaken as first reports indicated.

[Helena Independent; November 1, 1935]

SIXTH WARD AGAIN IS HIT VERY HARD By Quake Damage To Property In Section Will Be High

Already given a severe shaking in the quake of Oct. 18, Helena's Sixth ward, that section of the city in the vicinity of the Northern Pacific depot, again today was hard hit by the earth's temblors, especially that of 11:47 o'clock this morning.

After a checkup last night, it was thought, however, that this portion of the city was not as badly hurt as it had been on Oct. 18. Residents of the district, while severely shaken, maintained their morale. Many of them thought other sections of the town had been more severely hit yesterday but some additional damage was done.

Property damage in the district, amount of which is still unestimatable, at least will run into thousands of dollars. Nearly every home was rocked by the quake and rare is the building which does not now show further results of the quake's actions.

Many residences were exhibiting much loosened and fallen plaster, while numerous dishes were broke, lamps fallen and cracked and other like injuries to glassware, furniture, window panes and the like.

Chimneys on many residence buildings, including those which had been repaired following the Oct. 18 quake and others which had been uninjured at that time, either were cracked or toppled to the ground.

Along Helena Avenue

In the business district along Helena avenue, stores were hard hit by the quake but in the late afternoon again were open for business, especially the grocery stores and meat markets. Some of the repair work, such as that on the Larson block, was halted temporarily but E. Walter Larson, owner, said repair work would start again this morning. The crew is ready to go back to work, he said.

Mr. Larson also said that the repair work which had been done on the north side of the building, that fronting on Helena avenue, had withstood the shock in good manner and was all right.

Apartments in the structure were not badly damaged, he stated, but some little amount of plaster was cracked. In general the Larson building got a good shaking but withstood the shock very well, he said.

Other business establishments along that portion of the street also were shaken but seemed to stand up well under the shock.

St. Mary's Catholic school and church, where two men were hurt, was further demolished on the front side but the interior damage was said to be not much more than before. Some bricks fell from the front facing. The church and school rooms were not greatly hurt. The Northern Pacific depot, only slightly cracked on the outside by the Oct. 18 quake, was badly hit today. That section of the building on the west end seemed to receive the brunt of the shaking and the baggage room and west end of the depot proper showed gaping holes in the sides. Baggage men succeeded, however, in getting out their equipment and stored baggage without difficulty. Portions of the street around the depot were roped off last night. On the east end of the structure, that part housing the lunch room, the chimney which had been repaired recently was cracked at the chimney of the Coburn Memorial hall. The stone garage building in the 1600 block, belonging to Ora Guffey of the Consumer's Coal company, was badly wrecked. The roof of this structure also fell several feet and much more of the rock walls was torn out. Despite the damage there, Mr. Guffey and his assistants kept open their small office near the N. P. freight house for several hours as it

was thought necessary to supply coal to anyone who ordered it, considering the cold weather and necessity for keeping warm.

Part of a wall of a frame structure owned by Miss Anne Rody of 1420 Phoenix avenue caved in after the shake. Occupants of the building had moved out as part of a basement wall had caved in on Oct. 18.

A number of other buildings were damaged to a greater or less extent.

[Helena Independent; November 1, 1935]

CASUALTIES BY SHOCK; TWO KILLED, SOME SERIOUSLY AND MANY ONLY SLIGHTLY INJURED

Yesterday's major earthquake, the third within a space of thirteen days, caused the death of two persons and resulted in serious injuries, some critical, to at least nine. Many slight injuries, not serious enough to necessitate medical care, were also reported.

Ed S. O'Brien, 27, of Salt Lake City was instantly killed by a large fall of brick from the stack of the Kessler brewery, where he was working.

Vincent Kennedy, about 24, also of Salt Lake City, died at the St. Peter's hospital a short while after receiving injuries while working on the stack with O'Brien.

Both men had come to Helena with a crew of Brick masons, Monday, from Salt Lake City, and were rooming at 118 North Warren.

Sterret Crum, of 535 Fifth avenue, and Ben Wagner of Billings, who had been residing at 420 Knight street, were shaken from a scaffold on the St. Mary's Catholic school, where they were engaged in repairing damage done to the building by the former quakes, and were seriously injured. They were taken to St. Peter's hospital.

Lloyd Townsend, employee of the Northern Pacific railway, who resides in Bozeman, was taken to St. Peter's hospital after suffering severe injuries of the scalp and shoulder, while working at the roundhouse.

Roy Liebert, fireman for the Northern Pacific railway, who lives at 316 West Spruce street, Missoula, was injured by falling bricks and was admitted to St. Peter's hospital.

William Jean, also a fireman for the Northern Pacific was injured by a fall of bricks and was entered for treatment at St. Peter's hospital.

Three workmen, known as Parmalee, Hartman and Landis, who are employed as repairmen by the Northern Pacific railway company and who were working in the company's yards, received injuries by falling debris and were taken to St. Peter's hospital. Mrs. Margaret Barnes was taken to St. Peter's hospital following a nervous collapse brought on by the quake.

St. John's hospital was evacuated after the quake as it was feared that another shake might greatly damage the building. Some of the patients were taken to their homes, while others, whose condition would not permit cessation of medical attention, were removed to St. Peter's hospital.

Some of the patients at Fort Harrison and the Odd Fellows home in the Helena valley were also taken to St. Peter's hospital. Mrs. Arthur Acher, a maternity patient at St. John's hospital, was removed to her home at 833 Broadway.

Mrs. Joe Sanderson, also a maternity patient at St. John's was taken to a relative's home at 117 Pine street.

A Mr. Piper was sent from St. John's to his home at 1516 Euclid avenue.

George Howard, operated on for appendicitis three days ago, was removed to his home at 1418 Phoenix avenue, from St. John's.

John Mahan, city attorney, a patient at St. John's for several days was sent to St. Peter's hospital.

Three patients at the Veterans' hospital at Fort Harrison were admitted for treatment at St. Peter's hospital, following the evacuation of the hospital at Fort Harrison. They included Marcus Frysland, Theodore Funk and A. Dorsey.

[Helena Independent; November 1, 1935]

EAST HELENA HAS SERIOUS LOSS; GRADE SCHOOL IS GONE AND CITY HALL IS A WRECK

Striking with almost equal intensity but of much shorter duration than the Oct. 18 earthquake, yesterday's temblor destroyed the grade school at East Helena, completed destruction of the city hall, damaged chimneys and severely shook already weakened buildings, a check last night revealed.

The school building is almost completely demolished and a hurried estimate put the total damage at \$50,000. It had not been used since the major shock of two week ago and now school is postponed for an indefinite length of time.

The city hall was further damaged by the shock and the structure will now have to be entirely rebuilt. The walls cracked and bulged from the Oct. 18 quake, it was believed that the building was structurally sound and that repairs to the top portion would again make it safe for occupancy but yesterday's temblor extended wall cracks into the foundation making it completely unsafe and rebuilding a necessity.

Others Escape

Although the tremor was sharp it did little damage to other buildings around the city. In stores some articles were shaken from the shelves but in the majority of cases there was no severe damage and business was running smoothly last night with business places all open.

A close investigation revealed no injured persons and only a few old buildings further weakened by the quake. Most of them had already been knocked aslant by the tremor of the 18th.

[Helena Independent; November 1, 1935]

EAST SIDE HOMES SUFFER SEVERELY BY LATEST SHOCK

Completing the ruin created during the first big quake, homes on the east side of the city again suffered severe damage. Some of the badly weakened structures completely collapsed while others, left with gaping cracks, had walls and chimneys demolished. The Zimmer home at 565 Fifth avenue, known in the old days as Uncle Sam's house, was further wrecked. The round cupola on the northeast corner, weakened by the repeated shocks, fell to the ground along with the supporting brick walls.

A house at 20 South Davis, previously uninjured, had the walls torn away on the north and south sides while chimneys crashed through the roofs.

The house at 1317 Ninth avenue, unoccupied, completely collapsed. The roof fell in on top of the crumbling walls. Both east and west walls and some parts of the north wall were previously destroyed. More damage was one to the Hermann and Company mortuary at the corner of Broadway and Rodney streets. Walls previously left standing, and others in the process of reconstruction, were torn away by the force of the shock.

Damage to two brick houses in the 500 block on Hillsdale and considerable brickwork from the west wall of the old Urquhart home at 526 State street indicated that the shocks were felt deeper into the south-east corner of the city than the others.

The Elinor apartments suffered further damage to the top walls in the front of the building, seriously weakening the tower on the north. This was formerly a chemical plant before being converted into an apartment many years ago.

At the home of Justice of the Peace George O. Freeman, 45 South Rodney street, a front porch collapsed splattering wood and brick all over the lot. The house was previously slightly damaged.

The home of the Rev. Charles E. Cunningham, 1000 Eleventh avenue also suffered severe damage to both exterior and interior.

[Helena Independent; November 1, 1935]

NEW POLICE STATION MELTS FROM SHOCK

The brand new police station took a kayo punch on the nose yesterday when the front of it melted into the street with the quake.

Not as if that was alone enough to discourage the police, the building front dropped on top of the prowl car, leaving it in a state of "shock" from which it will be a long time recovering. Police had been using the vacant lot between Main and West Main street as their headquarters until the past day or two when they moved into the building next door to the A-A garage.

They moved out in a hurry yesterday.

[Helena Independent; November 1, 1935]

CAPITOL BUILDING BEARS SHOCK WELL

Montana's state capitol, which to date has stood up against the upheavals of the earth, again presented a solid front and although the building was rocked like a trundle bed, it survived any considerable damage and after the tremors has subsided, a cursory investigation revealed that it stood as before--a solid piece of workmanship, according to Walter A. Small, custodian.

When the shock struck the statehouse, the buildings rocked and swayed. Employees left in an orderly manner and there was no confusion or congestion, according to the custodian. The building, however, did not present an impregnable front. Many of the walls received minor cracks and plaster from the ceilings fell from the building. Structurally, the custodian said, there appeared to be no damage, and he, like others, said, that the latest quake was not as severe as the one of last Friday night.

Custodian Small inspected the building from the basement to the fourth flour. "Although there were some cracks and some plaster down the building suffered no damage," he said. There were no broken windows and the state building evidently weathered the shock in tip-top shape, the custodian said.

[Helena Independent; November 1, 1935]

LEWISTOWN PLANS TO GIVE AID TO HELENA

Lewistown, Oct. 31--(AP)--The earthquake shock which shook Helena was felt by most people here this morning at about 11:40, and was classified as more distinct and of longer duration that any so far felt in this city.

However, not the least damage was done.

The chamber of commerce will meet tomorrow to consider extending an invitation to Helena to have the inmates of some of its homes, including the orphanages, sent here to be cared for temporarily.

The temperature here at 6 p.m. was six below zero.

[Helena Independent; November 1, 1935]

RELIEF AND WORK CHIEF TO COME TO HELENA'S AID

Frank Walker, executive assistant to President Franklin D. Roosevelt, the man between the President and the Relief, the Public Works, the Works Progress administration, telephoned at midnight to James Rowe of Butte, his assistant, to inform him that Harry Hopkins, head of relief work agencies, was "squarely behind the people of Helena, and would be on the ground with men and money immediately.

Mr. Walker, formerly of Butte, asked Mr. Rowe to go to Helena at once and inform him of the needs and every reasonable demand would be met. Mr. Rowe telephoned The Independent that he would start for Helena immediately, leaving Butte shortly after midnight, and would be in Helena early Friday morning.

Frank Walker had a conference with Harry Hopkins immediately after learning of the second major earthquake in Helena, and assured Mr. Rowe, that simply EVERYTHING would be done to aid Helena and her people.

[Helena Independent; November 1, 1935]

VISITORS WARNED TO AVOID HELENA

Supervisor Lou Boedecker of the state highway patrol yesterday afternoon issued an order directing that all visitors and sightseers be kept out of the city, and the patrolmen were mobilized to see that the order was enforced.

"The presence of outsiders here at this time, with no particular business, is a hindrance to the maintenance of order and relief of the distressed," he said. "The confusion is bad enough as it is and must not be added to."

[Helena Independent; November 1, 1935]

GREAT FALLS IS EXTENDING OFFER TO HELP HELENA

Great Falls, Oct. 31--Great Falls residents today hastened to extend offers of aid to Helena residents affected in the latest severe earthquake.

Community chest workers, assembled this noon to report progress in the annual solicitation of funds for welfare work, on receiving reports from Helena immediately voted to sent \$1,000 to the Red Cross at Helena for use in relief work. A draft for that amount was sent airmail to the Capital city this afternoon.

The Great Northern railway here sent train coaches to Helena for possible use by those unable to heat their homes.

At the suggestion of the Helena Chamber of Commerce, the Great Falls chamber advised Great Falls residents having relatives, and friends in Helena, to invite them here until such time as their affairs returned to normal.

The Cascade County Medical association offered the use of its member home for any Helena people who might desire as well as their professional services. Dr. C. J. Bresee, president of the local group, wired the Helena Medical association to that effect.

[Helena Independent; November 1, 1935]

THREE HAVE CLOSE CALL; WAREHOUSE FALLS IN DEBRIS

Much damage was done to the five-story brick building at the corner of Logan and 13th in the big quake yesterday when the west wall of the building, now being used as a liquor warehouse by the Christie Storage and Transfer company of Butte, collapsed with a large portion of it burying one of the company's large trucks beneath the debris.

About \$20,000 worth of high grade liquor was said to be stored in the building at the time and three employees are reported to have had narrow escapes from death under the falling material.

The building formerly housed the U. S. veterans' administration headquarters here before that unit was moved to Fort Harrison structures. It has a long history and was commonly called the old Whitmer building, housing a blacksmith plant and wagon repair depot. Previous to its being used by the veterans' bureau, it was used as a storage warehouse and sales room by the T. C. Power Motor Car company.

The truck was released from the mass of debris covering it, but will doubtless require a complete rebuilding. Damage to it was estimated at \$500 by the owners.

[Helena Independent; November 1, 1935]

SHRINE TEMPLE IS HARD HIT BY SEISMIC SHOCK

Algeria Shrine temple, one of the most beautiful buildings in the entire northwest, suffered further damage from the quakes yesterday with the havoc more widespread than before. The entire upper portion of the west wall of the building fell to the ground in a solid strip. This left an opening of from two to four feet between wall and roof which, fortunately, is swung from steel girders with arched supports under the auditorium roof. The decorative coping extending around the building was almost totally destroyed,

dropping to the ground and breaking to bits where it fell.

To estimate the damage in dollars at this time would be impossible, as engineers for the purpose were not available. The west wall was not previously damaged on October 18, when the east side of the building seemed to bear the heaviest part of the shock.

Minaret Okeh

The tall minaret suffered no apparent damage owing to the steel construction features employed in its construction. Its lofty spire still held the "crescent and star" above the city last night.

It is believed that the damage will be confined largely to the outside of the building, as the interior construction was largely hardwood and steel. Plaster damage will doubtless constitute the largest part of the interior damage to the building.

[Helena Independent; November 1, 1935]

GUARD IN OTHER CITIES READY TO COME TO HELENA

Montana national guard companies of the 163rd infantry at Great Falls and Bozeman were held in readiness last night to come to the aid of quake stricken Helena if necessary, Col. E. H. Williams, adjutant general, announced. Meanwhile 50 members of regimental headquarters company of Helena patrolled the streets and guarded property, as they have been doing every night since the October 18 shock.

Yesterday a detachment of 12 men put the national guard trucks into use moving the homeless and injured to new residences and hospitals. Twenty five trucks were kept busy all night moving whatever was needed.

Always Open

Colonel Williams said that since the October 18 shock the adjutant general's office at the capitol has been open 24 hours a day with someone on duty all the time to care for emergencies and routine business. Any one needing assistance from the national guard company is asked to call 1277.

[Helena Independent; November 1, 1935]

KESSLER BREWING PLANT RUINED; TWO MEN ARE KILLED

With part of the chimney toppled and considerable damage done to the rest of the building, the Kessler brewery plant west of the city was near a mass of ruins as a result of today's quake.

Thirty feet of the tall smokestack toppled, killing two men who were working on top of it. About 30 other men, the repair crew which was working to get the building back into condition after the October 18 earthquake, escaped uninjured, not one being struck by a flying brick or otherwise hurt.

All, of course, were frightened, but things remained orderly. The large Northern Pacific locomotive being used to operate the brewery plant until repairs could be finished on the damaged boiler room continued to function perfectly.

Much of the brick and timber on the south side of the building were torn and damaged. The office was hard hit and the warehouse and bottling plant were further damaged.

Fall of Stack

When the stack fell, most of it landed on the boiler room. About half of it, however, remained upright.

Estimated loss was at first set at \$75,000, but this was only an estimate. Later it was indicated that the brewery might be damaged beyond repair.

[Helena Independent; November 1, 1935]

SHOCK NOT SO VIOLENT AS BIG ONE OF OCT. 18

Bozeman, Oct. 31--(AP)--Its north-south recording apparatus shifted about by the force of the earth shock at Helena today, the seismograph at the Montana State college here showed the quake was slightly less violent than the one October 18, but considerably stronger than the October 12 disturbance.

The machine here fixed the time on the quake today at 11:38:10 o'clock a.m. Recording sheets showed violent vibration for two minutes after. They lasted for three minutes after the jolt of October 18.

As in the previous disturbance, the seismograph showed unceasing rapid tremblings for about an hour after the main disturbance.

[Helena Independent; November 1, 1935]

SCHOOL OPENING SWEPT ASIDE BY FRESH TEMBLORS

Scheduled opening of some of Helena's public grade schools, to have been next Monday, was swept aside by the severe quake which struck Helena yesterday, Superintendent R. O. Evans of the city schools announced last night.

Plans had been going forward for the opening of the schools and some repair work had been done.

"There will be no school in the Helena public schools until further announcement," Mr. Evans said last night. "No one has investigated the condition of any of the schools yet but each one will have to be given a thorough check before any attempts at further occupancy are to be made."

Extent of damage to the schools of the city was not available when The Independent went to press. The new high school was most severely hit of all.

Reports were that the Central grade school on North Warren street was badly damaged inside. Much plaster was injured and considerable had fallen, it was said.

Torn Down

At the Hawthorne there was more damage also but its extent was not learned. In the Sixth ward, the quake helped along the job of tearing down the Bryant school on Boulder avenue. That building was abandoned after the Oct. 18 temblor and made unsafe for further use and yesterday's quake just added to the wreckage there. Much more brick fell, especially on the west end.

Reports on other schools of the city were vague and unconformed, but it was assumed that each was damaged to some extent.

[Helena Independent; November 1, 1935]

I.U.C. MUST MOVE FROM THIS CITY OR ELSE CLOSE UP

Intermountain Union college is face to face with either closing the institution or moving to some other city, President Jesse W. Bunch said Thursday evening.

President Bunch left last night for Great Falls to see what arrangements could be made to open the college there at an early date, possibly day after tomorrow.

A long distance telephone call from the Methodist and Presbyterian boards in Chicago last night advised Mr. Bunch that the college should use its own judgment as to continuing operations at some other city or definitely closing the institution.

The college buildings were severely damaged by the earthquake of October 18 and yesterday's severe temblor completed the wreckage. Helena hall, where classes are held, is apparently a total loss as the upper floor partitions have caved into the class rooms. The large double doors at the south entrance to the chapel have been twisted completely off their hinges.

Damage Great

Mills hall, residential dormitory, appears to be structurally sound but the damage to the inside walls, partitions and plaster is great.

Another portion of the west wall of the new gymnasium folded in during yesterday's quake and the east wall is reported to be unsound.

During yesterday's quake classes were being conducted at the First Presbyterian church and no students were injured by the further wreckage at the college plant.

[Helena Independent; November 1, 1935]

HELENA LOSS BY TEMBLOR TOLD IN GIST

The quake in a nutshell:

Fort Harrison--Chimney damaged and heating plant not usable. Patients evacuated to federal hospitals at Walla Walla and Roseberg.

Intermountain College--All buildings damaged, probably beyond repair.

St. John's Hospital--Badly damaged. Patients all removed.

Carroll College--Classes suspended. Damage is extensive.

Northern Pacific--Depot and roundhouse severely damaged.

Kessler Brewery--Two men killed when chimney falls. Plant probably beyond repair.

Shrine Temple--Minaret still stands. Walls extensively damaged.

High School--More completely wrecked than before.

St. Joseph's Home--Children taken to other places. Buildings damaged.

Crittenton Home--Occupants evacuated. Buildings severely cracked and bulged.

East Helena Smelter--Some damage. Not as extensive as in other places.

Helena Schools--All damaged somewhat, amount not determined. All plans for opening schools next week postponed.

Federal Building--Not severely damaged. Plaster shaken loose.

St. Vincent's Academy--Nearly wrecked. Damaged started Oct. 18 about completed.

East Helena--City hall and grade school buildings must be rebuilt. Extensive damage to business buildings.

St. Peter's Hospital--Not badly damaged. Patients' morale good.

Kessler School--Appears to be badly damaged. May have to be rebuilt.

Good Shepherd's Home--Severely damaged.

St. Helena Cathedral--Little new damage.

State Capitol--No severe damage discovered.

[Helena Independent; November 1, 1935]

TOTAL NOW 702

The big shock that rocked the city at 11:37 was the 570th recorded in the series since October 12, the one that started the whole show. Since that one a total of 132 were recorded up to midnight last night bringing the total to 702.

[Helena Independent; November 1, 1935]

SURVEY OF RELIEF NEEDS IS TO BE MADE BAN IS AGAIN PLACED ON ALL PUBLIC GATHERINGS

Emergency Reconstruction Committee To Make Systematic Study Of Requirements Of Stricken And Homeless Citizens; Those Needing Aid Will Be Directed To Proper Agency; Federal Money Is On Way

Helena cast a wary eye over its shaken properties today, and, while counting three major quakes and hundreds of lesser ones within the last few weeks, it steadfastly went ahead making the necessary arrangements for a complete and scientific survey of the damaged areas of the city.

The ban against public gatherings of all kinds was placed in effect again by order by Commissioner of Public Safety A. M. Shellady as an emergency measure. It will not be lifted until assurance of safety from earth shocks is had.

Governor Frank H. Cooney declared yesterday that the needs of all Helena people made destitute by the quake would be taken care of and that he had received a wire from Aubry Williams of Washington, D. C., assistant relief director, allocating an additional \$100,000 to Montana for the month of November, for earthquake relief.

"This was not solicited but came out of a clear sky to Helena," the governor said. He said that everyone in Helena in need of food, clothing and shelter would be adequately taken care of and no one would be in want.

Murray Helps

U. S. Senator James Murray of Butte, who has taken an active part in helping Helena in its catastrophe, made a splendid contribution yesterday when he notified J. H. Rowe, personal representative of Frank Walker, executive assistant to President Roosevelt, that he was turning over Boulder Hot Springs, which he owns, for the housing of approximately 140 orphans from the St. Joseph's orphanage. These little persons were cared for Thursday and Friday nights in the Great Northern coaches, but today will be transferred to Boulder.

Montana's junior senator was in New York City when he heard of the quake and of the plight of the orphans at St. Joseph's. He immediately contacted Mr. Rowe, donating the Boulder Hot Springs for their care. While the youngsters are at Boulder, the orphanage will be repaired and placed in shape for occupancy, Mr. Rowe said.

Mr. Rowe reiterated his statement made earlier in the day that the government, while not expected to remedy all of the city's ills, would see that no one was in want during the emergency crisis.

No Gatherings

Scarcely out of its last restriction, Commissioner Shellady ordered a second ban on all public gatherings. The ban will not be lifted until buildings are inspected and certificates of occupancy granted. Following Thursday morning's quake, which caused extensive damages in some areas, Commissioner Shellady said that all buildings in the quake zone would be re-examined to determine whether or not they may be used.

A comprehensive survey will be started today by a special committee named yesterday to learn the actual needs of the community. Members of the committee include Hugh R. Adair, Quay Painter and Brian O'Connell.

This committee has prepared questionnaires and blanks which will be distributed today in the quake areas of the city. It is the hope of the committee, Chairman Adair said, to ascertain actual needs and conditions and to help Helena citizens in reaching the proper agencies for assistance.

House to House

Chairman Adair said that the blanks would be distributed in a house-to-house canvass, while those not contacted would be able to secure the necessary questionnaires by calling at the Helena Chamber of Commerce. The special committee is working with School Superintendent R. O. Evans and teachers in the various schools of the district. The committee will work as speedily as possible and the survey is expected to be completed shortly, Chairman Adair said. From the survey the actual needs of the citizens will be determined and the committee, acting through the regular city reconstruction setup, will be able to direct those in need to proper relief channels, such as the American Red Cross, Reconstruction Finance corporation, Federal Emergency Relief administration, Federal Housing Administration, and those connected with slum clearance projects. Thursday's quake, while not as severe as the previous ones, put the city on its tip-toes and practically everyone was in a nervous state of mind. The national guard and the Montana highway patrol readily came to the front and soon after the city was rocked by the last severe quake, there was adequate patrol in the city.

Guard Assisting

Col. E. H. Williams, adjutant general of the state and commander of the 163rd regiment of the Montana National Guard, said last night that his regiment was ready to perform any possible service for the victim and refugees of the earthquake.

The same attachment of national guardsmen which has been on duty since Oct. 18, is still working and others will be added if needed, Col. Williams said. The adjutant general also said that there are 24 trucks, two station wagons and one ambulance ready for action. During the last few days these machines have rendered valuable service in Helena. He said that 200 tent stoves and 1,000 pieces of pipe have been secured at Fort Harrison, and that if circumstances warrant it, tents will be thrown up for the shelterless and the stoves installed.

Local peace officers were aided again by the Montana highway patrol, and men were called in to Helena from other sections of the state, according to Walter Beck, assistant supervisor.

Patrolman Busy

Last evening there were 14 highway patrolmen stationed in Helena, five working out of the police station, and the remainder patrolling the streets and highways leading in and out of the city. Assistant Highway Supervisor Beck said that the men were quickly secured and were on duty shortly after the major tremor Thursday morning.

Those first recruited made a hasty survey of the city, traveling to those places where they thought damage might be worst and where they could be of immediate assistance. Headquarters of the highway patrol at the capitol will be kept open day and night while the emergency condition exists, the assistant highway chief said.

While federal relief agencies are not to be expected to take care of all damages in the city, there will be sufficient assistance to take care of those in need and those made destitute by the earthquake, it was revealed yesterday at a special meeting of the local reconstruction committee.

U.S. Will Help

J. H. Rowe, special representative of Frank Walker, executive assistant to President Roosevelt, said that it "was impossible" for the government to handle all of the damages but that the various agencies would take charge and see that suffering was eliminated and proper readjustments were made.

In other words, the federal government will take care of people on relief, the American Red

Cross of destitute people not on relief, and the remainder of Helena citizens must take care of themselves, either through private financing or through loans from the Reconstruction Finance corporation or the Federal Housing administration. "We are primarily interested in whether food and shelter needs are being met here," Mr. Rowe declared. "We appreciate the distress of the situation. I talked on the telephone with Mr. Walker, who conferred with Harry Hopkins and later authorized me to take care of any distress in this emergency."

Total High

When discussion arose as to the extent of earthquake damage in Helena, Oscar Baarson, city engineer and ex officio building inspector, said no survey of the damage from yesterday's major quake had yet been made, but that it was considerable. "A survey, not completed, of the damage done by the shocks of Oct. 18 showed," Mr. Baarson said, "that 278 homes were seriously damaged and 701 partly damaged, a total of 979 that suffered more or less severely from the quake. In addition 18 business houses and apartments were badly damaged and 59 suffered minor damage in the same disturbance.

"It is a fact, however, that in the business district all buildings of good construction are still standing and virtually intact," Mr. Baarson added. "Of the 18 business houses and apartments badly damaged Oct. 18, several should have been condemned years ago." Mr. Baarson reported that of the buildings heretofore granted certificates of occupancy without conditions attached, not one was more than slightly damaged by yesterday's severe shock.

Areas Located

A map showing the disturbance of the Oct. 18 shock damage was displayed. It revealed a large number of seriously damaged homes in the Sixth ward, the depot district and across the Northern Pacific tracks. There was also considerable building damage on Rodney and Ewing streets and territory adjacent thereto. In the south end of the city and on West Main street most of the structures damaged were of brick and brick veneer construction erected many years ago.

"This may be attributed to the fact that the brick was not properly bonded," Mr. Baarson said. "The absence of ties was the main reason for the wrecking of a number of such structures. This must not be taken to mean that brick structures, when properly built, are not safe."

Mr. Baarson suggested that possibly a community chest, with proper distribution of money made available, would be the best way to solve Helena's relief problems. He asserted that the government and others might be asked to contribute, and the cash used by various organizations along their particular lines of work. This suggestion, however, was not approved.

Tom McCabe, head of the county relief organization, reported that most of the patients at the wrecked county hospital are at the federal transient camp at the state fair grounds and the Odd Fellows' home. The Salvation Army, through the courtesy of the Farmers' union, has taken over the Green Meadows farm warehouse for the sheltering of the homeless, he said.

[Helena Independent; November 2, 1935]

HIGH SCHOOL DAMAGE WILL TOTAL 75 PER CENT ENTIRE STRUCTURE, ENGINEERS SAY

Helena high school's new half million dollar building suffered loss far more extensive than at first believed, it was revealed yesterday when four army engineers made an inspection of all public school property. Damage to the building as a whole will be 75 per cent or more, the report indicated.

This fixes the actual loss at \$360,000 or more, as the actual construction cost of the building was \$464,000. The report, signed by Capt. C. H. Chorpening, in charge of the engineers here, states that the entire auditorium wing is virtually a total loss, that the main class room section between the two wings is 75 per cent wrecked and that the damage to the gymnasium wing is between 15 and 25 percent.

Must be Rebuilt

The shock of October 18 did damage to the building, chiefly the auditorium wing, estimated first at \$150,000 and later reduced to between \$90,000 and \$100,000. While it was realized that Thursday's quake did tremendous damage to the auditorium and north half of the main class rooms section, it was not until the army engineers made their examination that the full extent of the loss was perceived.

It means virtually reconstruction of the entire building in the belief of City Engineer Oscar Baarson, to whom the report was submitted.

Following is the complete report of the inspection of the school system:

Memorandum to Oscar Baarson, city engineer, Helena.

Additional damage done by earthquake of October 31, 1935, (inspection made forenoon, Friday, November 1, 1935).

Gymnasium Building--With the exception of a few additional bricks loosened and fallen to the ground from the chimney, no further damage is evident.

Central School--Further damage exists at the rear parapet over the center entrance.

The parapet over the front entrance on the east has collapsed, destroying the penthouse on the roof and some of the roof construction.

A further general shattering of non-bearing partitions exists to the extent that several are bulged and out of plumb.

Additional plastering has been loosened and some fallen.

Kessler School--Fractures of main walls have been increased in size. A large amount of additional stone has fallen from dormers and copings. Stone above the entrance has fallen through and destroyed the outside platforms and steps leading to main entrance. The upper portion of the chimney has been seriously fractured.

New Helena High School--The east half of the auditorium, together with the entire portion of the building which lies to the east, is entirely wrecked. The west half of the auditorium is so badly shattered that it is believed it is virtually wrecked.

The entire classroom or central section, including the center tower, has been shattered to such an extent that it is believed to be 75 per cent wrecked. The gymnasium section has been damaged between 15 per cent and 25 per cent.

Broadwater School--Further fractures of chimney at roof line, but no additional cracks in mason walls. Some additional fallen and loosened plaster.

Emerson School--Only one additional crack in masonry noted on the exterior of the building, not serious. A small amount of cracked and fallen plaster.

Jefferson School--A few minor additional cracks in masonry and some additional cracked and fallen plaster.

Hawthorne School--General further weakening of all parapet walls above the roof, and a small amount of additional fallen and cracked plaster. Stack appears to be undamaged. Bryant School--Building further shattered above the first floor line, and many additional walls fallen. Building is now a total wreck.

C. H. CHORPENING,

Captain, Corps of Engineers.

[Helena Independent; November 2, 1935]

JUST SOME OF THE THINGS LAST SHOCK DID TO HELENA

According to the number of buildings damaged by the large earthquake Thursday, Helena's East side and Sixth ward bore the brunt of the seismic shock.

The major portion of the property damage received by these sections was to buildings which had been injured to some extent by the previous crumblers.

As far as could be ascertained, there were no demolished structures either on the East side of in the Sixth ward which had not been affected by the former jolts.

Damage done to buildings not previously injured consisted mostly of cracks in the outside walls, loosened coping and plaster cracks.

In the Lennox addition dislodged chimneys and interior cracks constituted most of the damages.

Sixth Ward

The old Capital hotel, almost completely demolished by earlier quakes, was utterly devastated.

A stack on the Northern Pacific lunchroom, rebuilt since the large shock of October 18, was shaken lose from its base, but did not fall down. It will have to be rebuilt, however. Considerable additional brick veneer on the St. Mary's Catholic school was dislodged, and the scaffold from which two men were hurled and injured, was torn from the side of the building.

Three brick houses on Boulder, Nos. 1719, 1723 and 1727, which were badly shattered by the former large shocks, were completely razed by Thursday's roller, and several men working on the structures narrowly escaped being buried by falling bricks. The houses were formerly occupied by Robert Connell, T. E. Barclay and Charles Purdy.

Apartments Crumble

The Willis apartment house at 1603 Lyndale, one whole corner of which was torn down by a former shock, was badly crumbled and yesterday was in a state of utter ruin.

The Elmer Harris home at 1518 Boulder avenue received nearly as much damage from Thursday's shock as from the earlier hard one.

Badly crumpled by the shock of October 18, the home of J. W. Wilson at 1502 Boulder was leveled by Thursday's quake. The home had been completely renovated and refurnished about the first of October, it was said by friends of the family.

A part frame and part brick house at 1424 Boulder, nearly collapsed by other shocks, crumpled to the ground as Thursday's jolt shook the structure.

Much additional damage was done to the already ruined National Biscuit company's building on Boulder avenue. The top floor of the structure crumpled to the third story, and large sections of the remaining walls were shattered.

Finishing Touch

The Drake hotel took a terrible beating, and the rear end, shattered by former shocks, was damaged irreparably.

A finishing touch was put on the K. P. hall on Helena avenue, the structure now having both ends crumpled by the repeated jolts.

Curt's Grocery store, the front of which was deposited in the street by the major shock, received additional damage to the walls and interior.

Christian Rickert's home at 1400 Phoenix, slightly damaged by earlier quakes, suffered additional injuries as the last shock loosened a section of the brick work on the west side of the house.

The Lee home at 1113 Phoenix, irreparably shattered by earlier gyrations, now feebly stands on a small remaining portion of the walls.

Warehouses Hit

Holes were opened in the walls of the Power Townsend warehouse, which building had already received serious damages on the west end.

The front end of the Capital Commission company's warehouse and office building had just been boarded up after being shattered by the shake of October 18, when Thursday's crumbler tore out the entire rear end.

A huge section of brick work on the front of the national armory building toppled to the ground, and the already crumpled rear end was further shattered.

The Leo M. Goldberg fur warehouse on Helena avenue, badly cracked earlier in October was shaken sharply, suffering severe injuries to the front of the building.

East Side

The large brick building at 636 Logan street, formerly occupied by the T. C. Power Motor Car company, somewhat damaged by earlier jolts, suffered a shattered rear end on the two top floors. The falling bricks tore a fire escape stairway from the building, and the main portion of the falling mass lit on a large transport van belonging to the Christie company. The truck was damaged almost beyond repair.

The Miller apartment building at 649 North Ewing street received great additional damage, a large section of the brick work on the north wall being jarred off. Gables on the front of the structure were cracked and suffered the loss of some bricks.

A stucco residence at 317 Thirteenth street, which had been badly crumpled by former jars, received severe wall injuries.

A large brick house at 669 North Rodney street received structural damages from the shock of October 18, and was devastated by Thursday's shake. The front end of the building collapsed.

Fall Apart

At 666 North Rodney a brick veneered house, from which most of the outer covering had already been shaken, was badly twisted, most of the remaining brick work falling off. The stone residence of Mrs. Elizabeth Goede at 1222 Ninth avenue, which was so damaged by the former major shock that it was being razed, was leveled to the ground. A brick house at 1317 Ninth avenue, formerly occupied by Mrs. Jennie B. Williams, crumpled by earlier quakes, was demolished by Thursday's temblor.

A brick residence at 403 Montana street, which had suffered slight damages from the pervious Friday's shock, was badly cracked when Thursday's shaker shattered the rear wall, depositing the loose bricks in the back yard.

A large additional portion of the brick veneer was dislodged from an apartment house at 415 Eighth.

No Doubt Here

Bob Claflin's house at 924 Eleventh avenue was seriously damaged by the large quake of October 18, and workmen had started to repair the structure. Thursday's shake removed all doubt as to the future of the structure; it was demolished.

On Eighth avenue three brick houses in a row, 418, 420 and 422, were cracked and twisted, suffering severe damage, after being badly jarred by former jolts.

A brick apartment house on the southeast corner at the intersection of Sixth avenue and Davis street, apparently unhurt by the many tremors prior to Thursday, was considerably damaged as a large section of brick work was torn from its west wall.

A brick house at 539 Fifth avenue received huge wall cracks after passing through

previous shocks seemingly unscathed.

At 565 Fifth avenue a residence which had been badly damaged by earlier shocks received large cracks under a tower on the south wall, and the tower crumbled to the ground.

Walls Fall

One whole wall collapsed from a brick house at 801 Fifth avenue, the house was damaged by previous jolts.

At 1021 Fifth avenue a brick veneered residence suffered the loss of the veneer on two sides.

A dwelling at 826 Fifth avenue, damaged by the large quake October 18, was transformed into a feeble hulk.

Scaffolding and brick work on a residence at 1051 Sixth avenue were toppled out of place by Thursday's shake.

The Mix apartment house at 911 Sixth avenue escaped serious damage during the former shocks, but Thursday's jolt caused large cracks to appear on all sides of the structure, and caused the walls to sag.

Lehman's market on the corner of Hoback and Sixth, badly twisted and loosened by earlier jolts, suffered the loss of more bricks from the coping on top of the building, and a more severe bulging of the west wall.

Damage Increased

Another series of houses at 809, 805 and 801 Sixth avenue, plainly showed effects of Thursday's shake although they had already received considerable damage.

The front end of a dwelling at 734 Sixth avenue collapsed during the heavy crumbler Thursday, after sustaining major injuries during former shocks.

An apartment house at 715 Sixth avenue received another severe jolt Thursday and suffered additional damages to both side walls.

A dwelling at 538 Sixth, badly jarred by shakes earlier in October, had bricks toppled from its walls, and was badly twisted.

The brick veneer on a house at 553 Breckenridge, loosened by previous jolts, fell down in great pieces as Thursday's temblor rocked the structure.

The city garage at 801 Breckenridge, somewhat damaged by other shakes, received large cracks throughout the building.

The roof of a grocery store at 627 Broadway, repaired after being damaged by bricks falling from an apartment house next door, was again torn open as more bricks were hurled from the apartment house coping.

Loses More Brick

At 517 Broadway, the Eleanor apartments, the front of which building was badly damaged by the previous Friday's jar, suffered the loss of additional bricks from the upper front wall. Across the street and east from the Eleanor apartments, two small brick structures, nearly leveled by the former hard shake, were left standing on shattered portions of the remaining walls

The front of a house at 414 Broadway, apparently not seriously damaged by earlier tremors, received large cracks, and the loss of some bricks.

The walls of the Herrmann and company mortuary, on the corner of Rodney and Broadway, were cracked, the brick veneer having been mostly stripped off by previous shakes.

Dwellings at 304 and 317 Broadway, sadly twisted and cracked by October 18th's rumbler, presented badly shattered fronts.

Rodney Hit

Many houses on South Rodney street, some seriously mangled by former temblors, received injuries, said by some, to be irreparable.

Pat Heaney's apartment at 112 South Benton survived the former shocks apparently undamaged, but Thursday's temblor cracked the front of the structure, hurling a large section of brick work to the ground.

Another section of the mangled city hall dropped to the ground, leaving the walls of the structure in a badly weakened condition.

The rear wall of the old Davis Clothing company building at 100 South Main street fell out, and the south wall was left badly sagging inward.

A chimney on the Eagles hall building, spared by other jars, was shaken to such an extent that it was necessary to remove the still intact top of the chimney to get at the badly twisted base.

A large section of the coping on the top of the Harvard apartments at the corner of East Sixth and Warren street fell into the street, barely missing a car parked there.

More bricks fell from the top of a building located at 110 East Sixth avenue, the side of which structure was badly damaged by former shakes.

[Helena Independent; November 2, 1935]

CITY GRITS TEETH, PAUSES TO FACE STARK REALITY OF PRESENT SERIOUS SITUATION

For the second time in as many weeks, Montana's Capital city gritted its teeth and paused yesterday to face the stark reality of a truly desperate situation, and at the same time to launch new plans for rehabilitation and reconstruction.

It found itself facing zero weather with hundreds homeless or temporarily without shelter. It found itself facing the huge task of providing homes for scores unable to replace their destroyed dwellings.

It found itself facing the staggering financial task of healing the deepened scars of its property damage now believed to total nearly \$4,000,000.

And it found itself facing the problem of soothing nerves worn to the ragged edge, of relieving the strain of the tension that has shackled all in the city, and of maintaining its past high morale.

Plans for reconstruction were under way again yesterday, but this time the program will proceed more slowly and cautiously, partly through plain necessity and partly through the desire to be sure that the earth has ceased its plain and fancy contortions in order that the job will not have to be redone.

Rebuilding and general rehabilitation activities will be retarded materially, for the present at least, because of a lack of engineers to carry on the inspection work that is so necessary. Today City Engineer Oscar Baarson will be left with but one regular engineer inspector. Captain C. H. Chorpening and Engineers H. H. Dunham, A. H. Buckley and G. B. R. Gloyd of the U. S. engineering corps left late yesterday afternoon to return to Fort Peck. It is possible, however, that they or others may return later.

These four men are among the principal engineers on the huge dam project and their chief, Major Larkin, felt that their services could not be spared any longer at the present time. He likewise expressed the belief that the services of the engineers could be used to better advantage two or three weeks later after the earth movements have definitely settled.

"I am sorry to see Captain Chorpening and his aides leave," said Mr. Baarson, "because they have rendered invaluable service during a period of great stress and need. I certainly hope they will be able to return later."

Osterberg Too

A. G. Osterberg, chief designing engineer for the A. C. M., also returned to Butte last evening after giving his services to the city since Oct. 19. He has been continuously on the job, being one of the first to volunteer his services to a stricken city. His regular duties forced him to leave.

At this time, the city engineer has the services of only one full time assistant, W. M. McClean, Helena contractor. Sigvald Berg, supervising architect for the Federal Housing administration, is giving time when he can, but his regular duties prevent him from assisting as much as he would like.

In this new emergency, City Engineer Baarson turned to the local emergency reconstruction committee and urged them to conduct a campaign to raise funds for the employment of additional engineers and the payment of their expenses.

Need Emphasized

Thursday's shake revived the necessity of inspecting buildings to determine their state of safety. In fact, it appeared that the work done before would have to be repeated and some of this was accomplished before the engineers left.

All of the schools of the city were inspected and several of the principal buildings that are subject to general public use. The downtown buildings examined were found to be in good condition. Additional inspections will be made as the city engineer can get around to them. In the meantime, the city began to pick up the threads of normal business activity where it left off Thursday noon after the third terrific shock in the current series. A survey of the situation revealed many significant things.

The total of homeless in the city last night stood at 450, a check of all institutions revealed, but of that number only 235 were actually earthquake refugees, dependent on outside help for shelter.

The others, inmates of various institutions and college students, had taken up temporary abodes in homes in the city or nearby.

Last night many persons who had no homes were quartered in the Green Meadow farm warehouse and about 100 orphans from a home in the valley were cared for in coaches on railroad sidings.

Evacuate

The Red Cross was supplying provisions for these and last night served 300 meals in its effort to meet needs adequately.

Sixty evacuated the Florence Crittenton home and 29 residents left the Odd Fellows home in the Helena valley for their home lodges.

From the Montana children's home 24 children evacuated and were stationed in private homes in nearby towns. The 85 residents of the House of the Good Shepherd were quartered in the T. C. Power residence and food and clothing was supplied by the Montana relief commission.

Ninety Intermountain Union college students will be moved to temporary quarters in Great Falls next week.

Relief agencies indicated that double or triple the present number of refugees could be cared for if necessary. Nearby towns were offering homes for the Helena destitute. On the tops of several taller buildings in the business district, workmen at sundown were hammering away at ornamental copings, overhanging ledges and brickwork to avoid possible future weakening and injury.

The business district failed to reflect the terror that emptied it yesterday.

While there was plenty of sidewalk and shop room for all who ventured downtown, one failed to see the apprehension and fear of past days and most places were operating normally. However, numerous places of business were closed, particularly in those areas where weakened walls or store fronts threatened collapse under another vibration. On Main street the coping of the Martha hotel had loosened and this was segregated by the commissioner of public safety. The Great Northern and Northern Pacific railways suffered alike in damage to their depots, both of which were evacuated and roped off. Both buildings had towers housing huge timepieces the giant hands of which hung in amusing positions yesterday. One face read one hour, while the others registered still a different time of day.

The same was true in the cracked tower of the Lewis and Clark courthouse building where the clock cheerfully chimed the hour of 9 at three o'clock in the afternoon. The building was severely cracked October 18th and was again badly rent yesterday.

Buildings at Intermountain Union College, Carroll college, St. Vincent academy, and St. John's hospital, stood in awesome darkness tonight. All were abandoned and several may never be rebuilt. In the Helena valley a half dozen institutional structures had been evacuated.

Mostly Intact

The Blackstone apartment building, North Benton and Lawrence, seemingly escaped the shakings unscathed but yesterday serious cracks were found in the building chimney. The same situation was true in hundreds of structures that escaped the brunt of the previous quakes.

A row of business buildings from which the fronts had been shaken and rebuilt in the past 13 days, stood intact while just across the street the Northern Pacific depot gave the appearance of having been hit by a nine inch shell. A great rent appeared in the mid-upper structure and one end was knocked out of a one-story wing.

Passengers on incoming trains crowded to the windows for an eager view of what the quake had done. Crowding the platforms at the same time were scores bound for varied points until the earth had settled once and for all. Some carried pets, some carried bedding rolls, babies were many, and children pressed their faces close to car windows to bid their stay-at-home fathers goodbye.

With the entire station roped off and well policed, including the dining room section, a railway diner was shunted to a nearby sidetrack to serve steaming food to workers.

[Helena Independent; November 2, 1935]

CITY AGAIN STARTS TO REPAIR DAMAGE

With quickly returning confidence, Helena residents have again set about reconstruction work and repairing its damage, as evidenced by five building permits taken out Thursday and Friday.

They are as follows:

Max Behman, repair of brickwork on store at Sixth avenue and Hoback street, \$1,000. Glenna E. Purdom, 1312 Wilder, remodel apartment with outside entrance, \$300. Otto Mattson, 585 Highland, general repairs to brickwork at 300 Chaucer and 587 Highland, \$200.

S. Israel, Helena, repairs to brick wall of store building at 6 North Main street, \$600. Roland Eames, 400 North Rodney, remove brick and replace with siding, apartment house at 425 Broadway, \$1,231.

[Helena Independent; November 2, 1935]

RAILROADS RESPOND QUICKLY TO APPEAL FOR HELP FOR CITY Shelter Is Provided For Over 1,000 Homeless

Resources of Helena's two railroads, the Great Northern and the Northern Pacific, were placed at the disposal of relief agencies in response to the general call for aid for the quake homeless. More than 1,000 persons can be housed in heated cars and coaches rushed here Thursday night and Friday morning.

Brown Brothers Lumber company and other firms have donated coal for the refugees and piles have been placed beside each coach, it was stated yesterday.

The Great Northern has seven steam heated coaches, five cabooses, two bunk cars, two baggage cars and other equipment spotted in the yards near the depot. It is estimated that approximately 600 persons can be accommodated there.

Maintain Service

Because the depot building appears to be badly damaged, a coach is being temporarily used as a station and ticket office and full service will be maintained. The railroad was prepared to meet any emergency.

At the Northern Pacific, 11 outfit cars and about 15 regular coaches were made available as shelters. They would house 500 or more persons, it was estimated. The railroad was prepared to bring in additional equipment if it was needed.

Although the depot structure was badly shattered, temporary emergency arrangements were made to carry on the regular passenger, freight and express service.

[Helena Independent; November 2, 1935]

PECULIAR CASE OF QUAKE VICTIM HERE

Among the strange cases growing out of the Thursday quake was that of George Hudson, 439 North Park, who yesterday was found in the hospital. SHH the hospital ward of the Salvation army refugee center at the Green Meadow farm.

A victim of severe shock, perhaps injury, Hudson was found wandering aimlessly about after the Thursday quake. He could not tell where he was or who he was and later was taken to the improvised hospital.

Yesterday, still affected, Hudson presented a pitiful plight as a nurse administered to his wants.

"I know who I am, I know where I live, I'm alright and want to go home," he protested as the nurse and a Salvation Army officer sought to quiet him. Hudson was to be held there for his own well being.

[Helena Independent; November 2, 1935]

IN THE WAKE OF THE TREMOR

"We're running a bowling alley," explained Manager Joe Melugin of the Brackman store in the N. P. depot section.

"We just pue 'em up and they're knocked down again."

The grocer was referring to the many cans on his store shelves, toppled from their places again and again by the guakes.

It's a good thing no one was using the bathtub in the sheriff's section of the county jail building or another fatality would have been added to the list.

Most of the roof fell through and a number of large stones, part of the high walls of the building crashed through to the bathroom floor. The tub was about half full of rocks weighing upwards of 20 pounds and much plaster and general debris.

Speed as is speed was demonstrated in numerous instances in Thursday's quake but residents of East Helena believe all records were shattered by the three men working on top of the big smelter stack.

With bricks falling around them, the men clambered down the ladder on the outside of the stack and reached the ground just a wee bit after the bricks.

There once was a clock on the outside front of the Hawthorne grade school near the top of the building. Now there is a gaping hole over where the clock used to be.

Activity was at a low ebb at the state capitol Friday, and official business languished. In most of the offices an emergency had been declared, and 90 per cent of the help stayed at home. One or two offices where nothing pressing was on hand closed up to resume business on a brighter day.

One of the field agents of the land department, probably to show his appreciation of the earthquakes, in the address on a letter he wrote to the field division here, drew the word "Helena" in wavering, shaky lines. "However, the staff in the office, particularly the girl stenographers, believe he doesn't know the half of it.

An observer, after the heavy earthquake Thursday forenoon, said the most pitiful sight he saw was a group of little children with bundles of clothes tucked under their arms walking through one of the residence streets.

Mrs. C. H. Cruttenden was in the midst of midday meal preparation when the quake jarred the house, showering plaster on the floor and over the utensils into which she was about to break an egg. Her husband scraped the plaster off the stove and dishes and she rescued the egg--unbroken.

Frank S. Fusick, navy recruiting officer, is one man who didn't know there was an earthquake Thursday--at least for a while. He was just starting his car when the shake came.

He drove up the street and saw people pouring out of their houses. "Everybody's crazy but me," he said to himself. When he got to his apartment he found plaster on the floor and the rooms disarranged. "Then," he said, "I decided there must have been an earthquake. Roy Leibert, Missoula, and Lloyd Townsend, Bozeman, Northern Pacific employees injured in Thursday's quake, were removed from a Helena hospital to the Northern Pacific hospital at Missoula.

Leonard C. Young, state railroad and public service commissioner, said he has arranged with the Northland Greyhound Bus company to furnish transportation to earthquake refugees without means and who wish to leave Helena for other Montana towns. Contrary to some people's opinion, Helena is still 4,083 in elevation and the top of Mount Helena is 6,462 feet above sea level, U. S. geological survey men said.

Aubrey Williams, assistant relief administrator, informed Congressman Joseph P. Monoghan that "this office has instructed Marvin to immediately put people to work and grant aid to anyone in need."

If all ordinary means of communication out of Helena should be destroyed, the army amateur radio system is ready to handle the emergency, C. Raymond Stedman, Helena radio operator, has been advised. Members of the system are listening for Helena stations in the event use of shortwave radio becomes necessary.

[Helena Independent; November 2, 1935]

OTHER COMMUNITIES WANT TO AID HELENA

As quakes continued to wreck structures, leaving many people homeless generous offers from other Montana communities were received at different places here yesterday. In a wire to S. V. Stewart, chairman of the reconstruction committee, J. D. Scanian, publisher of the Miles City Star, extended his sympathy to the people here, and said that \$500 would be raised in Miles City to carry on relief work here.

From Kalispell, A. R. Johnson, president of the chamber of commerce, came the word that people there stand ready to do anything that they can to aid Helena. He sent the wire to W. G. Ferguson of Montanans, Inc., who said that the government agencies and Red Cross should be able to handle the situation, but, "we shall not hesitate to follow the suggestion should such a course become necessary."

[Helena Independent; November 2, 1935]

FEDERAL AGENCIES TO HELP MONTANA Pres. Roosevelt Issues Order

Hyde Park, N.Y., Nov. 1--(AP)--Federal agencies were directed today by President Roosevelt to extend immediate relief in the Montana earthquake.

Informed at his family home of the new tremors, Mr. Roosevelt directed the Red Cross, the army and the Federal Relief administration to send representatives immediately to Helena to provide aid and report on conditions.

The president acted on word received by telephone from Washington that many families were homeless in a temperature of six degrees below zero and that temporary shelters for victims of recent quakes as well as federal housing facilities for the homeless were endangered.

It was announced by Stephen Early, a secretary, that Mr. Roosevelt has sent requests to Admiral Grayson, chairman of the American Red Cross; General Craig, chief of staff of the army, and Harry L. Hopkins, relief administrator, to have representatives get together at once in Helena.

[Helena Independent; November 2, 1935]

DILLON BUILDINGS CRACKED BY QUAKE NO REAL DAMAGE

Dillon, Nov. 1--Dillon and other communities in Beaverhead county felt the earthquake temblor which wreaked more havoc in Helena this morning.

Though no serious damage was reported in Dillon, cracks appeared in several buildings. The shock came at 11:40 a.m., and lasted about two seconds. Local residents disagreed as to whether its intensity equaled that of the guake of Oct. 18.

[Helena Independent; November 2, 1935]

DEER LODGE GREATLY ALARMED OVER NEW QUAKE ON THURSDAY

Deer Lodge, Nov. 1--Deer Lodge residents were thrown into a state of distress and uneasiness today when the town was again shaken by a heavy earthquake at about 18 minutes to noon. The concern was not so much for themselves as for their Helena neighbors.

Lights swayed, buildings rocked and a thunderous roar as though of a huge truck had rumbled by accompanied the nerve-wracking phenomena.

Deer Lodge people having relatives in Helena were badly frightened and many left immediately to bring them here.

A message requesting accommodations for 75 homeless persons from Helena sent city and county officials scurrying to arrange housing this afternoon, with plans made to use the former high school dormitory, the city hall, and Colbert-Hirst dance hall, but a later message stated that all refugees would be provided for in Helena.

[Helena Independent; November 2, 1935]

ESTIMATE QUAKE TAKES TEN SECONDS TO REACH BUTTE AFTER HITTING HELENA

Butte, Nov. 1--The earthquake shock traveled at an approximate speed of five miles a second between Butte and Helena according to the experience of W. B. Elliott, general agent of the Northern Pacific at Butte. Mr. Elliott was on the phone talking with L. R. Challoner, assistant general freight and passenger agent at Helena when the quake occurred. There was a moment's interruption on the wire and then Mr. Challoner called out: "We have just had another and she was a hard one."

Within 10 seconds the Metals Bank building began to sway and Mr. Elliott called back to his chief, "We have it over here now."

"It was not more than 10 seconds," Mr. Elliott said, "from the time I received word from Mr. Challoner until I felt the shock in Butte. Estimating the distance between Butte and Helena at 50 miles, as the crow flies, this means a speed of five miles a second or 18,000 miles an hour."

[Helena Independent; November 2, 1935]

BELIEVE THE CENTER OF MINOR QUAKES IS 3 MILES FROM HERE

Dean S. Carder of the Unites States Coast and Geodetic survey, who is in charge of the seismographs at the federal building, said yesterday that the aftershocks of the major earthquake Thursday were perhaps centered within an area three miles northeast of Helena and about three miles deep.

Carder said further that this area is only the epicenter (the ground over the center of the quake) of the smaller temblors because, he said, that with only one seismograph it is impossible to determine the exact epicenter of the big shaker.

Recordings of the minor shakes are described by Carder as some of the best he ever obtained. He had planned to leave here Monday, but later decided to stay and see if he could not get additional data. Excellent recordings were obtained on the strong motion seismograph here.

[Helena Independent; November 2, 1935]

PATROL * * * * * * * * * *

Wanted: Men To Work Without Pay

Commissioner of Public Safety Shellady, Chief of Police Roger Smith and Sheriff Brian O'Connel yesterday conferred with Mayor J. C. Bausch on the subject of securing additional men to patrol the city's streets, and to safeguard against house burglary. None of the three favored martial law. None of them favored the idea of men giving up jobs at a time like this to do patrol work, free of charge, as the family income would disappear, thereby causing more trouble.

"What we need," said Mr. Bausch, "is a large force of loyal citizens who will work regular shifts, without pay, patrolling the streets. This will save the taxpayers a great sum of money."

When asked by Mr. Shellady where the advantage of saving money could be if the families of the volunteer patrolmen had to be taken care of, the mayor replied, "I still maintain that there are sufficient reliable citizens in this city to make up a citizens' patrol, and I am sure that there are many responsible men in this city who will work a shift each day voluntarily." The meeting adjourned without further action.

[Helena Independent; November 2, 1935]

TEMBLORS TOTAL 765 IN THE CITY; MERCURY STAYS AT ZERO MARK

As the number of earth disturbances mounted to 765 in Helena at midnight last night, the city was also visited by its fifth consecutive day of zero weather.

For the fifth consecutive day a cold weather record was broken, as the coldest previous Nov. 2 was 12.9 degrees above zero, and at midnight last night is was 1.1 degrees below zero.

The weather bureau reported that there were 57 temblors felt for the 24-hour period that ended at midnight, all of which were moderate or weak except the one at 5:16 yesterday morning, which was described as strong, and lasting for four seconds.

Between 6 o'clock last night and midnight there were three disturbances recorded, they being at 7:57, 9:49 and 10:02.

[Helena Independent; November 2, 1935]

SCHOOL BOARD WILL MEET EITHER TODAY OR ON NEXT MONDAY

Trustees of Helena school district No. 1 will meet either today or Monday to discuss what procedure they will take in regard to repairing the buildings of Helena's quake torn school system, Chairman E. M. Hall said yesterday. Engineers carefully checked the damage done to the school buildings yesterday and they will have a report for submission to the trustees at their meeting.

[Helena Independent; November 2, 1935]

HELENA REMAINS AT THE SAME ALTITUDE

Despite wild rumors to the effect that the city has "sunk" several feet due to earthquakes, officials said yesterday that the altitude of Helena is still the same--4,033 feet above sea level. It was said yesterday that an East Helena man was spreading the story that Mount Helena had settled six inches. Geologists say that such a settling would cause an earthquake that would make the "October epidemic" look like wrist slaps.

[Helena Independent; November 2, 1935]

RECONSTRUCTION PROGRAM IS ORGANIZED REBUILDING OF HELENA UNDER WAY

Rowe Acts

Debris Being Cleared Up By Crews At U. S. Expense

Helena's rehabilitation program, following the weeks of earth disturbances that have destroyed millions of dollars worth of property, was under way yesterday morning. And Helena people may thank one man, and his able assistants for starting the ball rolling-James H. Rowe of Butte, personal representative of Frank Walker, executive assistant to President Roosevelt.

Before the day was over Rowe had nearly 200 men at work clearing up debris, segregating usable brick from broken brick, and hauling away the refuse.

Handling the job in a systematic manner, Mr. Rowe secured 20 trucks on short notice and had all of them at work by afternoon.

Provided by FERA

Funds for this work will be provided by a \$100,000 allotment to Montana from the Federal Emergency Relief administration.

Mr. Rowe's room in the Placer hotel was one of the busiest places in the city yesterday as he generaled operations and gave the entire community a brighter outlook toward recovery.

The representative of Mr. Walker made it plain that the government was without power to expend any Works Progress Administration money on private rehabilitation, and that relief money could not be used for replacements. However, funds will be available for the aid of public institutions. Mr. Rowe again emphasized the fact that people who are in need of repairs should call the Red Cross or the NRS office at the courthouse. This is the first thing that all of these people should do, he said, so that they can be put on the right track. Despite the tragedy of the damage done by the earthquakes, Helena people were cheered yesterday as the relief workers energetically began their task of "cleaning things up." Before evening, many of the distressing marks of the shocks, laying like corpses on a battlefield, had been cleared away.

Care For Orphans

One of the biggest problems that confronted the groups in charge of rehabilitation was the caring for the youngsters and nuns from St. Joseph's orphanage, but this was taken care of by Senator James Murray, who offered the use of Boulder Hot Springs.

Mr. Rowe said that by removing the top story of the orphanage building, it could be fixed up for use. The children will be taken to Boulder today. For the last two days they have been housed in railroad coaches.

Yesterday afternoon Mr. Rowe, accompanied by Miss Romney and Harold Longmaid, made a tour of the city and the valley to see the extent of damages to institutions. Mr. Rowe is hopeful that the Montana Childrens' Home hospital, on Helena avenue and Warren street, can be fixed up as a hospital with FERA funds. It is understood that a few partitions can be built, and then the equipment from St. John's can be moved down there. The building, which was never equipped because of a lack of funds, withstood the severe earthquakes with practically no damage, it was said.

Gets Patrolmen

Among other things done by Mr. Rowe was the securing of five additional men in patrol cars for the police department. Councilman Amos Shellady, in charge of the police department of the city, has been making frantic appeals for police protection, and the Butte

man filled the order.

There is plenty of employment for Helena men who want work, Rowe said, but when the task of clearing the debris away from the schools and other large public buildings is to be faced, Montana men outside of Helena will have to reinforce the crews already at work. Mr. Rowe emphasized again the fact that people must come to Helena in search of jobs, because when outsiders are needed they will be taken from the registration lists of the National Reemployment Service.

Mr. Rowe is doing everything possible with Washington officials in regard to the high school, and is hopeful that taxpayers will be let off with as little expense as possible. Mr. Rowe expressed the belief that the government would finance nearly all of the reconstruction of the schools.

The representative of Mr. Walker was ably helped in his activities yesterday by F. H. Marvin, state director of the FERA, and Tom McCabe, head of the county relief organization, who furnished most of the men for the cleaning up crews. Both relief and non relief workers were put on the job.

Well Protected

Ample police protection is guaranteed by Mr. Rowe's action in authorizing the employment of five patrolmen, and by the direction of Governor Frank H. Cooney who has assigned 10 highway patrolmen to do everything in their power to aid the distressed people. Last evening Mr. Rowe had planned to go to his home in Butte, but the press of affairs here kept him on the job over the week-end.

The work of cleaning up the debris will continue as strenuously today as it did Saturday, and additional men will be put to work, said Rowe. Besides the relief and non-relief workers, men were also drafted from the transient camp yesterday to aid in the operations. With the procedure followed out as started, Helena should have its entire rebuilding program under way in a short time.

[Helena Independent; November 3, 1935]

A.C.M. PLANT HAS A THERMOMETER WHICH RECORDS EARTHQUAKES

A record of the major and medium sized earth tremors, which have occurred in the vicinity recently, has been kept by a delicate thermometer, which reacts much in the manner of a seismograph, at the Anaconda Copper Mining company plant at East Helena, Superintendent Laist said yesterday.

The marking needle of the thermometer, which keeps a continuous record of the temperature of the plant, vibrates when the tremors shake the ground.

Variations of one quarter of an inch, caused by the larger shocks, are visible in the temperature line, while the larger of the little tremblers cause the needle to vary about one-sixteenth of an inch from its course.

Employees of the plant have examined the records of the last few weeks, and can tell accurately the time of each of the harder shocks.

[Helena Independent; November 3, 1935]

LABORERS AND TRUCKS AT WORK MOPPING OVER ZONE OF QUAKE DAMAGE

Federal And Private Agencies Open Prompt Operations As Federal Funds Pour Into Capital; Committee Is To Make Survey On Monday And Finally Shape Program

Helena's reconstruction program was being organized in a big way yesterday as the different federal and private agencies opened fire with their heavy artillery along several different fronts.

Federal funds were poured in without stint for relief of the distressed, for removal of debris blocking streets and sidewalks and for general rehabilitation.

With the federal emergency relief administrator's personal representative taking complete charge of the situation, as local authorities seemed not to know which way to turn, a great force of laborers and trucks were put to work mopping up after the Thursday's rocker.

Work Starts Monday

The American Red Cross will commence Monday with its building program and actual construction work will get under way despite the fact that recurrent tremors of lesser intensity are rocking the city at irregular intervals, E. S. Transue, disaster relief representative, announced last night at a special meeting of the advisory committee of the Lewis and Clark chapter.

Today the Red Cross offices will have a staff of nine experienced persons: Five case workers, two engineers, and an accountant and a director. "We are going ahead with our building program as if nothing had happened," Mr. Transue said.

A check made last night showed that there are now 197 families registered with the Red Cross for assistance, many seeking aid in rebuilding and repairing their damaged homes. "Those desiring assistance are urged to register without delay as the organization plans to close its registration books by November 9," Mr. Transue said.

Setup For Survey

Also Monday morning a comprehensive survey will be started in Helena by a special committee of the Helena Reconstruction committee and from it detailed information will be obtained that will be of great benefit in bringing about hasty recovery to this quake tossed city, Hugh R. Adair, chairman of the subcommittee, announced last night following a special committee meeting.

The survey will be supervised by Chairman Adair, Fred O. Robinson, P. C. Albertson and Tate W. Peak and will be carried on by 75 or 80 teachers available in Helena. The crew will be completely organized Monday morning at 9:30 o'clock at a meeting in the Placer hotel, following which a house to-house canvass will be started in the damaged areas. The city will be districted and the crew divided into such a way that a comprehensive and systematic survey may be obtained, Chairman Adair said.

Actual Needs

From the survey the committee will be able to determine the exact individual needs of the city and to advise destitute families and property owners as to what governmental agencies they should appeal to to obtain the required relief. The committee will work in cooperation with various agencies, including Federal Emergency Relief administration, the Reconstruction finance corporation, the Federal Housing administration, slum clearance agencies, the American Red Cross, the Salvation Army, the Works Progress administration, and the public Works administration.

While primarily the survey will show immediate human needs, it will be complete enough to help property owners in securing financial assistance for rebuilding and repairing their

damaged residences.

Because many of the residents of Helena left the city following the last tremors until the earth adjusts itself and normal conditions return in Helena, the committee decided to complete all of its preliminary arrangements before launching the survey Monday, Chairman Adair said.

Blanks Available

Necessary survey blanks will be available at the Chamber of Commerce and at the offices of the city engineer in the Placer hotel. Any persons not contacted by the canvassers may secure them at those places. Clerks also will be available to help out in filling the report blanks and explaining their significance.

Particularly, Chairman Adair asks that all persons whose homes have been damaged, fill out the questionnaires even though they will not require financial assistance in rehabilitating themselves.

"We want to obtain complete data on the damage here," he said, "and even if property owners are perfectly capable of taking care of their own needs we want them to fill out one of these blanks." We want to know just what the picture is in Helena."

Schools Plan Opening

Several factors entered into the rebuilding of shattered morale.

One was another suspension in the torturous contortions in the earth; another was the manner in which the preliminary work looking toward rehabilitation and restoration was launched Saturday morning in the face of biting weather and a steady fall of snow. At the same time plans were announced by Supt. R. O. Evans of the city school system, that barring unforseen difficulties the schools, closed now since the first quakes October 18, would be re-opened on a curtailed basis a week from Monday.

However, in the meantime many repairs must be made and upon resumption of work, classes will probably be held on a half-day basis with both high and elementary pupils using the Central and Hawthorne buildings.

High school classes, moved from the destroyed \$500,000 structure opened only this fall, will be held during the morning hours until 12:30 when they would be turned over to the grades.

Means Sacrifice

"As an emergency this probably will be the arrangement. It will mean sacrifice on the part of the pupils and revision of the work of the teaching staff but we must accept it as the most feasible under existing conditions," Supt. Evans said. Besides the high school, the Bryant and East Helena grade schools were leveled.

Many pupils thrown on their own since the first of the series of quakes have found temporary work and classes, particularly those in high school, may be greatly reduced when school starts again.

That the high school may not be used until it is entirely rebuilt was seen in the report of army engineers that the imposing PWA structure was 75 per cent a loss after the tremors of Thursday which pancaked the north wing.

There are approximately 3,000 pupils in the district of which 1,000 were registered in the high school.

Though the city's balance momentarily was somewhat off center following a heavy tremor Saturday morning, confidence was restored as the day wore on and the earth's restless shifting seemed appreciably to lessen.

Belief Goes On

While the center of activities was focused on reconstruction plans, general relief of the homeless and distressed went along normally and as far as could be ascertained, everyone who required food, shelter, clothing and physical aid was being taken care of by the various agencies looking out for these things.

People at the Green Meadow farm are being fed by the Red Cross and approximately 110 refugees have been quartered in the warehouse. A few have ventured to move into other quarters but the majority of them still remain within the shelter of that place. Mr. Transue said all were being taken care of although the severe tremor of Oct. 31 forced officials to make a complete revision of quake damages.

When the Red Cross starts its building program Monday it will have some 25 or 30 projects already approved as worthy for such assistance. While estimates are being revised because of the latest shock, actual construction work will begin Monday, Mr. Transue said.

Outside Contributions

Approximately \$2,000 has been received to date from the state-wide Red Cross drive and contributions are coming in from the various chapters in every mail, he said. Many chapters are sending their donations to the mid-western branch in St. Louis and it will be several days before the amounts can be determined. A sum totaling \$300 came in yesterday from chapters in Judith Basin, Teton, Golden Valley, and Glacier counties. There was ample evidence that in the event conditions in Helena should become acute neighboring towns would care for the homeless.

Robert E. Burns of the Manhattan city council announced yesterday that the councils of Manhattan and Three Forks are offering free shelter and food for refugees. Yesterday there came a similar offer from the Red Cross chapter at Deer Lodge and the Rev. A. P. Alton, pastor of St. Paul's church, has offered Coburn memorial hall, in the Sixth ward, a frame structure, for quake homeless. Lloyd Synnes said today that the Shanty, a frame dance hall in the Helena valley, was also available to shelter people. Children from the Montana Deaconess school were housed there for a few days after the October 18 quake which destroyed their building.

J. N. Templer, forest supervisor, said he was advised last night that Major Evan Kelly, regional forester of district No. 1, was sending an additional 250 capox sleeping bags here for use.

[Helena Independent; November 3, 1935]

HELENA GIVEN ASSISTANCE BY GOVERNMENT; NATIONAL GUARD ELIMINATED FROM PATROL DUTY

Helena yesterday received financial aid from the government and was able to arrange for its own patrol squadron at the same time relieving the loyal local company of the national guard from further duty on the streets, it was announced by Amos M. Shellady, commissioner of safety. The city's lone prowler car was wrecked when the front of the police station fell out.

Following a conference with J. H. Rowe, personal representative of Frank Walker, executive assistant to President Roosevelt, and F. H. Marvin, state director of relief, it was arranged so that the city could put on five patrol cars and drivers, to be paid by the FERA, Commissioner Shellady said.

City Zoned

The city was zoned and each patrol car was designated to one particular district. With six Montana highway patrol cars working in cooperation with local peace officers and with the five new patrolmen on duty, it was possible to eliminate the national guard, which was composed of 44 men, and which has been on active duty in the Helena district since the major guake of October 18.

Words of encouragement were given yesterday by Governor Frank H. Cooney. Although continuously harassed to call out soldiers from Fort Missoula, the governor declined to make the move, saying, "There is no need of being stampeded into martial law." The governor said that everything would be adequately taken care of in Helena and no one would go hungry or remain in need. In explaining that there was no need of bringing in regular soldiers, he said that Chairman L. J. Croonenberghs of the highway patrol had ordered in 12 patrolmen, and that they were working in 24-hour shifts and in cooperation with local peace officers.

Latitude Given

Although admitting that the \$100,000 allocated to Montana could not be used for all purposes, he said that the relief commission "would have considerable latitude" in the expenditure of the funds. All dangerous properties will be removed and those persons made homeless by the earthquakes will be properly taken care of, he said. While the local company of the national guard was taken off patrol duty last night, Col. E. H. Williams, adjutant general, said that a special motor detachment would be kept in readiness until the emergency had passed. This detachment will consist of 12 trucks and drivers, an ambulance and a station wagon.

A temporary barracks has been set up in the basement of the state capitol, which is serving as headquarters for the company. Yesterday many of the trucks were kept busy transferring company equipment from the arsenal to the new barracks.

Orphans Move

First steps were taken yesterday in moving the St. Joseph's Orphan home equipment to the Boulder Hot Springs hotel. Eight army trucks and a station wagon left early last night for Boulder, carrying a considerable amount of the institution's belongings. The children, about 125 of them, will be taken there today.

A survey conducted last night revealed that the city was adequately equipped to meet the emergency. There were more than enough coaches and bunk cars in the railroad yards, families at the Green Meadow farm were comparatively comfortable and no one appeared in want.

Inmates of the Montana Children's home were "farmed out" during the day and were placed in comfortable quarters until the emergency ends and permanent quarters established.

Evans Starts Today

Beginning today Commissioner of Streets Noble Evans will start a crew of men cleaning up in the damaged parts of the city. Clearing of debris, piling of bricks, tearing down of badly damaged structures and like work will be carried on, the commissioner said. It will be necessary for property owners, in addition to those who hold mortgages on damaged buildings, to sign clearance papers before any buildings will be torn down, he pointed out. These clearance papers must be signed and notarized and may be secured either from City Engineer Oscar Baarson in his temporary offices in the Placer hotel, or from Commissioner Evans.

The commissioner said he had been granted authority to have 100 men in his crew and it is possible that he will start work today with as many as can be mustered, possibly 50 or 60. The men and several trucks will be distributed in the quake-damaged portion of the city.

Is Free

"This work is to be done free of charge to property owners, but we absolutely must have clearance papers before any buildings are to be torn down. Verbal assurance that it is all right to go ahead with the destruction of the buildings is not enough," Commissioner Evans said.

Labor for the work is being furnished by the federal relief administration. Already the old Capital hotel near the Northern Pacific depot has been razed to the first floor and work was going on yesterday in the tearing down of the Knights of Pythias hall on Gallatin street, also in the Sixth ward.

[Helena Independent; November 3, 1935]

TOTAL NOW 791

With 26 lesser tremors occurring during the day, the earthquake total at midnight, 791. There were three shocks during the day of more than moderate intensity. There was a three second tremor at 6:26 a.m.; another at 10:42 a.m.; and one of two seconds duration at 6:12 p.m. The shocks while numerous were characterized as "moderate or weak" and added little new damage to the city.

[Helena Independent; November 3, 1935]

CITY ENGINEER TO CLAMP DOWN ON RACKETEERING BY OUTSIDERS; WARNS PUBLIC

While work plans were moving ahead at accelerated pace, a warning was issued yesterday by City Engineer Oscar Baarson that a new type of "racketeering or hijacking" must stop immediately or drastic steps would be taken.

It came to Mr. Baarson's attention yesterday that a contracting concern, said to be from Great Falls, had been extracting outrageous fees for tearing down chimneys and making repairs.

In one instance, this outfit went to the wife of a Helena doctor and obtained a contract for taking down a small chimney. When the job was finished, the supervisor demanded and collected \$60 for the work. At ordinary rates, the cost of this work would have been not more than \$4 or \$5.

Later she called Mr. Baarson and asked him about it. He advised that payment be stopped on the check.

Gets Jolt

Another instance was that of a Helena property owner who employed the same outfit to make some moderate repairs to his home. He was absent from the city for three days and when he returned he was presented with a bill for \$350.

Mr. Baarson advised all persons to investigate carefully if approached by persons they do not know to perform work. They should have a clear understanding regarding the cost of the work before they permit it to be started, he said.

Helena workmen have not been guilty of this practice, he said, and in fact, have been working Saturday afternoons and Sundays at straight time.

Prospects for relieving the emergency created by the necessity of inspecting buildings to determine their safety looked up yesterday when City Engineer Baarson was authorized by J. H. Rowe and F. H. Marvin, of the federal emergency relief administration, to employ competent engineer inspectors.

Three Coming

He had negotiated for the services of three and expects two of them to be on the job Monday.

Not much inspection work has been possible since the earthquake of Thursday morning, but the army engineers from Fort Peck, before returning to their duties there, inspected the new high school, other Helena schools and several business blocks.

As a result the Power block, the Gold block and the Power block annex, all of which house home governmental offices, have been declared safe for occupancy.

Necessity, in the interest of safety of life and property, of removing as soon as possible all "gingerbread" work, ornaments and upper brickwork that may have been loosened by Thursday's earthquake or the preceding severe shocks was stressed by City Engineer Baarson.

This is particularly important along Main street and wherever buildings of two stories or more are involved. Inspection has shown, Mr. Baarson said, that many cornices, ornaments and bricks are loose and in event of another shake, undoubtedly would fall. This would place people in the vicinity in grave danger.

Property owners and agents for such owners are urged to inform themselves if such conditions exist on their buildings and to remedy them without delay. Yesterday workmen took down certain brick and stone work atop the old National Bank of Montana building as a safety measure.

No Suffering

If there was any suffering due to the two quakes and the routing of several hundred families, it was not the fault of the Helena reconstruction committee, the railroads, the salvation army, FERA or other relief and welfare organizations. Transients who drifted into the city as well as temporarily homeless found a kind word and a hot cup of coffee or a bowl of soup at the Green Meadow refugee camp operated by the Salvation army. Food and supplies were loaded in great quantities on vans to be taken to the Boulder Hot Springs hotel, which was opened by Senator James E. Murray of Butte, the owner, to shelter the youngsters from St. Joseph's orphanage in the Helena valley. Although sixty-five guests, some of them Helena refugees, were registered at the resort hotel, these were advised to move elsewhere to make way for the homeless boys and girls.

Business As Usual

Business in Helena's retail districts went on about as usual Saturday though perhaps fewer persons were on the streets or shopping because of the weather. The ban held tightly on public gathering, including church assemblies, and was lifted only to permit a mass Sunday morning in the basement of St. Helena's cathedral after that building had again been inspected.

Although the weather again interfered with much outside reconstruction, it didn't hamper the efforts of the wrecking crews who throughout Saturday were in action in all sections of the city and in East Helena.

All over the stricken city scaffolds dotted the skyline as masons hurried the repairs of chimneys, many of them shattered 14 days ago and replaced, only to be knocked down again.

[Helena Independent; November 3, 1935]

EARTHQUAKE NEARLY LIFTS TRAIN FROM TRACKS THURSDAY

Livingston, Nov. 2--Passengers on train No. 4, reaching Livingston 20 minutes late at 4;05, were still in a state of excitement as a result of their earthquake experience. The train, Conductor Frank Shelver reported, was a few minutes late and was still standing at the station in Helena when the shock came.

Members of the train crew agreed with passengers that for a moment they thought the train would leave the track, so pronounced was the swaying of the engines and cars. There was a considerable crowd of people in the station, waiting to go west on train No. 1. The crowd came pouring out of the station and fortunately no one was hurt as one end of the structure came down.

Most of the westbound passengers in their panic crowded upon train No. 4 and it was more than 10 minutes before the train crew could get matters straightened out to leave. It was reported that one engine standing upon the N. P. tracks near the roundhouse was derailed.

Passengers said they were looking out of the windows and could see clouds of dust arising over demolished warehouses and similar large structures.

[Helena Independent; November 3, 1935]

TEMPORARY QUARTERS OF DEACONESS SCHOOL ARE PRONOUNCED SAFE

The old Salvail residence, in which are housed the children of the wrecked Deaconess school in the Helena valley, is but little damaged and perfectly safe for occupancy, it was shown yesterday after an inspection of the structure by City Engineer Oscar Baarson. According to Miss Helen C. Piper, principal, the children are comfortable in their new quarters, and relatives in other communities who have feared for children attending the school are urged to be now reassured.

[Helena Independent; November 3, 1935]

CRACKS IN BUTTE POSTOFFICE ARE WIDENED BY SHAKE

Butte, Nov. 2--Severely rocked in an earthquake Thursday morning the Butte postoffice building escaped with but slight damage. Two partitions in the forest service offices on the third floor were cracked in the tremor, it was discovered yesterday.

Cracks were in the walls prior to the quake, Postmaster Frank X. Monaghan said, but the movement Thursday made the breaks larger. An inspection in other parts of the building failed to disclose any other damage.

[Helena Independent; November 3, 1935]

IN THE WAKE OF THE TREMOR

With the courthouse temporarily vacated, Lewis and Clark has the novelty of a "walking district court." Will Whalen, clerk of court, forced to close his offices, carries his official seal around with him and transacts court business at home, on the street or wherever attorneys happen to find him.

Mr. Whalen removed all of the necessary indexes, dockets and record books to his home and has even issued a marriage license there. The intrepid pair who secured the license in the face of all the earthquakes are Joe M. Bowden and Helen Lee Wilcoxen, both of Helena.

Charley O'Rourke, well known auto peddler and former prominent theatrical agent, has not been seen in his favorite haunts since Thursday noon. He says he "hasn't lost anything up the canyon." He spent Friday night in a Great Northern coach and last night commuted to Boulder Hot Springs for the weekend.

George Pauly of the county clerk's staff got caught in a bad way when Thursday's rumbler hit the courthouse. The spectacle of his flight down the corridor was so amusing that County Treasurer Gar Lutey, the only witness, burst out with raucous laughter while the building was still shaking. He had much difficulty convincing the members of his office force that he had not gone hysterical.

A railway mail clerk had just finished his run Thursday and was in the N. P. freight office making out his report when the quake came. Involuntarily he jumped up and started for the door. Three feet from the door, it suddenly struck him that he had better stay inside. He had no sooner stopped than a mass of bricks came crashing down outside the doorway. Members of the national guard company patrolling the streets yesterday were praising the thoughtfulness of John Byrne of the V. F. W. Friday night when it was coldest, Byrne appeared with a whole flock of sandwiches and several large cans of coffee. The welcome refreshments were on tap all night long at the A-A garage, headquarters for the unit. To make the last big earth shock more terrifying for Mrs. Lee Goodwin, she found she was unable to get out of the room she was in when the quivering had subsided. The quake had broken the lock on the door and it was necessary to get an axe and break the door in to release her.

A workman standing on the ground outside the Crago Transfer company reported that the shock knocked him flat. Another individual asserted it knocked him off his feet three times as he ran across an open space.

Fifty-four persons sought shelter Friday night in the coaches brought in by the Great Northern, it was reported. More were on hand last night.

A Helena visitor had occasion last Thursday to drive out into the Helena valley, and on his way out he drove by the partially demolished Northern Pacific land office in the Sixth ward. He slowed up to obtain a good look at the result of mother earth's tremor, and then continued on his way.

When the large shock came he was still in his car and did not feel it. He drove back to the city by the same route he used going out. When he drove up along the side of the old building he gazed again at the remains, now leveled. He rubbed his eyes, shook his head and then decided to change his brand of liquor.

[Helena Independent; November 3, 1935]

N. P. COACHES AND BUNK CARS USED TO HOUSE CITY'S NEEDY; 200 CARED FOR DURING NIGHT

With every available resource of the Northern Pacific railroad placed at the disposal of Helena people made homeless by the tandom of major quakes, upwards of 200 persons were taken care of last night in the warm, comfortable coaches and bunk cars furnished by the company during the emergency, it was said by Lynn R. Challoner, assistant general freight and passenger agent, and D. M. Driscoll, division superintendent with headquarters in Missoula.

Although through the generosity of U. S. Senator Murray, Boulder Hot Springs hotel, which he owns, was turned over to officials of the St. Joseph's Orphan home as quarters for the 125 children of the institution, they remained in the Northern Pacific coaches last night and will not transferred until today.

Many Others

In addition to the 125 orphans being taken care of in the N. P. coaches there were from 75 to 100 others housed there last night, Mr. Challoner said. The coaches and bunk cars are comfortable and suitable beds are made by bringing the coach seats together. Mr. Challoner said that there were 11 coaches and eight bunk cars being used for the care of the destitute.

"If necessary," he said," we will bring in more coaches, for everyone in need is to be taken care of."

Much of the equipment was brought here Thursday afternoon in two special trains from Missoula and Livingston. A special train of Pullmans carrying CCC boys to Gardiner and Cardwell was made available Thursday and run out on the Fort Harrison spur track and placed at the disposal of veterans' hospital authorities for moving patients.

Officials Here

On the ground supervising work at the Northern Pacific yards are T. F. Lowery of Seattle, assistant general manager of the road; Mr. Driscoll; E. H. Carlson, master mechanic, and Walter Bradford, bridge and building superintendent, from Missoula; H. M. Tremaine, district engineer with headquarters at Spokane, and S. A. Erickson, assistant engineer from Missoula.

Despite the damage done by Thursday's jar, there was little interference with rail operations. A passenger car is being used as a station and when the lunchroom is reopened, probably today, the ticket agent will be accommodated in one corner of it. The roundhouse, although considerably damaged, is being used. Power is furnished by two large locomotives. A large crew is busy on the building making the necessary repairs. Two bridge crews were called in and there are sufficient workers to repair all damages to Northern Pacific property.

Mr. Challoner and Mr. Driscoll commended N. P. officers and employees here who remained at their posts throughout the various quakes. George Miner, city passenger and ticket agent, was highly praised as was his entire staff.

[Helena Independent; November 3, 1935]

SEN. MURRAY TO ASK INSTALLATION HERE OF A SEISMOGRAPH

The matter of installing a permanent seismograph at Helena has been taken up with the U. S. Coast and Geodetic Survey by U. S. Senator James E. Murray, Postmaster Harry Hendricks was advised yesterday. The postmaster requested such action in a letter to Murray a few days ago.

"There is no doubt as to the need of setting up such an instrument in your city and I am accordingly taking the matter up with the director of the Coast and Geodetic Survey," said Murray. "I consulted with the director several days ago in regard to having his organization send several men to Montana to make a complete survey of conditions, which has been done."

[Helena Independent; November 3, 1935]

Section 5

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Headline: School Classes May Be Held On Half-Day Basis

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Headline: Approval Of Federal Grant For Rebuilding Schools Now Up To

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Headline: Jitters In Discard As City Works

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Headline: U. S. Engineer Says Federal Bldg., Okay

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Headline: 115 Orphans Safely Housed At Boulder

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Headline: Tremors Total 826 In Helena; Believe Mercury Will Rise

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Headline: <u>Earthquake Drill" For School Pupils</u>

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Headline: Hope New Helena Will Grow Out Of Ruins

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Old City Hall

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Headline: Theaters Of Helena Plan To Open Their Doors Next Sunday

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Headline: Parents Asked To Keep Youngsters In Safe Quarters

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Headline: Nine Helena Boys And Girls Attend Missoula Schools

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Headline: Larger Crew Now Clearing Up Debris Around The City

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Headline: Quake Ordinance Is Passed At Stormy Council Session; Let

Government Pay, Motto

Date: 11/06/1935 Info Categories: A, I, P, R

Headline: Steaming Opening In Earth Found North Of Wolf Creek

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Headline: Twenty-Six Shakes For 24-Hour Period Bring Total to 863

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Headline: Council Asks Aid In Getting State To Condemn Sites

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Headline: Courthouse Declared Unsafe For Occupancy; Departments Are

Seeking Other Quarters

Date: 11/06/1935

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Headline: City's Condition Found Favorable By Dr. Shepherd

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Headline: Good Shepherd Home Has Declined Offer To Move To Spokane

Date: 11/06/1935 Info Categories: A, B, P

Headline: City's Housing Problem Is Now Solved

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Headline: WPA Goes Over Top In Its Program To Provide Jobs

Date: 11/07/1935 Info Categories: A, B, I, R

Headline: City Beehive Of Activity As Reconstruction Work Is Pushed

Relentlessly

Date: 11/07/1935 <u>Info Categories</u>: A, B, I, P, R

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Date: 11/07/1935

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Headline: Property Owners Urged To Remove Hazards At Once

Date: 11/07/1935 Info Categories: A, B, R

Headline: Ickes' Executive Assistant Will Arrive Here Today To Look Over

School Situation

Date: 11/07/1935

Info Categories: I, R

Headline: Wednesday Tremors Less Frequent, Says The Weather Bureau

Date: 11/07/1935

Info Categories: E

Headline: Kalispell Raising \$2,000 For Relief Of Quake Victims

Date: 11/07/1935

Info Categories: A

Headline: Quake Survey Of Dwellings In Helena Completed; May Need No

Outside Assistance

Date: 11/07/1935 Info Categories: A, B, P, R

Headline: Radio Broadcasts False And Anxiety At Capitol Ensues

Date: 11/07/1935

Info Categories: I, P

Headline: Demolition Work Begun In Earnest Along South Main

Date: 11/07/1935 Info Categories: A, B, P

Headline: City Engineer Resorts To Drastic Action To Protect Life And

Property In City

Date: 11/08/1935 Info Categories: A, B, P, R

Headline: Dwelling Houses In Helena Hard Hit By Quake, Survey Of Adair's

Committee Shows

Date: 11/08/1935 Info Categories: A, B, I, R

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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HELENA COLLEGES INVITED TO GO TO STATE UNIVERSITY

Missoula, Nov. 2--(AP)--Students and faculties of Helena's two earthquake-ruined colleges, Carroll and Intermountain Union, have been invited by acting President F. C. Scheuch of Montana State university to use the facilities of the Missoula institution until such time as reconstruction can be completed, it was revealed here today. Telegrams sent Friday afternoon to the Rey, Emmett J. Reilly, president of Carroll college. and the Rev. Jesse Bunch, president of Intermountain Union, said: "Montana State university invites Carroll and Intermountain Union colleges of Helena." Mont., to make use of its facilities during the present period of trail and distress." The invitation was extended. Scheuch said today, in the face of the present crowded housing conditions at the university. However, the university's acting president feels that temporary arrangements can be made to handle the increased classroom load by arranging late afternoon and night classes during the period of emergency. There will be no attempt to assimilate the classes of the two Helena institutions with those of the state university. The state university would simply make possible the use of classrooms and equipment by Carrroll and Intermountain Union student bodies and faculties to carry on their regular curricula.

All Will Help

The administration and faculty of the state university are anxious to extend all aid possible to the two Helena institutions, Scheuch said. "I am sure we can depend upon the people of Missoula to assist in every way during the period of emergency."

[Helena Independent; November 3, 1935]

MARIE KIRWIN NOW RESTING AT HOME IN DEER LODGE

Deer Lodge, Nov. 2--Miss Marie Kirwin was brought from Helena to Deer Lodge last evening in an ambulance. Miss Kirwin received severe head injuries on the night of the first bad quake in Helena and has been a patient at St. John's hospital in Helena since. Miss Kirwin is being cared for by a nurse from the Helena hospital and will remain at the home of her parents, Mr. and Mrs. P. L. Kirwin, until fully recovered. A man and two women, patients at St. John's hospital in Helena, were brought to Deer Lodge last night in a taxi. They will remain at the local hospital until recovered. A number of other persons motored to Deer Lodge yesterday and spent the night with friends or at the hotels.

[Helena Independent; November 3, 1935]

SCHOOL CLASSES MAY BE HELD ON HALF-DAY BASIS Schools To Be Closed Until November 11 Is Report

Until such time as other arrangements are feasible, students of Helena's public schools may attend classes on the half-day plan, it was announced yesterday by R. O. Evans, superintendent, after a meeting of principals and instructors of the various institutions. Mr. Evans also announced that as a great amount of repair work to the grade schools must be done before classes can be resumed, the schools cannot possibly be reopened before November 11.

Under the proposed half-day plan, classes for the high school students would be held at the Central and Hawthorne buildings. The grade school students of those buildings would use the school during half of the day, and the high school students would attend classes in the buildings during the other half of the day.

Following the demolition of the Bryant school by the earthquake of October 18, it was decided to take care of the students of that school at the Central and Broadwater buildings. Under the proposed half day plan, those students who would have been placed in the Central school will attend classes in the Jefferson and Emerson buildings.

"This plan will have to be adopted as an emergency provision," Mr. Evans stated, "although some of the teachers' work will have to be rearranged, and some sacrifices probably will have to be made on the part of a few students.

[Helena Independent; November 3, 1935]

THE INDEPENDENT ON EARTHQUAKES

Readers of The Independent will recall that NEVER during the last three weeks has this newspaper ever pretended to predict or indicate as to whether there would be more major earthquakes in this area. On the other hand it has condemned those who thought they knew something about the caprices of Nature.

After the first major quake, The Independent sought the aid of the Associated Press correspondents all over the United States to interview the leading scientists with regard to the history and records of other destructive quakes.

The verdict of these men was that there was no record of one major earthquake following another after an elapse of a reasonable time--twenty-four hours. On the other hand they represented that always after such a disturbance there were "vibrations" not so heavy and gradually diminishing in force, sometimes lasting for several days, at times for several months.

With two major earthquakes following one another in ten days, and more than seven hundred minor quakes and vibrations which were recorded, the Helena area has broken all records, perhaps set the scientists at naught.

But bear this in mind--The Independent gave the record and the experiences during and following other major earthquakes, which were to the effect that following the quake of October 18, it was not likely that another major earthquake would be experienced for many years. If the record went wrong, it is up to Nature and not to those who thought they knew something about earthquakes.

The Independent does not pretend to know, even now, about the frequency of earthquakes, neither do the almanac makers, other newspaper editors, and sometimes we doubt the exactness of scientific knowledge on the subject.

[Helena Independent; November 3, 1935]

RADIO AMATEURS STAND READY TO HELP AS NEEDED Prepared To Maintain Communication If Wires Fail

Standing ready to do its part to help sufferers during the Helena earthquakes, is the Butte Radio club, with which is affiliated the Butte Amateur Radio club, according to word received here yesterday. These organizations are the largest of their kind in the United States with over 2,700 members.

On Thursday afternoon, Carl J. Trauerman of Butte, president of the Butte Radio club, in conjunction with Ben Hardin, head of the naval reserve radio operators in Butte called out all amateur, short-wave operators asking them to stand by and establish contacts with Helena short-wave operators, in the event that all wire communications to the state capital should be cut off. Contacts may be established either directly with Helena wireless stations or by relay with operators in other parts of Montana or in nearby states.

Ready Messages

Any operator who contacted Helena operators was asked to relay messages to Butte in the way of news or requests for aid from the quake-stricken city. Their messages will be promptly answered by Butte operators who have instructions to transmit all messages received either to Mr. Hardin or Mr. Trauerman, day or night.

While a great many of the Helena operators may be effected by being cut off from electric power, a number of them have installed battery sets and can act efficiently independent of central power service.

Among those in Butte who were active Thursday night were Operators Crouter, Foster, Kistler, McKinnon, Sewalson, Gallinger, Cooper and station W7CHF and Assistant Operator Chevigny.

Operators in Helena are asked to establish Butte contacts, the Helena operators listed being:

Call No. Name Address

ALWAYS GOOD NEIGHBORS

There is a beautiful tradition in the United States, intensified by the people who dwell "out where the West begins." It is the tradition of helping our neighbors. This dates back to the time when labor was scarce and farmers, as well as small town folks, would band together in harvest time, in barn raising, it erecting a school house or a town hall.

The willingness of the American people to come to the aid of those in need is too well known to be discussed here. It has become an American by-word to be a good neighbor. This has been demonstrated in Montana during the last two weeks when Helena has been shaken many times by devastating earthquakes. As soon as the news of the first earthquake reached our neighboring city of Billings, a check was immediately forwarded to Mayor C. J. Bausch for a substantial sum. Other cities have followed. Business organizations have met the moment they received news of these earthquakes, and not only passed resolutions of sympathy, but arranged to give financial aid to the city in caring for the needy. Stories sent out over the radio led other Montana cities to believe the business district of Helena was in ruins. Merchants in these cities offered stocks of goods. From far away New York came a check from a necktie manufacturer to the Christie Company, to help in any way needed. Newspapers in Montana offered aid to the papers of Helena--offered anything required or requested.

For all this assistance and offers of assistance, the people of Helena are deeply grateful. Those who today live in more fortunate surroundings, whose food is clean and certain, whose homes and beds are warm, must realize that there are in Helena scores of people who must be cared for promptly. The relief organizations are caring for these people. In that way Montanans are continuing the tradition of being good neighbors, as suggested by President Roosevelt.

[Helena Independent; November 3, 1935]

POSTAL SERVICE HERE CONTINUES AS USUAL

Old Jack Dalton, who put on his red mittens and galloped away with the U. S. mail, has nothing on the clerks and carriers at the Helena postoffice, who have given the people here regular service, in all departments, despite the disruption in general activities occasioned by the earthquakes.

Postmaster Harry Hendricks, as well as several Helena people, yesterday commended the force at the Helena postoffice for their work during the emergency.

Hendricks said that everyone has been on the job as usual every day, and that not a single clerk or carrier had made a "kick" about having to work during these times.

Dick Tinker, a carrier, was at Lennox during the Thursday morning quake, and was hurt when some falling brick struck him. His leg was badly bruised, but Tinker carried on with his work without a whimper.

"This," Hendricks said, "has been the attitude and the loyalty of every postal employee during the emergency."

[Helena Independent; November 3, 1935]

HELENA IS RECOVERING NORMAL SPIRIT MORALE OF CITY FOUND EXCELLENT Self-Reliant

Workers Begin Survey Of Relief Needs of Helena

Helena's morale is returning.

That was the encouraging message brought back yesterday by a group of 40 grade and high school teachers upon completion of one-half of a comprehensive survey of the city. The work is being carried on under the direction of a committee composed of Hugh R. Adair, chairman; Fred O. Robinson, Tate W. Peek and P. C. Albertson.

"Nearly everywhere the teachers went, they found a spirit of optimism, a desire to rebuild damaged properties as soon as possible, and a recovered morale," Mr. Robinson said.

City Districted

The survey was authorized by the local reconstruction committee to ascertain Helena's housing and relief needs. The city was divided into 17 districts for the purpose of the work and each district is to be covered by at least two teachers working together. Late yesterday afternoon the committee made its first report, some of the districts being entirely covered during the day. The survey will be finished by tomorrow. Information obtained yesterday was classified last evening, the urgent relief needs being turned over to the Red Cross and reports on dangerous properties given to the ERA "wrecking squadron."

Cooperative Living

While the survey workers found many homes deserted, they found in other residences several families living together in a cooperative fashion. The initial survey reports disclosed a need of housing facilities, a small number of immediate relief needs, but a generally high morale, according to Mr. Robinson.

"Many refused assistance, determined to go ahead by themselves in rebuilding and repairing their homes. Only among the jobless did the survey workers find immediate relief needs," Mr. Robinson said.

"You get me a tent now," one smelter worker said, "and when I've rebuilt my home I'll give it back."

In one small frame home, survey workers found 11 persons living as a family, but warm, comfortable and in good spirits.

A meeting of the workers was held at the Placer hotel yesterday morning before the survey was started. The object of the canvass was explained and full instructions were given. "The actual purpose of this special committee is to speed the actual activity of getting rehabilitation in Helena started," Mr. Robinson explained. "After we find out what is needed, efforts will be made to get money for rebuilding and reconstruction." Speakers at the meeting yesterday morning included: Stuart Bingham of the RFC, Norman Winestine of the Capital City Rehabilitation corporation, Barclay Craighead of the Federal Housing administration, E. S. Transue of the Red Cross, Judge A. J. Galen, who presented a picture of the job awaiting the workers after he and Mr. Adair had made a preliminary survey Sunday; O. C. Lamport, secretary of the chamber of commerce, who advised the group that the facilities of his office were at the disposal of those undertaking the work.

City Districts

The districts are as follows:

Everything north of the Northern Pacific track, Main street to city limits east and between

the Great Northern and Northern Pacific tracks, the triangle formed by the G. N. tracks and Helena avenue, the triangle bounded by Helena avenue and Rodney street, between Rodney and Montana, between Eleventh and Helena avenues, from Townsend avenue to the G. N. tracks between Montana avenue east to the city limits from Townsend to Eleventh between Montana and the city limits, from Davis to Montana between Sixth and Eleventh, from Montana and Eleventh east including Lenox, from Davis to capitol between Sixth and Broadway, between Davis and capitol and from Broadway south, from Davis to the business district between Eleventh and Broadway, from Broadway south between Main and Davis, south of Lawrence from business district out, between Benton and G. N. from Neill to Carroll college and including the G. N. bunk cars, from Benton west and Hauser boulevard north, East Helena.

Information received in the survey is to be classified for the benefit of Helena residents in an effort to help get them started on the road to rehabilitation.

Following the meeting it was announced that Miss Ora Conway will be stationed at the chamber of commerce office in the Placer hotel and that it will be possible to fill out blanks there if any person is not at home when the workers call.

Efforts are being made to contact every person in the above districts so that they will know what to do and where to go for assistance, it was stated at the meeting.

[Helena Independent; November 5, 1935]

APPROVAL OF FEDERAL GRANT FOR REBUILDING SCHOOLS NOW UP TO ICKES, TRUSTEES TOLD

Difficulties and problems that face Helena's badly battered school system were aired last night at a meeting of the trustees, who were advised by J. H. Rowe, a personal representative of Frank Walker, that the matter of the government financing the repair of the high school and of rebuilding the Bryant school has been left to the decision of Secretary Ickes of the department of the interior.

Mr. Rowe received a call yesterday morning from Col. H. B. Hackett of the Public Works administration that was most encouraging, and Hackett said that he would take the matter up with Secretary Ickes on Wednesday, when the latter returns to Washington.

Estimate Damage

R. C. Hugenin and Norman DeKay, the architects for the new high school, estimated the damage done at \$150,000. The first major earthquake on October 18 caused damage to the extent of \$90,000, while the one last week, he estimated, added another \$60,000. Hugenin explained to the board members the damage that he had found since the second big shock.

On motion of Trustee Alex Wardlaw, the board decided to employ an engineer to go over the high school and other school buildings to determine what had to be done to make them safe for occupancy.

This engineer will also investigate the construction of the high school. Since the earthquakes caused the damage at the new half million dollar structure there have been many rumors and stories afloat as to faulty construction, and it is hoped that the report of the engineer to be employed will clear up the matter once and for all.

Architect Hugenin said that he gladly invited a thorough inspection of the building. Chairman E. M. Hall of the school board said that Engineer Hein of the treasury department, who was sent here to look over the federal building and assay office after the big earthquake, told him that there was "no criticism at all on the construction of the high school building." At the time that it was erected, Helena was not considered in an earthquake zone, it was pointed out.

Dr. Thomas L. Hawkins was named by Chairman Hall to secure a competent structural engineer to inspect the high school and other buildings of the system.

When the report of the engineer is made, it will be published.

As to the opening of school, the board announced that classes will be resumed as soon as buildings have been repaired and thoroughly inspected and not before.

Aviation classes in the high school, however, are expected to start next week at the hangar of the Helena airport. William Fahrner, the instructor, said that the schools could use the hangar for the payment of approximately \$20 a month for heat. On motion of Trustee Hawkins, the plan was approved.

Trustee L. S. Hazard made a motion to have the fire insurance on the new high school building reduced from \$388,000 to \$200,000, and this was approved. The insurance on the equipment, however, remains at \$12,000.

[Helena Independent; November 5, 1935]

JITTERS IN DISCARD AS CITY WORKS Scores Busy Great Activity Noted In All Parts As Crews Speed

There was no room for the jitters in Helena yesterday as the Capital city definitely entered upon the first important phase of its reconstruction program after the interruption occasioned by last Thursday's heavy earth contortion.

Throughout the city was to be heard the pounding of hammers, the shrill ripping of saws, the clang of pick and shovel removing fallen debris, as hundreds of workmen bent to the gigantic rebuilding task.

Activity was to be seen everywhere and many factors entered into the picture--the weather that emphasized the need of permanent housing for homeless families, the desire to rehabilitate homes and buildings not severely damaged before further loss should occur, and the desire to return to normal business and social life as soon as possible. Once more Helena was demonstrating its great recuperative ability, its supreme confidence in its future and its unshakable spirit of self-reliance.

Encouraging Report

Building operations appeared ready to boom and an encouraging factor was the announcement that the building total for October was approximately \$159,000, believed to be the highest October figure in more than 40 years if not in the history of the city. Sixty permits were issued, most of them since the initial heavy quake on October 12. A total of 300 men, under the supervision of F. H. Marvin, ERA director for Montana, and Tom McCabe, head of the relief organization in Lewis and Clark county, were at work in Helena yesterday tearing down hazardous walls, segregating usable bricks from damaged

In many parts of the city last night could be evidenced the fine work of these crews, which aided in restoring general order here.

ones, and hauling away debris.

James H. Rowe, the federal official in charge of the rehabilitation work, said yesterday that where houses are beyond repair and are endangering adjoining property, it is requested that owner of the property in danger get in touch with Secretary O. C. Lamport of the Chamber of Commerce immediately. Crews will be sent out right away to remove any such dangers.

Service Gratis

The service is free to property owners, Mr. Rowe pointed out. Such owners need only give their approval to having the work done by signing a release. Men paid by the federal government are doing the work.

Mr. Rowe yesterday highly commended the men who are working for him in the rehabilitation work. He especially praised Mr. McCabe, and Riley Mapes, state director of transient relief, who, he said, have been working night and day keeping the crews on the go.

He also pointed out that the moving of the orphans from St. Joseph's to Boulder Hot Springs had been successfully done by Supervisor Lou Boedecker of the highway patrol, State Treasurer James Brett, and the members of the patrol.

Another who have been giving constant aid to Mr. Rowe is Miles Romney, director of the state emergency council.

An added impetus was given to reconstruction plans when a force of six engineers and inspectors was made available for City Engineer Oscar Baarson.

Had Lagged

Examination of buildings and general rehabilitation activities had lagged Friday and Saturday, due largely to nervousness, lack of organization and lack of help in the city engineer's office to make the inspections necessary before work could be undertaken. Yesterday Mr. Baarson had the services of two new engineers authorized by James H. Rowe, representing Frank Walker of the new deal. The state highway commission again donated the services of two engineers, E. F. Moyle and Maxwell Mason, who assisted the city before. In addition he had the promise of F. H. Marvin of the ERA of perhaps half a dozen more engineers or inspectors.

Crews were engaged in tearing down dangerous buildings and walls on the request of property owners. This work will be done free, but the owners must sign a waiver relieving the city of all responsibility and liability. The work is being done by crews under the supervision of Commissioner of Streets Noble Evans.

Forms Prepared

Regular waiver forms may be obtained at the city engineer's office in the Placer hotel, and these must be signed before a notary public. No action toward condemning buildings will be taken immediately.

Little has been done since Thursday in the matter of inspecting buildings for the issuance of certificates of occupancy, but this phase of the will be started again immediately. It will mean examination of practically all the principal buildings of the city for the second time. There was ample indication on all sides of the improved morale of the people of the city, of lessened nerve tension and of a growing feeling that the worst was over.

While many persons were still out of the city, it was surprising the number who went about their usual routine with no show of the hidden fear that has lurked during the last three or four weeks.

Nearly everyone fell in step with the belief, "It might have been worse."

Taken Care Of

Everyone, it seemed, was warm and housed as comfortably as the quarters available would permit. Army cots and mattresses supplied the wants of more than a hundred men, women and children quartered in the Green Meadow warehouse on a ranch near the city. Here families were permitted to "bed down" at will, some taking a section of four to eight or ten cots. Some, seeking privacy, erected temporary blanket barriers but generally the sleepers rolled into their beds unmindful of who the person next door might be. In one corner of this great room maintained by the Salvation Army was a colony of Chinese from Helena's famous old Oriental section. Ancient men, several stooped with the years and with grizzled mien, sat swathed in blankets by roaring fires as younger women sought solicitously to help them. One old man, they said, was nearing the century mark. It was a jargon of jumbled words in this corner of the great room and no one but the colony sought to interfere or ask questions.

Slant-eyed youngsters, usurping the belief that "ne'r the twain shall meet," scampered over the feet of dozing elders; ran behind chairs or under cots and otherwise unleashed themselves with children of their new white neighbors.

Midway in the huge building a cook kept cauldrons of stew and coffee ready for any and

In the rear of the building a white clad nurse ministered to the ill or injured, victims of Thursday's fatal blast.

Same Picture

Elsewhere in the city's retreats the picture was nearly duplicated.

In a firm looking two-story building could be found several score youngsters soundly in their slumbers, wholly unmindful of the worry of those entrusted with their care. They were the children from the Montana Deaconess home in the Helena valley, a fireproof three-story building and annex, both riddled by the quakes.

The home given them was once the palatial dwelling of a Helena physician.

Just a few blocks up the street in the west side residential section slept more than 80 girls from the home of the Good Shepherd. Their abode, one of the finest of the old brown stone dwellings of another era in Helena, was built by a Montana pioneer, T. C. Power. For years it was dark until the quakes permitted its opening to shelter the unfortunate wards. In the guild halls of St. Peter's pro-cathedral were temporarily housed the 60 girls of the Crittenton home. A massive kitchen and a huge assembly hall provided them every convenient facility. However cots rested their bodies.

No New Cases

Though St. Peter's hospital had received no additional quake victims other than numerous cases treated for shock, the Salvation Army hospital center in the refugee camp evacuated a woman to Warm Springs. Normal at the time of the last quakes, her mind had shattered under the physical and mental stress of the constant pounding.

Physicians believed she would recover if removed from the quake zone. Her husband also is a refugee.

The Red Cross emergency branch was jammed with unfortunates seeking aid in restoring themselves and their families. Transue said registrations neared 225 and that it was a good indication.

"It means," he said, "that people are now determinedly going ahead to find a way out of their difficulties."

The Red Cross has promised to help all who are victims of the earths almost constant tossing.

The Helena slogan, he said, is rightfully, "Meet the need."

Director Rowe also assigned a force of men Monday to finishing the interior of the Montana Children's Home hospital on Helena avenue for the use of St. John's hospital. It will provide from 40 to 50 additional beds under the direction of the Sisters of Mercy whose building on Catholic hill was virtually destroyed.

[Helena Independent; November 5, 1935]

MONTANA QUAKES DON'T ORIGINATE IN YELLOWSTONE

Yellowstone Park, Nov. 4--Yellowstone National park, with its geysers and thermal activities, is not the source of the recent earthquakes in western Montana, Dr. C. Max Bauer, park naturalist said.

Dr. Bauer, geologist with considerable experience in the study of earthquakes and their behavior, and other members of the naturalist department, have kept close check on all park features. The results of this investigation are disclosed in a report just submitted by Dr. Bauer to the park superintendent. The report was completed prior to the second big shock in Helena on October 31, but which was not felt in the park itself.

Felt on Oct. 18

"The only shock felt in the park as far as we are able to learn was the one on October 18 at 9:50 p.m., and investigation shows that while this shock was felt pretty generally over the park no damage was done to buildings and other property here," Dr. Bauer's report reads.

"Several visits have been made by the park naturalist to Norris Basin, Canyon and Lake and several calls on the phone to the Old Faithful ranger, who is a geologist, to inquire if any changes have taken place and a special inspection of the Upper Geyser Basin was made by officials of the park service. The results have all been negative.

"It is true that an old geyser crater in the Norris Basin became active during the last week. But such changes are common in the geyser and hot spring activity in the park and cannot be ascribed to earthquake activity in the Helena region.

"It is well proven that earthquakes in the park region have been prevalent in the geologic past and might, if they should occur again, change things in a remarkable way. But the fact remains that the earthquakes of the Helena area have not been felt in the park region and have not had their source in the park.

Local Fault

"The cause of the recent quakes has been in the vicinity of Helena and is attributed to local faulting there. A fault is a break in the rocks of the earth's crust along which there has been movement--one block moves with respect to the other. Such movement does not take place in a uniform straight forward manner. Rather a strain or stress is developed and when this becomes too great there is a sudden slipping or displacement along the fault or break. Such slipping may be only a few inches, but the sudden release of the strain causes a jar or quake of the earth at that place and the vibrations spread in all directions from it. "This is the usual cause of earthquakes. There is another cause of earthquakes in regions of active volcanism. Such quakes are caused by more or less violent explosions in the active volcanoes. This kind of earthquake may be felt in Japan, Sumatra or in any country where violent volcanoes are now active.

Long Extinct

"Although the Yellowstone park region was a region of active volcanism throughout a long period of the geologic past, and the hot spring and geyser basins are the direct result of that volcanism, still, so far as we know, there has been no active volcanism of the explosive type in this region since the great ice age."

[Helena Independent; November 5, 1935]

HELENA'S CONDITION GREATLY MAGNIFIED BY RADIO STATIONS

Exaggerated and untrue radio broadcasts about Helena's plight after the recent earth shocks were yesterday condemned by Norman Winestine, president of the Helena Chamber of Commerce, who stated that news services have access to all of the facts of the disaster, and should be content with telling the truth about the city's condition. "The majority of the news services have given accurate accounts of the recent happenings here," Mr. Winestine said, "but, there are a few stations which are not content with telling the plain truth, and their malicious reports are doing Helena a grave injustice." Mr. Winestine said he had been receiving telephone calls from places as far distant as Florida, inquiring as to the safety of the city's residents.

"Many of the persons calling," he stated, "had been informed by radio broadcasts that the city was leveled, and that the ruins were being consumed by a great conflagration."
"We have made no attempt to cover up the facts of the situation here," he concluded, "and all that we ask of the news services throughout the country is that they give us an even break."

[Helena Independent; November 5, 1935]

U. S. ENGINEER SAYS FEDERAL BLDG., OKAY

Employees at the federal building were assured that the structure is safe, and that it was not structurally damaged during the earthquakes last month, when W. N. Collier of Kansas City, construction engineer in charge of the treasury department in this district, gave a talk in the court chambers yesterday. Mr. Collier's talk was based principally on the construction of the building, and his assurance set the employees back to work without fear that the shocks had did any damage that might make occupancy of the building risky. **[Helena Independent; November 5, 1935]**

IF COUNCIL HOLDS MEETING TODAY, NEW QUAKE MEASURE IS DUE FOR FINAL PASSAGE

If the city council is successful in organizing itself today, it will hold a meeting at 10 o'clock a.m., in the water department offices to consider upon second and final reading the passage of a proposed amendment to the local building code providing for earthquake resistance construction on new buildings and repairs on damaged properties. The amendment was passed on first reading a week ago. It is patterned after the Long Beach, Calif., ordinance, drafted by capable structural engineers following the 1933 earthquake, and altered here to fit Montana's particular types of construction and the cold climate.

Marks Time Monday

Although the council was scheduled to go into regular session yesterday morning, it was not until 4 o'clock in the afternoon that Commissioner Noble N. Evans showed up. Mayor C. J. Bausch and Commissioner Amos M. Shellady were present in the morning and the mayor declined to hold a meeting without the presence of Commissioner Evans. When the meeting finally was held, it was in session less than 30 minutes and nothing was done other than auditing a few claims.

It is thought that if the council manages to get together today, when the earthquake resistance building amendment is slated for final passage, other important matters in connection with the city's catastrophe will be discussed, including plans for a temporary or new city hall, providing more clerical help in the city engineer's office, and passing a supplemental emergency ordinance to pay the 41 national guardsmen who gave such good service until released Saturday evening.

Believe U. S. to Help

Commissioner Shellady said last night that it is possible that J. H. Rowe, personal representative of Frank Walker, executive assistant to President Roosevelt, will be successful in working out a scheme whereby the government would pay for the guardsmen and that it would not be a liability of the city.

The national guardsmen were released Saturday evening when Mr. Rowe was able to authorize the employment of five patrolmen and their cars for the city. The Montana highway patrol, summoned by radio to concentrate in Helena after the first of a series of destructive earthquakes, has been on 24-hour duty since and is helping the city during the emergency. Eleven patrol cars are on duty each night, including the five obtained by Mr. Rowe and paid for the government.

Good Service

Supervisor Lou Boedecker has established night and day headquarters at the statehouse where emergency calls are handled. Ten patrolmen are on duty assisting the police in patrolling the stricken areas and guarding against the burglarizing of homes temporarily vacated.

Fortunately the patrol chief said, looting has been held to a minimum with but two arrests for attempted pilfering of damaged places.

Though Helena was thronged with sightseers a week ago Sunday, there were but few largely because of a request broadcast by the patrol to avoid congestion where every effort is being made towards restoration.

On Duty

On duty with the patrol here are Albert E. Fusick, Alec Simpson and Erwin Richert of the headquarters staff; Elmer A. Martin of Great Falls; John Flanagan and Robert Wright of

Butte, and members of the flying squadron, Ralph Evert, Hugh Potter, W. W. Beckwith, William McLain and Lawrence Conwell.

There is also some confusion in the minds of city officials whether or not the council must approve releases for liability, signed and sworn to by property owners, before razing work can be done. Commissioner Shellady said yesterday that it was his opinion that such approval was unnecessary, although they must be filed with that body. Such releases, however, must be notarized.

[Helena Independent; November 5, 1935]

STATE UNIVERSITY ESCAPES DAMAGES IN EARTHQUAKES

Missoula, Nov. 4--Buildings of the State university were not damaged by the earthquake Thursday morning, according to a statement made by officials. In the chemistry building plaster fell from the ceiling of one of the rooms. Expansion joints in the auditorium of the Student Union building show evidence of slight heaving.

The tremors were felt in classrooms of buildings throughout the campus. In Main hall the telephone switchboard was disconnected a few moments. There was little confusion among students although some classes were dismissed before the hour was finished. Dr. J. P. Howe of the State university department of geology said that following a severe tremor there are many slighter ones due to the continued settling of the ground which might last for a year or more. Dr. Rowe is interested in the reports that cracks in the ground have been discovered in the vicinity of Helena.

[Helena Independent; November 5, 1935]

115 ORPHANS SAFELY HOUSED AT BOULDER

One hundred and fifteen youngsters, boys and girls, made homeless by the angry tossing of the earth last Thursday, Sunday night were enjoying the warmth and shelter of the Boulder Hot Springs hotel opened to them by Senator James E. Murray of Butte, the owner.

They were the wards of St. Joseph's orphanage in the Helena valley, one of many semipublic institutions made uninhabitable by the long series of damaging earthquakes. In two great motor busses brought here from Anaconda, the youngsters were moved under the direction of Lou Boedecker of the state motor patrol. A convoy of patrolmen preceded the caravan to assure safety through the canyon.

Since Thursday the children had been quartered in warm coaches shunted to a track in the Northern Pacific yards. Prior to the removal, army trucks moved beds and clothing, food and supplies and other essentials.

Sixty-five hotel guests were requested to relinquish their quarters to provide adequate space for the youngsters.

[Helena Independent; November 5, 1935]

TREMORS TOTAL 836 IN HELENA; BELIEVE MERCURY WILL RISE

At midnight last night the Helena weather bureau reported that it had recorded the 836th distinct tremor since Oct. 12.

There was some cheering news in the report that the mercury stood at 30 above at midnight, and indication that it would go above the freezing mark today. Better weather will greatly facilitate rehabilitation activities in the city.

There were 28 tremors recorded at the weather bureau for the 24-hour period ending at midnight, three of which were classified as "strong." The strong ones occurred at 4:23 and 5:42 yesterday morning, and at 10:36 last night.

The shakes yesterday morning were severe enough to awaken many who said that up to that time they had succeeded in sleeping through the minor jolts.

It was said that the 5:42 tremor was felt at Butte, Bozeman and Missoula.

The early morning disturbance caused damage at the Denver block, which heretofore had escaped any great injury. The place was roped off as the east wall bulged. The wary roomers left in an orderly fashion, and later returned to gather up their possessions.

[Helena Independent; November 5, 1935]

MASONIC STRUCTURES NOT BADLY DAMAGED

Officials of Helena Masonic lodges said yesterday that with the exception of Algeria temple, their buildings were not badly damaged by the series of earthquakes last month. At the Masonic temple on Broadway, the principal damage was cracked plaster and loosened partitions. The Consistory, on Jackson street, survived the first major quake without injury, but the second one shook down some mortar above the stage. There was no structural damage so far as can be ascertained.

Additional plaster fell at the Masonic home in the Helena valley, but the structure withstood the shaking. Good morale has kept up at the home, where many aged people live, despite the shocks.

It was announced that a careful investigation of the Algeria temple will soon be made to determine the loss.

[Helena Independent; November 5, 1935]

"EARTHQUAKE DRILL" FOR SCHOOL PUPILS

Drummond, Nov. 4--Thursday's earthquake caused little excitement among Drummond pupils as the teachers have been giving them drills regularly since the quake two weeks ago. Each child at signal gets under his or her desk. When the building began rocking the pupils immediately got under the desks and after the shocks ceased they were dismissed until after the lunch hour.

Plaster in the school building has some new cracks and a few old cracks have enlarged some, but to date no serious damage has been detected. The high school students upstairs felt the shock much more than those downstairs. No other buildings in town sustained damage. Many families from Helena having relatives in Drummond came back Thursday after the second quake, having felt it was safe to return to the capital last week. **[Helena Independent; November 5, 1935]**

KENTUCKY LIQUOR COMPANY DONATES \$500 TO THE CITY Governor Cooney Will Turn Check Over To Deaconess School

If distilleries selling their wares in Montana would follow the lead of the Glenmore Distilleries company of Louisville, Ky., relief rehabilitation in Helena would make rapid progress and many of those made homeless by the recent earthquakes would soon be "on their own" again. A wire was received yesterday from the Kentucky firm donating \$500 to the city.

As soon as the check arrives, Governor Cooney will turn it over to the officials of the Deanoness school on North Montana avenue in the Helena valley for their use in repairing their properties severely damaged by the quakes. The children of the institution, between 50 and 60 are now being taken care of in the old Salvail hospital.

In its wire to Governor Cooney the distillery company said, "We are distressed to hear of the suffering of your citizens due to the recent earthquake. We are sending you our check for \$500 and ask that you utilize this for relief purposes to the best advantage. If suffering is acute and additional funds required call on us."

Replying, Governor Cooney said, "The people of Helena keenly appreciate your thought of them and your generous donation. Rest assured that it will be judiciously applied for relief of suffering. My heartfelt thanks to you also."

The governor, in commenting on the donation, said that it was a splendid gesture and one worthy of commendation. Of the hundreds of liquor firms doing business in the state, it is the only one to date cognizant of the city's plight and anxious to aid in the emergency.

[Helena Independent; November 5, 1935]

THERMOMETER ACTS AS QUAKE RECORDER

A standard recording thermometer in the poinsetta house of the State Nursery and Seed company greenhouses west of Helena served as a "seismograph" during the earthquakes of the last week, Bill Mills said yesterday. Whenever a shock of any intensity occurs, the needle on the thermometer makes a straight line diagonal to its regular course. The shock of last Thursday, however, nearly emptied the ink supply of the machine on the recording paper.

Mills said that the greenhouses and the down town store survived the quakes in good shape, although the foundations under the boilers at the greenhouses were considerably damaged.

[Helena Independent; November 5, 1935]

HOPE NEW HELENA WILL GROW OF RUINS SPIRIT OF OPTIMISM IS RISING Tremors Go On But All Activities For Reconstruction Are Moving On

Radiating a constantly growing optimism, those directing reconstruction of this quake-torn city yesterday could already visualize a new Helena emerging from her ruins--a stronger, sturdier, finer, more beautiful city.

Plans already under way indicated that the coming year will see the greatest building boom in the history of this 71-year-old city, and as a matter of course its greatest era of prosperity.

This fact is admitted by those who have looked at the situation cold-bloodedly and conservatively; who, having confidence in the courage and character of the pioneer stock inhabiting the city, have considered every angle of the picture and have found only cause for faith and optimism.

"Six months or a year from now, if we have no more devastating tremors such as the last two, you won't be able to find a trace of the quake damages," declared Associate Justice Sam V. Stewart, former governor, now chairman of the city's emergency reconstruction committee.

All activities seemed to gain momentum yesterday and the morale of the city improved proportionately as another 24 hours passed in normal manner. True, the tremors continued and two or three fairly sharp jolts were felt during the period but this condition has come to be regarded as a matter of course and the inhabitants of the city paid them only passing notice. The city has become definitely hardened to the minor demonstrations of the earth's acrobatic ability.

Business throughout the city was excellent and automobile traffic on the streets was fully as heavy as under ordinary conditions before any of the tremors visited the city. Many business establishments reported a lively patronage and people generally were exhibiting good spirits and a greatly lessened tension.

Repairs Pushed

Repair of damaged structures was pushed at an accelerated pace and the din of construction activity resounded on all sides. A kindly weather man gave assistance and temperatures gradually lifted to above freezing for the first time in more than a week. A chinook turned the streets into rivulets as the mantle of snow disappeared.

More than 500 men were at work yesterday removing debris and repairing buildings it was estimated. Through the efforts of J. H. Rowe, 325 laborers were engaged in the work of erasing the scars of the earthquakes--hauling away the debris and razing dangerous buildings.

City Engineer Oscar Baarson and his staff are concentrating for the present on the removal of ruined and dangerous buildings and this work is being pressed with all possible speed. Already nearly 50 homes and buildings have been razed with the consent of the owners and many more will be removed in the days to come.

With the government providing the labor to tear the buildings down, scores of property owners who had held off because of the cost are now voluntarily asking that buildings damaged beyond hope of repair be taken down.

Today, two of the larger structures will be eliminated as hazards. The Crago building on Broadway, formerly the home of the Elks lodge, will be torn down entirely, and the two upper stories of Mayor C. J. Bausch's building on South Main street will be removed and

the remainder of the building reconstructed. This latter structure is the Old Cosmopolitan hotel, a landmark of the city and once considered the finest west of the Twin Cities.

Materials Low

While general repair of homes is going ahead at once, rebuilding of business structures will not be pushed extensively until the razing program is finished. Each day discloses additional buildings which either must be taken down entirely or which have walls that must be removed.

However, reconstruction went ahead at such a rapid pace that stocks of building materials on hand were becoming low and rush orders were being placed by local dealers with manufacturers and mills.

Either of two things were being done to the quake-shattered buildings and homes. Those damaged beyond repair were being wrecked and those which can be made habitable once more are undergoing a thorough program of reconstruction.

E. S. Transue of Denver, Red Cross disaster representative, said the latest figures available to him showed 170 homes badly damaged. Many of these, he said, must come down and the others may be rebuilt if the owners decide the expenditure would be justified.

700 Homeless

More than 700 persons once lived in those 170 houses, Transue said, and now are unable to return. Some can never go back into the houses and the others must wait until builders can make the houses fit to live in.

The 700 or 800 unable to live in their own houses have found other quarters here or in nearby cities and not one is living in discomfort because of necessity.

The population of refugees at the relief shelter warehouse decreased each night and only a few remain in the steam-heated railroad coaches and bunk cars.

Returning peace of mind has sent hundreds back into their own houses, while others, made nervous by the earth jerks of the last few days and nights, have gone to the hurriedly established refugee quarters so they could get a night's sleep.

Twenty artisans were placed at work finishing the interior of a new annex to the Montana Children's home to be occupied soon by St. John's hospital. At St. Peter's hospital another crew worked feverishly to place the interior in shape for another 20 beds.

City Engineer Baarson, with the aid of a group of engineers, will continue with the task of re-inspection but said it would take considerable time to properly examine 1,000 or more buildings for which certificates of occupancy will be issued if found structurally unimpaired.

All Mental

Every time the earth gives a lurch under Helena, and it has lurched pretty close to 900 times in the last month, the residents who stayed around for the whole show "hold that pose" for a moment, settle back to feel their hearts beating several pulsations over the normal, then breathe deeply a few times.

The blood feels like it was instantaneously turned to ice water, but the doctors say there's nothing to it.

"It's all mental," they say, and there is no physical or organic change in the human makeup.

Apprehension alone is the root of the alarm that comes with each earth tremor, they explained. Elderly people not in the best of health suffer the most in this respect, they said. No one escapes entirely, however.

Restless, irregular sleep contributed to everybody's general "state of nerves."

The strain will leave no permanent affect and the gradually worn down systems will be right back in condition, say the doctors, when the continual pounding ceases and people

can convince themselves the earth has settled down once more. [Helena Independent; November 6, 1935]

From Survey

Out Of 1,000 Families Seen, 800 Need No Help

With its survey of the quake-damaged areas of the city virtually completed, members of the special committee appointed to do this work reported to Chairman Hugh R. Adair last evening that of 1,000 families contacted, approximately 800 had declined financial aid in rebuilding or repairing their homes.

Of the total number of homes visited in the quake-torn districts of the city, but 75 would require some private or governmental assistance in repairing or rebuilding their homes, Chairman Adair said.

Workers found a total of 85 families in immediate need, because of the earthquakes, of such requirements as shelter, food, fuel, clothing and medical attention.

Should Be Razed

Twelve structures were deemed dangerous and hazardous and recommended to be razed. The locations of the 12 residences were turned over to the city engineer and to the ERA officials for prompt inspection and action, Chairman Adair said.

All but one of the 17 districts reported the survey complete yesterday. The survey embraced only homes and dwellings and did not include the business districts, apartments or hotels, Chairman Adair explained. He said that the entire survey would be completed by noon today.

In many districts there were a number of vacant homes and the survey workers were unable to get in touch with the owners or tenants. Chairman Adair asked that any person missed in the survey make his report to the chamber of commerce or the Red Cross as soon as possible. He estimated that the survey is approximately 80 per cent accurate.

Work Late

Every hard-hit area of Helena and East Helena was covered in the survey. Those in charge worked late last night classifying the reports and delegating them to the proper agencies so that assistance can be tendered as quickly as possible.

Once again the survey workers brought back an optimistic picture. Fred O. Robinson, member of the special committee, said last night that the great majority of those whose property was damaged were already making plans to rebuild and repair at their own expense. "They are grinning and taking it on the chin," Mr. Robinson said.

In all cases where immediate relief was needed, the reports were given to the Red Cross and will be quickly acted upon. With 1,000 families contacted and 800 of that number listed as not needing any assistance of any sort, survey workers praised the character of the people visited highly.

Donate Services

The work is being done by 34 Helena and East Helena grade and high school teachers and three special workers. The teachers are donating their time and efforts without pay, Mr. Adair said. Others helped in the survey work yesterday and it is planned to finish it today and begin a complete and thorough classification.

Those making the survey are by districts: No. 1, W. L. Fahrner; No. 2, Miss Theo Smith and Miss Mable Smith; No. 3, Tate W. Peek and Katherine Allan; No. 4, F. P. Martinson and C. H. Marple; No. 5, J. C. Coleman and Katherine Blacker; No. 6, John W. Grosse, Dan Bock, A. Salvail and H. E. Benson; No. 7, Alice Israel, Alice Schreiner and F. V. Milner; No. 8, Tena Calander and Margaret Reess; No. 9, Jesse Morgan and Christine Smith; No. 10, Blanche Nowell and Eva LaReau; No. 11, Bay Butler and Clarise Mark; No.

12, Margaret Knudsen and Selma Israel; No. 13, Fred O. Robinson; No. 14, Edith Bray and Pearl Lee; No. 15, C. R. Anderson and Paul Davee; No. 16, Ethel Mellor, Mrs. Grace Muth and Jessie Bayha; No. 17, (East Helena), Andrew Mackanich and teachers of the East Helena school.

[Helena Independent; November 6, 1935]

HELENA WILL HAVE U.S. ASSISTANCE Sen. Murray At Work In Washington

Washington, Nov. 5--(AP)--Senator James E. Murray, Montana democratic, came here today for conferences with federal officials in regard to plans for rehabilitation of the quakeridden city of Helena.

The senator said despite the damage "the people of Helena are not deterred. It has been a serious shock and continued tremors naturally prolonged the mental and nervous strain." "The people of Helena, however, he said, "are meeting the situation with courage. As a consequence of the rebuilding and reconstruction work that will go on the city will be teeming with prosperity in the near future."

Ready To Help

Murray said the Federal Housing administration and the Reconstruction Finance corporation are prepared to give "prompt and effective aid within the legal limitations which control their activities."

He added the Red Cross has responded effectively and is giving aid to all those who have been made homeless and destitute as a result of the quakes. This, together with the \$100,000 set aside by the president, Murray believes, will insure that no one will suffer from the hunger or cold.

He emphasized the seriousness of damage done to public institutions and quasi-public institutions such as the Deaconess School for Children, parochial schools, Intermountain and Carroll colleges and other institutions supported by donation and endowment. "The existing relief agencies, of course, can render no help in such cases and it would require an act of the state legislature or of congress to authorize the use of public funds in such instances," said Murray.

He said he was prepared to aid in carrying out any rehabilitation plans which may be submitted by the people of Helena to the federal government.

The senator said he also planned conferences with officials of the works program in regard to various Montana projects, particularly Buffalo Rapids and the Chain of Lakes.

He said the Buffalo Rapids project is now in the hands of engineers who are attempting to work out a plan by which the beneficiaries will be able to repay funds advanced without assuming too heavy a load.

Signers Awaited

The Chain of Lakes project is now tied up through failure to secure sufficient contract signers in one of the several districts into which the project is divided. Murray said he planned to confer with officials here on the possibilities of a program which will satisfy the objectors and at the same time retain the benefits of the project.

Murray has not decided how long he will remain in the capital but plans a vacation before congress convenes in January.

[Helena Independent; November 6, 1935]

BOARD FIRE UNDERWRITERS CONDEMNS PROPOSAL MAYOR TO REBUILD OLD CITY HALL

Helena's need for a modern and centrally located fire station was forcefully stressed in a letter received yesterday by L. B. Tipling, local representative of the Board of Fire Underwriters of the Pacific, from Charles W. Cook, district secretary of the board. When informed of Mayor Bausch's proposal to rebuild and remodel the badly damaged city hall for a fire station, Mr. Cook wrote Mr. Tipling, explaining what he thought of the plan, as secretary of the board for this district.

The letter says in part:

"I am greatly surprised to learn that there is any thought of rehabilitating the old fire station, due to the poor character of its construction, age and location, as well as the fact that it is unsuitable for Helena's present needs."

Made Recommendations

Following the disastrous fire of July, 1928, which involved 25 buildings in Helena and caused a loss of over \$1,000,000, the board of fire underwriters recommended to the city council a list of necessary improvements to the fire fighting system here. Principal among the factors mentioned was the fire station, even then considered unsuitable by the board. The letter further states:

"The location of the old city hall is unsuitable; egress being poor, coupled with the necessity of transversing narrow, crooked streets, and the problem of heavy traffic in responding to alarms at the north end of the business district."

Amos Shellady, commissioner of public safety for the city, has proposed the erection of a new city hall in the vicinity of the Great Northern depot, west of the Knapp service station. The fire, with other city offices, would be housed in the proposed structure.

Plan Approved

As regards a new fire station, the letter states:

"By all means the old station should be condemned and abandoned and serious consideration given to the erection of a new modern fire and earthquake resistant structure, located near the Great Northern depot. A station in this vicinity would not only be more centrally located, but would also expedite the response to alarms in all sections of the city and would obviate to a large degree the heavy traffic which is encountered from the old station."

The Board of Fire Underwriters, set up by the fire insurance companies, fixes the insurance rates for dwellings and business establishments in the cities under its supervision.

The rate of fire insurance is affected by many different factors, each of which is brought into consideration in the making of rates, or the changing of rates.

In the order of their importance, as listed by the board, they are as follows: Fire department, including personnel, equipment and station; water supply, which includes also the distribution system; fire alarm system, including fire alarm boxes over the city and the headquarters of the system, the fire station and the conflagration hazard.

[Helena Independent; November 6, 1935]

AID FOR HELENA

Roundup, Nov. 5--(AP)--The Musselshell county chapter of the American Red Cross has sent \$100 to aid in the earthquake relief work in Helena. Because the annual roll call will be held this month, there will be no special drive at this time to raise money for the donation.

[Helena Independent; November 6, 1935]

THEATERS OF HELENA PLAN TO OPEN THEIR DOORS NEXT SUNDAY

To further restore confidence and assurance, James H. Rowe, who is in Helena representing Frank Walker, director of the national emergency council, announced last night that Helena's theaters would re open Sunday for the first time since October 18th. "This will give people another opportunity to get these things out of their minds. For days now they've been sitting at home looking at each other and wondering what would happen next, but all this is changing," Rowe said.

Evidence of the tremendous movement toward reconstruction was the early depletion of building supplies and materials in local yards and depots. As a result emergency orders were placed at western mills and with fabricators of various necessities and within a day or so sufficient supplies will be on hand, he added.

Director Rowe announced that with the arrival of numerous building mechanics--plasters, carpenters, plumbers and other tradesmen, Helena now had all the manpower it needed for the present.

"The task now is to place them and provide the needed materials," he observed. [Helena Independent; November 6, 1935]

PARENTS ASKED TO KEEP YOUNGSTERS IN SAFE QUARTERS

Parents are urged to keep their children from playing in buildings damaged and made unsafe by the quake, by Tom McCabe, county relief director, following numerous reports of workmen yesterday that small children were endangering their lives in such a manner. Many of the buildings damaged by the recent tremors have loose brick and rock and to play in them is extremely dangerous, Mr. McCabe said. He also pointed out that some of the vacated homes contain personal property that should not be meddled with by youngsters.

He asks all parents to speak to their children and instruct them to stay away from such structures.

Warning to parents to keep their children from coasting in Helena streets was issued yesterday by Commissioner Amos M. Shellady. No coasting streets have been designated this year and no warning signs have yet been posted.

[Helena Independent; November 6, 1935]

NINE HELENA BOYS AND GIRLS ATTEND MISSOULA SCHOOLS

Missoula, Nov. 5--A check-up Monday revealed that nine sons and daughters of Helena residents who had fled the city of nearly a thousand quakes had enrolled in Missoula public schools.

City Superintendent Ira B. Fee said that six students had enrolled in Missoula's grammar schools during the past three days, following disturbances at the Capital city, while a check at the high school showed that Friday morning three Helena students had registered there. Over the week-end a number of Lewis and Clark county licenses were evident on Missoula's streets, jitter-ridden residents of the shaky city finding a haven in the quietude of Missoula.

[Helena Independent; November 6, 1935]

LARGER CREW NOW CLEARING UP DEBRIS AROUND THE CITY

The FERA crew assigned to tear down hazardous brick and stone walls in the city was increased to about 325 men yesterday, and the work continued with fervor as working conditions, occasioned by a rise in temperature, were more favorable.

James H. Rowe, representative of Frank Walker, director of the National Emergency council, assigned Tom McCabe, FERA head in this county, to supervise the work, and it has been carried on at high speed since Rowe took charge of things late last week.

Work on Schools

Work on the school buildings of the city went further ahead Tuesday as 11 plasterers arrived from outside the city and immediately took up their duties. There were 20 men finishing the interior of the Montana Children's home hospital on Helena avenue, which is to be used temporarily, perhaps a year, by St. John's hospital. Another crew under the supervision of Lease and Leighland, Great Falls contractors, was at work repairing damage done at St. Peter's hospital.

To expedite the general program of inspection and rehabilitation, the services of six engineers were made available by City Engineer Oscar Baarson. Two of the engineers, E. F. Moyle and Maxwell Mason, were loaned by the Montana highway commission at Mr. Rowe's request.

It was reported that the orphans from St. Joseph's are comfortably quartered at Boulder Hot springs, and that A. I. (Daddy) Reeves had already been out there keeping them amused by a musical entertainment that he put on.

Certificate Void

Baarson announced that certificates of occupancy issued prior to the October 31 earthquake were void, and that no new ones had yet been issued. Four engineers will handle the inspection work from now on, and it is estimated that they will have about 1,000 buildings to go over.

"All we need now is our normal period of quiet and Helena will come back and come back fast," said Mr. Rowe. Rowe could see nothing but a bright future ahead for Montana's Capital city.

Scores of householders who left the city in terror after the second quakes October 31 had returned; more and more homes were lighted last night, sending a cheery glow out on what had been a dismal landscape, and everywhere there was less inclination to talk about the disaster and a greater willingness to look ahead.

As fast as human hands and bodies could move, the ugly scars left by the erratic action of the earth were being moved from sight. As the same time plans went ahead for the removal of a number of ancient South Main street buildings erected when the city was born, and many of which, all agreed, should have disappeared years ago. Most of them were rendered permanently uninhabitable by the tremors.

[Helena Independent; November 6, 1935]

QUAKE ORDINANCE IS PASSED AT STORMY COUNCIL SESSION; LET GOVERNMENT PAY, MOTTO

By unanimous vote the Helena city council yesterday finally passed and approved an amendment to the building code which provides for earthquake resistant construction of masonry in all repairs or erection of new buildings. No one appeared before the council in opposition to the amendment.

After the council had acted, sponsors of the measure commended the city administration for its interest in safer construction. They assured the council that their only interest in the building ordinance was to create safe construction of earthquake resistive nature. They promised cooperation with the council and the city engineer in assisting in the interpretation of its provisions and helping educate citizens of the city in good construction.

Great Saving

Stating that there was not such a thing as complete earthquake proof construction, the spokesman for the engineers who prepared the ordinance said that it would provide for safer construction and might mean great savings to this community, both from the standpoint of property and loss of life. It was patterned after the Long Beach, Calif., ordinance and represents the most modern methods with the lowest possible cost in constructing buildings relative to earth tremors such as have struck Helena during the past few weeks.

"From time to time, newer and more structurally sound methods may be evolved," it was stated. "I will be glad at that time to help the council enacting amendments to the present regulations."

Asks Housing Authority

When action was taken by the council on the building amendment, Amos M. Shellady, commissioner of safety, made a direct motion that Mayor C. J. Bausch appoint a housing commission to secure a charter from the state and a loan and grant from the government for a municipal housing authority, by which hundreds of small homes could be built for the shelterless before winter sets in with earnest, with no ultimate cost to the city.

"There is no question of it," Commissioner Shellady said, "the city of Helena has been slack. This authority should have been created long ago by the mayor. It is never too late to start. I therefore move that the mayor appoint a housing commission."

There was no second to the motion made by Commissioner Shellady. Although Helena has suffered a great catastrophe, the motion of Commissioner Shellady fared no better than it has during the past two or three months.

No Use For It

"There is a local committee of seven handling the situation, and handling it quite nicely. On your own statement, there will be no new construction in Helena for several months, so what is the use of a housing commission?" Mayor Bausch said. Commissioner Shellady explained that he had made the remark about new construction only in connection with business houses and that it did not hold true in the residential districts.

Commissioner Shellady again made his motion but Mayor Bausch curtly ended the discussion by turning to his junior commissioner, Noble P. Evans, and saying, "Have you anything this morning, Noble?"

"No," Commissioner Evans replied.

With pay claims written up for those who guarded Helena's property during the crisis of the earthquake, Mayor Bausch flatly refused to pay them until they had been presented to the government and refused. Commissioner Shellady had asked that a supplemental

emergency ordinance be passed so that a fund could be created in the police department against which the warrants could be issued.

"The government will pay them. I think the government will be just in this matter," Mayor Bausch said. "If my building was knocked down I would leave town unless I could get government aid to rebuild it."

"I know the government will be just so let us pass this emergency ordinance. Let us go as far as we can in our own behalf," Commissioner Shellady replied.

Noticeably disgruntled over the entire earthquake situation and the fact that capable men had stepped in to relieve the pressing problems by virtually taking the entire work set-up from the hands of Helena's officials, Mayor Bausch launched into a terrific tirade against Commissioner Shellady, Helena newspapers, and the slow "red-taped" government. Shouting at the top of his voice, Mayor Bausch said, "People know what we are faced with. The people know that the mayor is doing a good job. We (pointing to Commissioner Evans) are saving the taxpayers a lot of money, and we plan to use it in the next campaign."

Wants Action

"I am talking to you, the mayor of Helena, and not

to the public or to the papers. I want things done in an efficient, business-like way. That is all. We have lost the confidence of the people. We have not done our part," Commissioner Shellady said in reply.

"Who told you that?" the mayor asked.

"No one had to tell me that."

"If no one told you, you don't know it," Mayor Bausch retorted."

Yielding a bit, the mayor said that there was s special fund in the budget providing for the expenditure of \$1,000 for repair of the city hall. "This is an emergency and I guess we can use that to pay some of these warrants," Mayor Bausch said.

"One thousand dollars," Commissioner Shellady said, "That is only a drop in the bucket. We may have the militia to pay for."

"I am taking it for granted that the federal government will handle that," the mayor said.

"This is no time to take things for granted," the commissioner of safety said.

Is on Job

Declaring that the council had no right to increase the tax burden of its people, the mayor said, "We can't create an additional debt. The people are opposed to it."

"The people are not opposed to it," Commissioner Shellady countered. "A higher power put that debt against them. We must help in this crisis and keep our citizens here."

"We will work out our problems," Mayor Bausch said. "The banks will help the people, the government will help. The people know their mayor is on the job. And you are talking like a chicken."

Commissioner Evans, who remained silent during the exchange, entered into the discussion when the mayor charged that Helena papers were misrepresenting the work being done. After the mayor had pointed to him and said, "This boy is doing good work," Commissioner Evans said, "I am not a manager, I am a worker. "There are too many managers on the job now."

Discounts Work

The commissioner of streets also charged that governmental red tape was slowing down the work, that he hadn't been able to buy two ladders on the government payroll, and that 300 FERA workers were doing little actual rehabilitation work. "They are carrying a brick back and forth," he said, in refuting the stupendous work program launched here the last

few days by J. H. Rowe, personal representative of President Roosevelt. Feeling that it was proper time to introduce his personal difficulties, the earthquake problem was put aside as the mayor resurrected the typhoid fever epidemic of six years ago and commenced a tirade on how, if others had not intervened he would have been able to settle with all the typhoid fever victims on the basis of 10 cents to the dollar and would have kept the attorney fees down and "R. Lee Word from riding in a \$5,000 car." People drifted in and out of the council chamber as the mayor's voice rose.

[Helena Independent; November 6, 1935]

STEAMING OPENING IN EARTH FOUND NORTH OF WOLF CREEK

This will relieve a lot of people who believed that the earthquakes will all subside as soon as a "geyser breaks out.

Kenny Burns and a group of four others from Wolf Creek were hunting in the vicinity of the North Fork of the Dearborn the other day when they observed steam coming out of the ground.

The place where the steam escaped was "big enough for a man to fall into," Burns said. The party threw cigarettes into the opening and watched the steam shoot them into the air. So far as could be determined, the steaming cavern had never been seen before by people who live in the vicinity of the North Fork.

Burns told the story to Dean S. Carder, U. S. Coast and Geodetic Survey representative, who is here in charge of seismographs for that department. Carder is anxious to get any further information in regard to the steamy vent, and perhaps will investigate it himself in the near future.

The opening, however, is miles away from what is considered the epicenter of the Helena earthquakes.

[Helena Independent; November 6, 1935]

TWENTY-SIX SHAKES FOR 24-HOUR PERIOD BRING TOTAL TO 863

Twenty-six tremors for the 24-hour period ending at midnight were recorded at the Helena weather bureau yesterday, bringing the total since October 12 to 863.

Two of those reported at the weather bureau for the 24-hour period were described as strong, and two others as moderate. The others were weak or barely noticeable. Strong ones occurred at 1:58 and 4:44 yesterday morning, and moderate ones were at 4:45 yesterday morning and 1:53 in the afternoon.

Up to midnight, the last tremor, described by the weather bureau as "very weak," was at 11:40 o'clock.

Last Longer

Strong afterquakes yesterday, according to the weather bureau, appeared to last longer than those following the major earthquake of October 18, and they were probably from a vertical earth movement.

Epicenter of the latest tremors has not been located, nor their intensity determined, Dean S. Carder, San Francisco, of the U. S. Coast and Geodetic survey, said yesterday. The latest aftershocks have widened the cracks in several buildings, but inside of houses have done no more than to rattle dishes and chinaware.

Strong quakes in Helena yesterday were both felt at Great Falls, and reports were received that they had also been felt at Butte and Livingston.

The city council at Great Falls was somewhat concerned with the intensity of the tremors there, and ordered an inspection of school houses. Strong earth movements yesterday were reported to have damaged some plaster in the Falls, and to have cracked an occasional foundation.

[Helena Independent; November 6, 1935]

COUNCIL ASKS AID IN GETTING STATE TO CONDEMN SITES Amended Ordinance To Be Presented Today At Session

After a brief session yesterday afternoon the city council adjourned to take under consideration a proposed amendment to the city ordinance providing for the condemnation of damaged buildings and this afternoon it will be formally presented to the city fathers. Reluctant to proceed by itself with condemnation proceedings and the wrecking of hazardous properties, the council yesterday asked State Auditor John J. Holmes and his assistant, Jean D. Kelley, to work out a method whereby such condemnations could take place.

Support Pledged

The two state officials pledged their cooperation and said that the state fire marshal, Art Parsons, would work with them and would condemn any building constituting a fire hazard or a danger to adjoining property. Beyond that, because of the limitations set by statute, the council must act itself. "We are not injecting ourselves into the municipal affairs of this city, but we will be glad to cooperate as far as the law allows us," State Auditor Holmes said

Under the proposed amendment to be considered today the matter of condemnation would be made easier and would embrace masonry structures as well as frame and log buildings.

"Liability to fire and consequent damage to adjoining property are the only considerations governing the state fire marshal's activities," Mr. Kelley asserted. "And in any event, the property owner has his day in court."

Would Expedite

Mr. Kelley suggested that in such an emergency as exists here, the courts in all probability would set such orders for hearing promptly at the expiration of the 10-day period.

"Where the property owner is obstinate in regard to removal of hazards, the city can apply to the state fire marshal's office for quicker action provided the hazard involves one of fire and danger to adjoining property," Mr. Kelley said.

Under the plan set in motion Monday, the government, through FERA labor, will defray the cost of removing dangerous structures. Property owners are urged to cooperate with city and state authorities in such matters.

The city council October 21 passed an ordinance declaring an emergency to exist and giving the city engineer, as ex officio building inspector, full power to order the condemnation and demolition of structures or parts of structures deemed dangerous to life and property.

Little Faith

Apparently the council has but little faith in the efficacy of its action of October 21, and seeks to find other means of relieving the city of possible liability under suits for damages. The state auditor yesterday announced that State Fire Marshal Arthur Parsons and the facilities of the state insurance commissioner's office would be at the service of the Helena reconstruction commission, headed by Justice S. V. Stewart of the state supreme court.

[Helena Independent; November 6, 1935]

COURTHOUSE DECLARED UNSAFE FOR OCCUPANCY; DEPARTMENTS ARE SEEKING OTHER QUARTERS

Declared unsafe for occupancy after an inspection Monday revealed damage far more extensive than was believed at first, the Lewis and Clark county courthouse will be entirely vacated until repairs can be made or it can be rebuilt. Its condition was pronounced dangerous.

The damage to the massive courthouse and the equally massive county jail across the street will total many thousand dollars it appeared yesterday. The three engineers who inspected the courthouse were George McPherson, A. N. Olson and Fred G. Kallberg. They made their report to F. H. Marvin, ERA director in Montana.

In the meantime, the various departments of the county government were seeking new quarters where they might carry on their business without interruption, and it was believed several of the offices might be quartered in the federal building temporarily.

County Attorney Frances Elge has already been provided with office space there, through the courtesy of John B. Tansil, U. S. district attorney, who called Miss Elge by long distance and offered her a portion of his suite on the third floor as soon as he learned of the predicament.

It was believed that the district court could also be accommodated in the federal court room and chambers, and Postmaster Harry Hendricks was attempting to contact Federal Judge James H. Baldwin whose permission is necessary.

Describe Damage

The report of the engineers on the inspection of the courthouse follows:

"We consider the building unsafe for occupancy and recommend that no persons, other than those engaged in the work of temporary repairs, be permitted around and in the building."

"All appendages projecting above the roof line should be torn down, as they are loose, and another quake or even a heavy wind may cause them to fall, causing damage to the courthouse itself as well as being a serious menace to safety.

"Due to the fact that the outside walls, at the point where the roof rests on them, are leaning outward, a considerable strain or upward thrust is endangering the whole structure. If the outside walls give away at this point the entire roof will fall on the top floor forcing the walls apart, and the whole building will collapse. Fractures in all the partitions running east and west throughout the whole building, and extending from the first floor up through to and including the attic, indicate that the entire west side of the building, and being about six feet in width, is leaning slightly away from the rest of the building."

[Helena Independent; November 6, 1935]

CITY'S CONDITION FOUND FAVORABLE BY DR. SHEPHERD Usual After Effects Not Present Here

"Contrary to the general rule, conditions in Helena are favorable considering the disaster through which the city has just passed," was the statement issued last night by Dr. W. P. Shepherd, secretary of the western branch of the American Public Health association, who came here from San Francisco to investigate health conditions in the city.

"None of the after-effects usually present after a disaster of any kind is visible in Helena," he said, "and I find that the local health authorities, the American Red Cross and the

Cause For Thanks

"Although Helena has suffered greatly in the loss of life and the damage to property, the citizens can be thankful that the earth shocks which have caused the trouble here occurred during cold weather, and at a time when there was little disease in the city.

"Cold weather has undoubtedly added to the discomfort of those people who were rendered homeless by the temblors, but, at the same time, the cold weather has helped keep down a terror worse than earthquakes--disease.

"There is a terror which accompanies earthquakes that is peculiar to them alone, but if people will stop to realize that fewer people have been killed by earthquakes than by any of the other disasters which happen, their morale will be greatly strengthened.

No Fires

"Helena has also been fortunate in that there have been only a few small fires, as fire presents a far more horrible danger to property and life than do earth shocks." In 1930 Dr. Shepherd checked every authentic earthquake report in the United States, and found that the deaths caused by those shocks were far outnumbered by the number of persons who met their deaths by leaping from the Brooklyn bridge in the same period. "I have not the slightest doubt," Dr. Shepherd concluded, "but that Helena will rebuild into a greater city than the present Helena, and if past records hold true, the city should enjoy a brisk business during the next several years."

[Helena Independent; November 6, 1935]

Salvation Army have the situation will in hand.

GOOD SHEPHERD HOME HAS DECLINED OFFER TO MOVE TO SPOKANE

Faith in Helena and the future was evidenced in an emphatic manner yesterday when it was announced that sisters of charity in charge of the House of The Good Shepherd, one of the largest institutions of its nature in the northwest, had declined invitation to move bag and baggage to Spokane and would remain here.

Though its huge suburban plant was badly damaged and the laundry, its chief source of revenue, put out of operation, the sisters determined to remain here although the offer by the Washington City included free transportation and modern quarters for the personnel and 76 wards.

An examination, J. H. Rowe announced, showed that three stories of the building could be reconditioned and used and that the laundry plant could be repaired. Housed in the T. C. Power home with inadequate equipment, Mr. Rowe sent to Butte and borrowed chairs and tables and other necessities.

[Helena Independent; November 6, 1935]

CITY'S HOUSING PROBLEM NOW IS SOLVED HOMES WILL BE BUILT BY HELENA MEN

Swift Action

Businessmen Organize New Concern To Build Homes

Helena's acute housing problem, occasioned by the utter destruction of more than 100 homes, was solved speedily and effectively yesterday when a group of public-spirited business men formed a private housing corporation to act in place of the public housing authority which Mayor C. J. Bausch refused to create.

This private concern will accomplish with subscribed funds what the public commission would have done under a loan and grant public works project had the mayor seen fit to create the housing board authorized by law. It is estimated conservatively that a shortage of at least 200 homes exists in the city today.

Plan 60 Homes

With the organization yesterday afternoon of the Helena development company, the city soon will have between 50 and 60 new, modern, earthquake resistant dwellings, each with from four to six rooms, perhaps of frame structure.

More than 50 of the city's leading business men and citizens met at the Placer hotel, appointed a temporary board of directors, organized a committee to secure building lots, over-subscribed a call for \$8,000 working capital, and sent Federal Housing Administrator Barclay Craighead merrily on his way to Washington, D. C., to arrange for having loans insured by the federal government.

Craighead subscribed the first \$200 of the \$8,000 and left late last night over the eastbound Northwest Airlines plane for Washington, D.C., to tell Uncle Sam that its citizens are going to build up the greatest Helena in the city's 71 years of existence.

Called by Hibbard

The meeting yesterday afternoon was called by A. T. Hibbard, president of the Union Bank and Trust company. He, Mr. Craighead and several others have been working on the proposition for the last day or two.

Briefly, this is the plan:

A working capital of \$8,000 will be raised--which has been done; lots approved by the Federal Housing administration will be secured from their owners, who will be paid for them with stock of the Helena Development company--that will start after a meeting at 9 o'clock this morning when workers will be assigned sections of the city to determine the ownership of lots.

Four to six-room dwellings, all modern and approved by the FHA, will be constructed. They will be rented at a reasonable figure.

The Helena Development company will issue bonds in the sum of about \$200,000 to build the houses, such bonds to be guaranteed by the federal government. They may be sold to some federal agency, or perhaps to individuals if they want them.

The bonds will run over a 20-year period.

Rentals from the homes will be used to pay the interest, principal and cost of amortization of the bonds.

All Modern

The homes will be built on the most desirable building lots in the city, as required by the FHA. Plans and specifications will be furnished by the FHA. There will be five or six different house plans, but no two alike will be built close to each other.

This is the temporary board of directors of the Helena Development association:

A. T. Hibbard, Chairman.

S. V. Stewart.

Walter Larson.

Alex Cunningham.

Earl Murphy.

J. D. MacKenzie.

Ed. O'Connell.

Earl Brown.

A committee headed by Matt Staff will start out this morning to secure the desirable building lots, although many have already been offered by those attending the meeting yesterday. Staff will be assisted by Earl Murphy, two men from the state FHA office, a man from the Montana Life Insurance company and others to be supplied through Secretary O. C. Lamport of the Helena Chamber of Commerce.

Most Important

Mr. Hibbard called the meeting to order yesterday afternoon, and outlined the plan, saying that he believed the "construction of the houses was about as important a thing as the group could do at this time.

He told of the need of the low cost housing projects under the FHA, but said that for the loans to be insured by the FHA, the dwellings must be built on the most desirable lots in the city.

Mr. Hibbard said that Helena was not only in need of housing facilities, but also that the psychological effect of the business men embarking on a venture such as this at the present time would improve the morale of everyone living here.

Mr. Craighead said that he has been in communication with the housing authorities in Washington for the last several days, and that they believed if he was there Friday morning a plan could be worked out so he could leave for Helena by Monday with a commitment to insure the building bonds.

Strictly Rental

There was some discussion of selling the homes after they are built, but from the regulations of the FHA, the group decided that it should be strictly a rental proposition. It was believed advisable to let the contract for all of the houses to one contractor. By doing this it was brought out, there would be a saving on the cost of the structures that could not be made if contracts were let by the unit.

There was considerable discussion in regard to securing lots on which to build the dwellings, and many of those present said they had property that they would be willing to exchange for stock in the company. Most of the lots mentioned were desirable, and would meet with the approval of the FHA.

It was on motion of J. D. MacKenzie that the group decided to form the company. The motion carried without a dissenting vote.

Matt Staff, who is managing the Park Avenue apartments and the Blackstone apartments in Helena said that such a project would not in any way injure the owners of present housing facilities.

"At these two apartment houses we have from 15 to 20 on the waiting list all the time," said Mr. Staff. "And the apartments are not occupied by people who are here just temporarily-most of them are what we consider permanent residents who have permanent jobs and positions in Helena."

Mr. Staff volunteered his services to the company, so was made chairman of the committee that will check up on the lots to be used.

If Mr. Craighead is successful in getting the commitment from the FHA in Washington, to insure the loans obtained to build the houses, the big project should be under way by the middle of next week.

Is Rebuke

By its action yesterday afternoon, the group of Helena business men rebuked the stubborn attitude of Mayor C. J. Bausch in refusing to appoint a housing authority in the city. It appeared that they were determined the city should go ahead despite its erratic city official. The proposal to create a public housing authority had been before city council formally at least four times. It was first presented last spring after the legislature had passed an act making it possible for cities of Montana to come under this phase of the public works program.

At that time a group of business men sponsored the movement and a public meeting was held at which a resolution was passed expressing the need for additional housing in Helena and calling upon the city council to take action directing the mayor to appoint the five-man commission which would constitute the authority.

The council adopted the resolution by a two to one vote but Mayor Bausch blocked the matter by refusing to appoint the commission. It was brought up at least three other times, the last being on Tuesday when Commissioner Amos M. Shellady again proposed that the mayor create an authority. His proposal was curtly turned down.

Under the plan, the housing authority would have become a municipal corporation. It would have prepared a project embracing the required number of reasonable cost new homes and would have presented its application to the PWA. It would have been empowered to issue its bonds for 55 per cent of the total cost and would have received a grant of 45 per cent from the government. The authority would have supervised the construction of the homes and their rental or sale on easy contracts.

The new Helena Development company will accomplish the same purpose although not under as favorable a financial arrangement.

[Helena Independent; November 7, 1935]

WPA GOES OVER TOP IN ITS PROGRAM TO PROVIDE JOBS; 5,000 MEN ARE NOW AT WORK

A bit groggy from the effects of more than 800 earthquakes, jarring the foundations and knocking the parapets from the top of the Works Progress administration building in Helena, besides taking it on the chin from a below-zero blizzard gripping every section of the state, Montana's Work Progress administration nevertheless went over the top Wednesday morning in its effort to provide work on WPA projects for eligibles on Montana relief rolls, and exceeded by 204 its quota set by National Administrator Harry Hopkins at 5.000.

District one from Havre came in with 829 assignments; district two, with headquarters at Billings, registered 823; district three with headquarters at Great Falls, 724, and district four with headquarters at Butte had put 2,819 workers on the job.

In Two Days

With the president's approval of many necessary projects reaching the offices only two days ahead of the start of the drive, all available employees were commandeered for the use of the engineering and assignment forces and every formality involving red tape was dispensed with in the effort to comply with Administrator Hopkins' requirements for the first five days in November.

With 5,204 workers from Montana relief rolls already assigned, the next goal to make will be 7,796 additional workers, or a total of 13,000, by November 20. Although Montana's relief rolls have carried as high as 24,000 eligible workers at the peak load of March, 1935, and although the exact number of workers available cannot be determined until assignments have been finally made, it is believed that with the exception of scattering workers in the rural districts who may be assigned to projects under the direction of the resettlement administration, the initial task of providing jobs under the Works Progress administration will have been accomplished.

Million Allotted

Allotments have been made to the various districts to carry the work forward to March 15, totaling \$1,085,032. The projects upon which work has started cover a great variety in all sections of the state, and embrace many permanent improvements.

In the Butte district 188 men started to work on the Thompson park recreational area, where a district embracing more than nine square miles is to be converted into a beautiful park and public playground, making use of native timber, mountain streams and many natural advantages. A big undertaking rip rapping Silver Bow creek gave jobs to 506. Campus improvements at the School of Mines started, as did a sewing project to employ 100 women.

In Fergus county the Valentine Blood-Creek dam, impounding a reserve supply of water for a great range country got underway.

At Billings crews started to work demolishing the old federal prison building, salvaging the stone for use later on an airport improvement project. County fair and athletic field projects also got underway.

At Great Falls enough additional men were put to work on park and civic improvements to entirely take up the employable case load.

Swimming Pools

In Missoula work started on an extensive park beautification program which involves the construction of swimming pools, bridle paths and picnic grounds. A cemetery landscaping project that will cost more than \$30,000 was begun.

At Anaconda a road improvement job was started that will cost more than \$40,000 and a women's sewing project to cost \$37,000.

In Flathead county at Kalispell and Whitefish, recreational center, bridge improvement, sewer and road projects started. At Polson the long hoped for Polson dock project started. At Miles City fairgrounds, airport and county road projects were begun.

Stick To Posts

The Livingston projects started beautifying the city park, completing rodeo grounds and constructing a community hall.

At various places in the state work began on farm-to-market road projects.

Works Progress employees who stuck to their posts despite the earthquakes and who worked days, nights and Sundays in the assignment and project departments are entitled to great credit," said Administrator Ray Hart Wednesday, "and I am greatly pleased that within a single week after approval of projects of the necessary type had been received, we were able to put to work on projects of permanent value more than one-third of the employable people on the relief rolls in Montana."

[Helena Independent; November 7, 1935]

CITY BEEHIVE OF ACTIVITY AS RECONSTRUCTION WORK IS PUSHED RELENTLESSLY

With each successive day's earth joltings revealing new or additional damage not apparent before, all forces in the city are now concentrated on the task of removing dangerous buildings and eliminating hazardous conditions. City Engineer Oscar Baarson is directing the work, assisted by State Fire Marshal Arthur Parsons.

Operations yesterday were chiefly centered on the rows of old brick buildings on South Main street, most of them souvenirs of the late sixties--pioneer structures of the Last Chance gold boom camp. All were hard hit by the repeated quakes and many that were not shaken down had bulging walls that were a constant menace.

For safety's sake and to facilitate the work of demolition, the district was roped off from Broadway to State street and both cars and pedestrians were barred unless they lived there or had urgent business in the area. The barriers were removed at nightfall after work had stopped.

Damage Grows

Each day adds to the total of damage laid at the door of the earthquakes. The preliminary estimate after last Thursday's shake-up was approximately \$4,000,000. Now City Engineer Baarson admits that the lowest possible minimum is \$3,500,000 and that it may run anywhere from that figure to \$5,000,000.

Such structures as the Crago building, formerly the Elks home; the old Davis building at Wall and Main; the C. J. Bausch building, formerly the old Cosmopolitan hotel, and many others were not counted in the pervious estimates as visible damage had not appeared until the last few days.

How much the actual loss will be in many of these buildings is questionable, as it is agreed that they should have come down years ago, but it all adds to the total.

May Be Some Time

Likewise, the continued tremors are adding to the loss on already damaged homes and business buildings. More bricks are tumbled down and walls are bulged a little more each day. It will some time, not until after reconstruction work is well under way, that any accurate estimate of the property damage can be obtained. Rebuilding operations are likely to bring out defects unsuspected, it was pointed out.

City Engineer Baarson announced last night his offices will be moved today to the Y.M.C.A. building where he will be located in the northwest corner of the second floor. He is forced to vacate his present office in the Placer hotel because it has been leased to the Miller Insurance agency of Butte which is opening a branch in Helena. That concern desires to start remodeling the office today.

Pushed Relentlessly

The shortage of building materials in the city was somewhat relieved yesterday by the arrival of several carloads from the west, and work speeded up immediately. Workmen labored until after dark and in some instances until after into the night with the aid of lights as rehabilitation was pushed relentlessly.

Warmer weather also greatly facilitated out-door work, particularly construction, and permitted the evacuation from Helena of 26 tots ranging in age from 3 weeks to 3 years. They were from St. Joseph's orphanage in the Helena valley and had been cared for in the Parish Home of Father James G. Tougas of St. Helena's cathedral until room was provided at the Boulder Hot Springs hotel.

Jamie, 4 weeks, and Patricia Ann, 3 months, the youngest of the infant refugees,

demanded the most attention from white frocked nuns who gave them every care. The two tots after the collapse of their Helena valley home were housed in a manger at the orphanage stable but suffered no ill effects from sub zero weather.

Of vital interest to Helena was the announcement of Emergency Director James H. Rowe, assistant to Frank Walker of the new deal, that Helena seemingly was assured of the rebuilding by the government of its badly damaged \$500,000 high school.

"I feel very encouraged in the belief that Helena at least will have that heavy burden taken off its well loaded shoulders," said Rowe, who through the day directed what he pleased to term "mopping up activities."

All through the quake scarred area Rowe's 300 to 400 federal paid workmen moved ahead removing the debris and otherwise brightening up the general picture.

Because of the recurrent tremors, City Engineer Oscar Baarson said safety inspections except those immediately needed, had been terminated for the time being.

During the late afternoon civic authorities were kept busy denying and at the same time denouncing false radio reports telling of recent severe quakes; heavy additional losses and the opening of chasms from which steam and smoke emitted.

Just where they originated no one seemed to know.

[Helena Independent; November 7, 1935]

WIII NOT OPEN

The theaters in Helena will not open Sunday, it was announced yesterday by Commissioner of Public Safety A. M. Shellady and City Engineer Oscar Baarson. "The theaters will not be permitted to reopen until new certificates of occupancy are issued," asserted Mr. Baarson, "and this will not be done immediately. As a matter of fact, the managers of the show houses do not desire to open at this time."

Mr. Shellady emphasized the fact that no public places would be permitted to house crowds until safety was absolutely assured.

[Helena Independent; November 7, 1935]

PROPERTY OWNERS URGED TO REMOVE HAZARDS AT ONCE While Government Is Providing Free Labor

Helena property owners, whose buildings were damaged by the series of earthquakes here in the last few weeks, are urged by Secretary O. C. Lamport of the chamber of commerce to take advantage of governmental aid being offered at this time. Lamport said his office is equipped to help property owners clear the way to have the rough work done.

All that is necessary to have free labor tear down badly damaged buildings, broken chimneys or sagging walls, or to have debris hauled away and good brick sorted from the bad, is for the property owner to sign a release before a notary public, it was pointed out.

Forms Available

Forms may be secured at the office of the city engineer in the Placer building or from the chamber of commerce, also in that structure.

About 400 men are now employed in the city in this relief work. Most dangerous of the structures are being razed first and a number of such buildings have been torn down already.

"Any property owner who has a pile of debris in his yard and wants it hauled away, who has a building that has to be torn down, or has a chimney that needs to be razed before a new one can be put in its place, can have the work done for nothing if he will take advantage of this system," Secretary Lamport said.

"We are keeping lists of these necessary work projects here and the orders are being filled as quickly as possible," he said.

[Helena Independent; November 7, 1935]

ICKES' EXECUTIVE ASSISTANT WILL ARRIVE HERE TODAY TO LOOK OVER SCHOOL SITUATION

A. H. Martin, executive assistant to Secretary Harold I. Ickes of the Department of the Interior of the United States, left Washington, D. C., by plane yesterday for Helena to confer with James H. Rowe, personal representative of Frank Walker, director of the National Emergency Council, in regard to securing a Public Works grant to repair Helena schools damaged by the big earthquakes.

Martin will arrive in Helena over the Northwest Airlines early this morning.

Mr. Rowe received a wire yesterday from H. B. Hackett, assistant administrator of the PWA, that Secretary Ickes was sending Martin to Helena.

Takes the Lead

Mr. Rowe, who is directing rebuilding activities in Helena for the federal government, has taken the lead in securing a grant from the PWA to repair the damaged half million dollar high school and the Bryant school.

At a meeting of the trustees of the Helena school district on Monday evening, Mr. Rowe advised the board that Hackett would take the matter up with Secretary Ickes yesterday when the latter returned to Washington from a business trip.

Martin's coming to Helena will be of the utmost importance, as he can now secure first-hand knowledge as to the damage done to the school buildings in Helena for submission to PWA officials in Washington.

Choice Good

Mr. Rowe said that Secretary Ickes' selection of Martin to come to Helena was indeed a good one. He believes that Martin will grasp the significance of the loss better than anyone who could have been sent, and that the Helena school district will have a real friend to represent it when the official returns to Washington.

Rowe said that he knows Martin, as his offices are in the same division as Mr. Walker's in Washington.

[Helena Independent: November 7, 1935]

WEDNESDAY TREMORS LESS FREQUENT, SAYS THE WEATHER BUREAU

The number of earth tremors in Helena became less frequent and of less intensity, as only three, all described as weak, were recorded at the Helena weather bureau over a period of 15 hours and 37 minutes, terminating at midnight last night.

There had been 17 felt for the 24-hour period ending at midnight, most of which occurred before 8:23 yesterday morning, when a strong one was tabulated. The strong one Wednesday morning was described as two jolts followed by a rumble.

After 8:23 a.m. yesterday, weak tremors were reported at 4:54 yesterday afternoon, and at 10:48 and 11:35 last night.

At midnight last night the tremor total stood at 880 since October 12, the twenty-sixth consecutive day of seismic motion in the city.

[Helena Independent; November 7, 1935]

KALISPELL RAISING \$2,000 FOR RELIEF OF QUAKE VICTIMS

Sam A. Roberts, chairman of the Lewis and Clark chapter of the American Red Cross, received word yesterday from the Kalispell Chamber of Commerce that that body's campaign for funds for relief of the distressed in Helena was going over in a big way. The chamber stated that it had already exceeded its original goal of \$1,500 and expected now to raise \$2,000. The Kalispell Interlake, daily paper, aided with a full page ad and the Kalispell radio station donated broadcasts to promote the drive.

[Helena Independent; November 7, 1935]

QUAKE SURVEY OF DWELLINGS IN HELENA COMPLETED; MANY NEED NO OUTSIDE ASSISTANCE

Helena tightened up its quake-notched belt yesterday and looked over its damaged residential buildings, determined to render speedy relief where needed and to guide those whose dwellings were battered by the earthquakes to proper governmental agencies for financial assistance, if needed.

The quake survey, commenced in the city by the local reconstruction committee, completed its preliminary work yesterday, painting a cursory picture far less deplorable than snap-shot judgment would have it, according to Hugh R. Adair, chairman of the survey committee.

Dwellings Only

While the committee limited its activities to the residential districts alone and did not attempt to gather information on public buildings, business houses, apartment houses, hotels and the like, it did cover with 80 per cent accuracy, the damage left in the trail of the quakes as they shook the city.

Handicapped by the fact that a number of damaged homes had been vacated and their owners not accessible to the survey workers, reports of the survey disclosed that 481 homes in Helena had been damaged to a considerable extent. The degree of damages ranged from complete ruin to partial destruction, such as fallen chimneys and walls, Chairman Adair said.

Few Need Help

While many of the dwellings represented life long savings of the owners, Helena citizens were stoically inclined and survey workers reported that 357 of the 481 declined financial assistance, determined to rebuild or make the necessary repairs on their own initiative and at their own expense--no matter the hardship involved or the frugality entailed.

Out of the group of damaged homes, the survey disclosed that 124 will need some sort of financial aid for their building programs, either through private loaning agencies or through such governmental branches as are available, the chairman said.

The survey showed that there are 17 homes so completely damaged as to constitute hazards to the safety of life and other property and their locations were turned over to the city engineer for close investigation and subsequent action.

Temporary Aid

One hundred and four cases were reported as in immediate need of such assistance as food, clothing, fuel, medical attention and cash advances for the repair of chimneys and windows, essential for reoccupancy, Chairman Adair said. All but six of those cases have been turned over to the Red Cross and will be acted upon promptly.

Work of tabulating the reports now is under way and when this is completed it will be of great assistance to the city in ascertaining actual rehabilitation needs as effecting the residential districts. Those working on the tabulation include the Misses Elizabeth Allan, Emily Stewart, Margaret Rees, Marion Young and Ora Conway.

The survey was conducted by 35 volunteer grade and high school teachers in Helena and East Helena. The local reconstruction committee highly commended the teachers for their work and the spirit in which they entered into the emergency. Appreciation was also extended to the office of Jay Diamond, chief statistician of the bureau of crop and livestock estimates for its work in getting out the necessary blanks and doing the mimeographing work.

While other teachers have been covering the damaged residential section of the city, Miss Conway of the Hawthorne faculty has been stationed at the Chamber of Commerce, helping coordinate the survey. She has been handling the reports and caring for the information as it is turned in by the others.

[Helena Independent; November 7, 1935]

RADIO BROADCASTS FALSE AND ANXIETY AT CAPITOL ENSUES

Enlarged and erroneous radio reports, purportedly emanating from the Billings station, caused grave concern at the capitol yesterday.

The radio broadcast of yesterday noon had severe earthquakes in Helena causing great damage to the west end of the statehouse.

D. A. McKinnon, chief engineer of the highway department, who was in Miles City with Governor Frank H. Cooney, telephoned his offices here to determine the extent of the damages which the radio broadcast stated had occurred.

Parents of many of the capitol stenographers and secretaries made long distance calls to ascertain their safety. Miss Mary Walker, employee of the state fish and game commission, received a call from her mother in Superior. She said the radio had broadcast that the west side of the statehouse had collapsed.

Walter Small, custodian of the building heard the broadcast at noon. He said the Billings station said the capitol had been considerably damaged and that the west wall was greatly weakened. He labeled the broadcast an untruth and said no damage whatsoever had occurred during the day there.

[Helena Independent; November 7, 1935]

DEMOLITION WORK BEGUN IN EARNEST ALONG SOUTH MAIN Cars And Pedestrians Are Banned From Razing Zone

Demolition work was begun in earnest yesterday along South Main street, and the thoroughfare was roped off from Broadway to State street, while workmen were engaged in tearing down several buildings which were in a dangerous condition.

Highway patrolmen and members of the Helena police department were stationed at both ends of the closed section in order to keep car and pedestrian traffic out of the zone.

A crew of workers removed the coping from the top of the front wall of the old Cosmopolitan hotel building preparatory to razing the upper two stories of the badly damaged structure.

Other workmen were engaged in the task of demolishing the old Davis store building, both side walls of which were leaning dangerously to the south.

Fear Damage

Another group of workmen were set at boarding up front windows in the neighborhood of the two buildings, as it was feared that another temblor of average intensity might crumble the weakened structures, causing damage to surrounding buildings.

The top of the front wall of the building in which the Weggenman Market is located inclined sharply toward State street, and the sidewalk in front of the building was roped off as it was feared that the wall might fall at any moment.

A section of Main street at the corner of Main and Edwards streets was closed to traffic while workers removed the decorative masonry on the northeast corner of the old National Bank building.

Many other structures along South Main street were further weakened by the sharp temblor yesterday morning, and inspections were made of several other building fronts which, authorities said, would have to be demolished.

[Helena Independent; November 7, 1935]

CITY ENGINEER RESORTS TO DRASTIC ACTION TO PROTECT LIFE AND PROPERTY IN CITY

Drastic action was taken for the first time yesterday by City Engineer Oscar Baarson to enforce safety measures for the protection of human life, when he personally evacuated the tenants of the Montana block at Fuller and Placer and locked the doors, closing it to occupancy.

This action was taken because the agents for the building, owned by Denver, Colo., interests, had refused or failed to remedy conditions extremely dangerous to occupants and pedestrians, Mr. Baarson said. He was approved and assisted in his action by State Fire Marshal Arthur Parsons.

The agents for the building had been directed to eliminate certain hazardous conditions after the major shock of October 18. This was not done and the heavy tremor of October 31 greatly aggravated this condition, making it positively dangerous for pedestrians to walk on the sidewalk along the two story structure.

Could Be Moved

Yesterday morning when Mr. Baarson and Fire Marshal Parsons visited the building, they found the parapet or fire wall for the entire length of the building, on both the Fuller and Placer avenue sides, to be so loose they could be moved back and forth by taking hold of them. At one point they found the wall so badly bulged they were afraid to even touch it for fear it would drop to the sidewalk.

The big stack that rises above the building is also badly cracked and must be taken down. If another severe shock should come, authorities said, it would crash through the roof. The parapet or fire walls are those that continue above the roof line. They appear to be part of the main wall but in reality are not and are only thin unsupported shells designed to retard the spread of a fire should one break out.

Two Weeks Enough

"I felt that 14 days was sufficient time for the agents to do something about eliminating the dangerous condition," said Mr. Baarson. "The condition of the parapets was not so bad after the October 18 shake but our request that they be repaired was disregarded. Since last Thursday's shock the situation has become critical. Occupancy of the building will not be permitted again until every hazardous condition has been eliminated."

This is the only case to date in which he has not received full cooperation of property owners in removing dangerous conditions, the city engineer said. Most persons are more than anxious to comply with regulations, particularly since the government is providing the labor for all demolition and "mop-up" purposes.

All Speed

Demolition of wrecked buildings and removal of hazards will be continued today as fast as the force of nearly 400 laborers can accomplish the work. A crew of 80 men will start work on the Denver block this morning removing a portion of the parapet wall and the granite superstructure over the main entrance. The building otherwise is in good shape. Having secured a waiver from the owners, workmen yesterday started tearing down the old Davis building at Wall and Main streets. This had accommodated the used parts department of the T-O-K garage.

City Engineer Baarson's assistants also are endeavoring to locate the owner of the old Savoy hotel building on the opposite corner of Wall and Main to secure a waiver. This building is so badly damaged that it must come down, the city engineer said. John

Carlluchi, the owner, is in the mountains some place employed as a sheepherder. If he is not found soon, condemnation probably will be resorted to.

Repair Homes

On the other hand, reconstruction activities grew apace with the tearing down, although they have not reached anything like the proportions they will assume later. Chiefly the work is being done by home owners who are anxious to get their dwellings in habitable condition before severe weather sets in again. Rebuilding of business and commercial structures will start extensively as soon as demolition period has ended.

City Engineer Baarson announced yesterday that the damage on the west side of the city now appears to be somewhat greater than before estimated. Many signs of damage not visible immediately after the October 31 shock have now appeared on the surface, due, it is believed, to the pounding effect of the numerous light tremors that have followed that major one. The same is also true in the more heavily damaged portions of the city.

Others Found

Other buildings in the business section which have lately shown signs of considerable damage are the Benson-Carpenter building on Lawrence street, which has its rear wall loosened, and the Fabian auto repair shop on Fuller which also has loosened walls. The rear wall of the Montgomery Ward building was slightly loosened and crews are already engaged in reinforcing it so that no serious damage will result.

Even with nightfall the building and wrecking activity showed no sign of let up, as workmen took advantage of warm, clear weather and hammered away under arc lights in the giant rehabilitation program.

W. E. Maughan, meteorologist, said the ever lengthening pauses between tremors might be taken as a good omen for complete recovery from the month-long siege of quakes.

Send Aid

Financial aid for the quake-stricken city continued to flow in from Montana points, large and small, and the latest was the contribution of \$2,300, dispatched from Kalispell. The money was raised in a three-day campaign conducted by the Kalispell Chamber of Commerce throughout all Flathead county.

Despite the mammoth building and wrecking operations, the city had sufficient laborers on hand to care for its present needs.

Further indication of the city's spirit of going forward was found in the announcement of a celebration November 22 to mark Helena's permanent location on the northern transcontinental air route.

[Helena Independent; November 8, 1935]

DWELLING HOUSES IN HELENA HARD HIT BY QUAKE, SURVEY OF ADAIR'S COMMITTEE SHOWS

Although actual damages to Helena by virtue of the earthquakes were not determined, the survey conducted this week and terminated yesterday noon by a sub-committee of the local reconstruction body indicated that the residential districts, particularly the east side and the Sixth ward, were hard hit, it was announced by Hugh R. Adair, chairman in charge. The survey did not attempt to cover the business areas, the west side, or any other damage than to dwellings, Chairman Adair said. The survey workers were handicapped by a large number of vacated houses and estimated that at the first of the week about 20 per cent of every fifth house was empty. Most of these were badly wrecked.

1,122 Reports Made

Reports were turned in on 1,122 homes. Of that number 506 reported no damage although destruction of some nature might have occurred, and 616 reported damage, the chairman said.

Owners of 125 Helena dwelling houses were so damaged as to need outside assistance of some nature, although only 81 would require loans from the RFC, the Federal Housing administration or a private agency. These 81 homes, valued at \$254,450 were damaged at the owners' estimate of \$105,060, Chairman Adair said. Many of the others needed aid on a smaller scale and cases were turned over to the Red Cross amounting to \$3,250.

In Immediate Need

There were 115 cases requiring immediate assistance such as food, clothing, fuel, shelter and medical attention, Chairman Adair explained. These cases, too, were handed over to the Red Cross and other agencies equipped to take care of them.

Seventeen dwellings were so wrecked as to be considered hazardous structures by the survey workers and their locations were made known to the city engineer and to the officials of the FERA wrecking crew.

Many Absent

The survey was conducted Monday, Tuesday and Wednesday of this week and many persons, now in Helena, were absent at the time. The survey showed that 243 homes were vacant by reason of the quake, or 20 per cent of those covered by the subcommittee, Chairman Adair said. Most of those were badly damaged.

"We want this survey to be complete for the city," Mr. Adair said, "and those property owners who were not contacted have been requested to call at the chamber of commerce offices and fill out a blank. One or two sections of the city, where no houses were demolished and damage was in most instances only minor, were not covered by the workers as they had plenty to do in some of the other districts which were much harder hit."

The survey has been conducted, he said, for the purpose of getting at the actual conditions existing after the damaging earthquakes. The amount of damage to private dwellings has been ascertained for statistical purposes. Results of the survey are being placed before representatives of the various relief agencies.

[Helena Independent; November 8, 1935]

Section 6

Articles 251-300 (11/08/1935 to 11/13/1935)

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Headline: Prospect Bright That PWA Will Rebuild High School

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Headline: \$8,000,000 Of State Insurance Cancelled, Mutual Companies

Refuse Adding Waiver Clause

Date: 11/08/1935

Info Categories: A, I, P

Headline: George Washington Feels Earth Shocks

Date: 11/08/1935

Info Categories: H, N

Headline: Offers Of Aid Are Received By Helena From Many Sources

Date: 11/08/1935

Info Categories: A

Headline: Eliminating Quake Perils

Date: 11/08/1935 Info Categories: A, B, R

Headline: Salvation Army To Care For Refugees Until Need Is Past

Date: 11/08/1935

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Headline: Helena Husband Is Seeking Wife Gone Since Big Quake

Date: 11/08/1935

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Headline: Five Earth Tremors Is Thursday Total

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Headline: Building Of New Houses Assured Thru FRA

Date: 11/09/1935

Info Categories: A, I, R

Headline: Work For Helena Begun In Capital

Date: 11/09/1935 Info Categories: A, I, R Headline: City Gives Definite Proof Of Return To Normal; All Activities Are

Speeded Up

Date: 11/09/1935 Info Categories: A, I, P, R

Headline: Seventeen Tremors For 24-Hour Period

Date: 11/09/1935

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Headline: Two More Loans Are Approved by Capital City Body

Date: 11/09/1935

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Headline: Procathedral Will Not Hold Services Sunday Says Pastor

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Headline: Homeless People Invited To Bathe Free At Y.M.C.A.

Date: 11/09/1935

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Headline: Earthquake Drill Established For Auditor's Office

Date: 11/09/1935

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Headline: Drill Away Quakes, Says Chicago Man

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Headline: Interesting Opinion Of Cause Of Quakes Given By Livingston Man

Date: 11/09/1935 Info Categories: G, P, S

Headline: All Set To Erect New Dwellings

Date: 11/10/1935 Info Categories: A, I, P, R

Headline: Building Estimates Revealed By Red-Cross Officials Here; Only

Few Are Requiring Help

Date: 11/10/1935 Info Categories: A, B, I, R, S

Headline: Public Schools To Remain Closed For Additional Period

Date: 11/10/1935

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Headline: Carroll College To Resume Work Monday Morning

Date: 11/10/1935 Info Categories: B, N, P

Headline: Earthquake Damage At St. John's Hospital

Date: 11/10/1935 Info Categories: B. I. P

Headline: Temblor Total Here Near World's Record

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Headline: Teacher Here Writes To Fergus Falls Of Earthquake Terrors

Date: 11/10/1935 Info Categories: B, H, P

Headline: Fort Benton Raises \$500 For Helena; To Make A Second Drive

Date: 11/10/1935

Info Categories: A, P

Headline: Manhattan Willing To Aid Helena For Earthquake Period

Date: 11/10/1935

Info Categories: A, P

Headline: Falls Teachers Will Help Helena People

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Info Categories: A, P

Headline: Rotarians Extend Sympathy And Aid To Stricken City

Date: 11/10/1935

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Headline: Geologist Explains How Earthquakes Function

Date: 11/10/1935

Info Categories: S

Headline: Helena Development Company Proceeding Swiftly, "Copper"

Homes Planned For Project

Date: 11/11/1935 Info Categories: A, I, P, R

Headline: Instruction School On Quakes Will Be Discussed At Meet

Date: 11/11/1935 Info Categories: E, I, P, R Headline: Pacific Fire Underwriters Say Bausch Negligent In His Duties

During Recent Quake

Date: 11/11/1935

Info Categories: A, I, P

Headline: RFC Offices Are To Remain Open Today

Date: 11/11/1935 Info Categories: A, I, P, R

Headline: On!, So Says City Relief

Date: 11/11/1935

Info Categories: A, P

Headline: Geodetic Officials Obtain Fine Account Of Last Major Quake In

City, One Of Best

Date: 11/11/1935 Info Categories: E, P, S

Headline: Single Change In Helena's New Building Ordinance is

Recommended By Engineer

Date: 11/12/1935 Info Categories: A, I, P, R

Headline: Inspection Of Buildings Will Be Resumed Today; Construction

Speeds Up

Date: 11/12/1935 Info Categories: A, P, R

Headline: Building Lots To Be Checked Today By Housing Group

Date: 11/12/1935

Info Categories: A, R

Headline: High School Will Be Put Back Into Perfect Shape

Date: 11/12/1935 Info Categories: A, I, R

Headline: Red Cross Board To Hold Meet Tonight

Date: 11/12/1935 Info Categories: A, P, R

Headline: Carroll College Has Resumed Class Work

Date: 11/12/1935 Info Categories: B, I, N, R

Headline: National Guard Has Started Cleaning Up

Date: 11/12/1935

Info Categories: A, R

Headline: Kalispell Leads All In Donation Of Funds For Earthquake Victims

Date: 11/12/1935

Info Categories: A, P

Headline: Mayor Bausch Will Fine Everyone In The City To Pay Debt

Date: 11/13/1935

Info Categories: A, P

Headline: Local Schools Will Not Open Until The First Of The Year

Date: 11/13/1935 Info Categories: I, P, R

Headline: Engineer Should Have Support Of All, Says Wales

Date: 11/13/1935 Info Categories: A, P, R

Headline: New Building May Be Solution For Methodists Here

Date: 11/13/1935 Info Categories: B, P, R

Headline: 'Quake Dance To Be Given At Missoula'

Date: 11/13/1935

Info Categories: A, P

Headline: Red Cross Approved Relief Awards Aggregating \$14,969; 286

Families Now Seek Aid

Date: 11/13/1935 Info Categories: A, P, R

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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PROSPECT BRIGHT THAT PWA WILL REBUILD HIGH SCHOOL

With the arrival here yesterday morning of PWA officials from Washington, D. C., Helena seemingly was within gunshot of government assistance for the rebuilding of its badly twisted \$500,000 high school, and the wrecked Bryant school building.

A. H. Martin, Jr., executive secretary to Secretary Ickes, and E. G. Bauer, special PWA engineer in charge of school construction, were on the ground here yesterday. They went over the building and then conferred with James H. Rowe, emergency director for Frank Walker. Though Martin refrained from making a direct statement on the possibility of Helena receiving federal assistance, he significantly added: "If there wasn't a good possibility of federal aid I wouldn't be here."

Cut Red Tape

Martin explained that in such a disaster as Helena has experienced, the Public Works administration will in every way possible cut "red tape" and get away from usual restrictions.

"We are here for the purpose of ascertaining what can be done to restore the Helena high school building and under what conditions that can be accomplished," he said.

"Furthermore, if the building is restored, we want to determine what changes in design may be necessary to contribute to safety in a known earthquake zone."

Martin will be in Helena today, checking up on PWA projects in the state. In this connection he said:

"I shall do all I can to expedite the starting of work on Montana's water conservation projects."

After leaving here, Mr. Martin will visit PWA headquarters in Washington, Oregon and Idaho before returning to the national capital.

Will Come Back

"I predict that Helena, so hard hit by the recent earthquakes, will arise from her ruins a bigger and a better city," Martin declared. "That has been the experience of other communities similarly unfortunate, and I feel confident that Helena people, many of them of pioneer stock, have as much or more courage and determination than those of other cities."

Bauer plans to remain in Helena for several days, studying the present status of the high school building and the best methods of rehabilitation.

[Helena Independent; November 8, 1935]

\$8,000,000 OF STATE INSURANCE CANCELLED, MUTUAL COMPANIES REFUSE ADDING WAIVER CLAUSE

During the earthquake period in Helena, insurance on approximately \$8,000,000 worth of state property changed hands at additional expense to Montana of at least \$4,767 in premiums and special waivers, it was announced yesterday by the board of examiners. When it was found that all fire insurance on state building carried a "fallen wall" clause, wherein all fire insurance became void if a wall or portion of a wall collapsed on an insured building, the board of examiners asked the companies holding the insurance to place riders on their policies waiving that particular clause.

Mutuals Refuse

All of the Mills Mutual companies, seven or eight in number, and the National Mutual Insurance company, absolutely refused to nullify the fallen wall clauses, although it is the practice of other fire insurance companies to do this for an additional premium, according to Attorney General Raymond T. Nagle, member of the board of examiners. With tremors shaking Helena and many of the properties of the state, the board decided to cancel such policies on a pro rata or short-term basis, and to take out new policies with the Pearl Assurance company, represented, as were the mutuals, by the Miller Agency of Butte. The Pearl company agreed to waive the fallen wall clause upon payment of an additional premium.

Costs \$7,009.91

The new insurance set-up cost the state in regular and waiver premiums a total of \$7,089.91. Some of this will be returned to the state from the premiums paid for the three-year term insurance to the mutual companies either on a pro rata or short-term basis, the attorney general said. Insurance figures show that the insurance deal with cost at least \$4,767 extra, and if the Mills Mutual companies refuse to cancel on the pro rata basis, another \$1,700 will be added.

The entire deal was consummated without inquiry by the board of examiners with the state insurance department, of which State Auditor John J. Holmes is the head. Yesterday he received claims for warrants aggregating \$7,089.91 to be paid the Miller Insurance agency of Butte.

[Helena Independent; November 8, 1935]

GEORGE WASHINGTON FEELS EARTH SHOCKS

Even George Washington felt the force of Helena's earthquakes.

The statue of the Father of His Country, on the courthouse grounds in front of the north entrance, has been moved several degrees west on its pedestal, it was discovered yesterday. The pedestal also was moved several inches out of line.

This situation had been over-looked until yesterday in the rush of repairing the building and moving out records.

[Helena Independent; November 8, 1935]

OFFERS OF AID ARE RECEIVED BY HELENA FROM MANY SOURCES

Helena is daily receiving aid and offers of aid from other Montana cities, individuals, service clubs and other organizations. The contributions thus far have ranged from \$1 in cash to a large hotel range, sent here, freight prepaid, by Frank Lang, a former Helena resident now living in Seattle.

An offer of additional assistance to the city was received yesterday by Mayor Bausch in a wire from United States Senator James E. Murray of Butte, now in Washington, D. C. The wire read as follows:

"If there are any special matters where I can be of help will be glad to hear from you. Intend to see president when he returns and talk over situation. Will be glad to have you write me your views of what should be done by national government to help in the present situation."

The Mayor telegraphed the following answer:

"Received your telegram. Helena appreciates your efforts in our behalf. Will write immediately in response to your requests."

Mayor J. P. Sweeney of Fort Benton also sent a telegram to Helena yesterday, offering substantial help through the Red Cross. Mayor Bausch replied to the wire with a note of thanks.

Many small contributions, ranging from \$1 up, have been received by Mr. Bausch, who in turn presents them to the Salvation Army.

[Helena Independent; November 8, 1935]

ELIMINATING QUAKE PERILS

After our experience during the last month, The Independent believes the taxpayers of this city will be willing to furnish the necessary funds for the employment of an assistant to the city engineer, whose business for the next few years will be rigid building inspection as new houses and business blocks are erected; as school houses are repaired and other improvements made.

Helena has been far too easy in the matter of building inspection. What the city needs is a hard boiled inspector who knows his business, who will fight quake and fire perils. For two years San Francisco has been waging a drive to eliminate hazards. As a result of the survey signs, parapet walls, marquees and roof tanks have been removed by the thousand. Last year 1,368 signs were condemned and hauled down as potential vehicles of injury to life and property in the event of an earthquake.

For the last five years Helena has permitted any business house to hang out any kind of a sign which the resources of the firm could buy or lease. The electric or gas sign business is much over-done in the city. There are huge signs on Main street which are pulling at the fronts of the buildings. A sign of large size and very heavy was put up on the front of the Cosmopolitan hotel building a few years ago. It was one of the causes of pulling out the front until it is necessary to wreck the two top floors of the building.

In the San Francisco investigation, 11 per cent of the electric signs were condemned as unsafe and a detriment to the buildings.

San Francisco has just appropriated \$5,000 additional to continue this work.

[Helena Independent; November 8, 1935]

SALVATION ARMY TO CARE FOR REFUGEES UNTIL NEED IS PAST

Earthquakes refugees at the Green Meadow camp will be provided with wholesome food, proper clothing and warm shelter until such time they can return to their own homes, it was announced yesterday by Capt. William Murtaugh.

The people at the camp are eager to get back to their own dwellings, he said, but in some cases it will be a long time before secure houses can be found for the refugees.

"We cannot permit any of the people at the camp who may be suffering from nervous disorders to return to a house that is in any respect hazardous," the Capt. said, "and those who are now at the camp have undergone a great mental strain lately."

Last night Major Thomas H. Mitchell, officer in charge of the Salvation Army corps in Billings, conducted a "cheer up" gospel meeting at the refugees base.

[Helena Independent; November 8, 1935]

HELENA HUSBAND IS SEEKING WIFE GONE SINCE BIG QUAKE

Butte, Nov. 7--Mrs. Thelma Borgen of Helena, missing since she fled to Butte from that city following the severe earthquake last week, yesterday was being sought here by her husband, J. Borgen of Yellowstone park.

The only information that could be obtained in Helena was that the woman had gone to the "Colorado hotel in Butte." There is no such hotel or rooming house, Chief of Police Walter I. Shay announced. Mrs. Borgen had been awaiting the return of her husband from the park, where he is employed, but became frightened and left before he arrived, friends said. If she reads this, Mrs. Borgen is asked to call at the police station, where she will be put in touch with her husband.

[Helena Independent; November 8, 1935]

FIVE EARTH TREMORS IS THURSDAY TOTAL

At midnight last night 17 hours and 14 minutes had passed without an earth tremor being recorded at the Helena weather bureau. The last one, at 6:46 yesterday, described at weak, was the 885th. Four quivers were reported previous to the last one at 6:46 to make Thursday's total of five for the 24-hour period ending at midnight last night. In the meantime, fair weather continued in Helena although there was a prediction of a lower reading today. At midnight last night the mercury stood at 47. It was 43 above just an hour before, and was 53 at 6 o'clock last night.

[Helena Independent; November 8, 1935]

BUILDING OF NEW HOUSES IS ASSURED Thru FRA Commitment Secured By Craighead In Washington

A tentative commitment from the Federal Housing administration that it will insure the bonds of the Helena Development company in the sum of \$200,000, has been secured in Washington, D.C., by Barclay Craighead, Montana housing director, it was announced yesterday afternoon by A. T. Hibbard, chairman of the board of directors of the new company.

The Helena Development company was organized on Wednesday of this week for the purpose of erecting between 50 and 60 new, modern, earthquake-resistant dwellings in the city. The homes will be rented to people, and the rent proceeds will be used to retire the bonds, pay interest and cost of amortization, and maintain the places.

If They Conform

Mr. Craighead's wire said that the FHA would insure such a loan if all proceedings conform with the National Housing Act and all applicable rules and regulations thereunder. He said further that he and Senator Murray would confer as soon as possible with officials of the Reconstruction Finance corporation regarding a tentative commitment to purchase the bonds of the corporation.

If the RFC does not want to take the bonds, Mr. Hibbard is quite certain that they can be disposed of otherwise, perhaps privately. They will be insured by the government, and will bear perhaps 4 per cent interest, and this should be an attractive investment for anybody. Articles of incorporation for the company, approved by the Federal Housing administration, were sent to Mr. Hibbard by air mail yesterday, and should arrive here today for the consideration of the board of directors. They will be filed just as soon as they are in shape.

No Other Intention

Mr. Hibbard interpreted this tentative commitment of the FHA as practical assurance that the project would go through. He said that the organizers and directors of the new development company had no other intention than to follow rigidly the regulations of the housing act throughout.

In other words, the FHA will approve the lots to be used, approve all plans, specifications, costs and estimates, and will hold a mortgage on the entire block of 50 or 60 dwellings. The main thing that the Helena Development company is endeavoring to do is to get houses built, and get it done as soon as is humanly possible.

Organizers of the company do not expect any special concession from the FHA, and do not ask that there be any variance from the regulations as they are laid down. The only difference is that a company of Helena's most substantial and leading citizens want to build a lot of houses, instead of one person wanting to build a single house.

Many Sites

About 200 lots have been offered to the new company as building sites. Earl J. Murphy, who is maintaining offices in the old National Bank of Montana building, and has spent the last two days interviewing persons who have suitable building property that they would like to exchange for stock in the company, said yesterday that the lots offered were "nicely divided between the east side and the west side."

After today, Mr. Murphy believes that the company will have listed as many lots as it will need. The next task will be to select the desirable building sites from the list for submission to the FHA for its approval.

At least eight formal written applications from prospective renters were received yesterday by Mr. Murphy, and dozens of tentative applications.

Mr. Hibbard said that the proposed houses would unquestionably have garages, either built in connection with the houses or separately, depending entirely on the wishes of the FHA authorities. It is highly probable that they will be gas-heated, but they will not be equipped with refrigeration or cooking ranges.

[Helena Independent; November 9, 1935]

WORK FOR HELENA BEGUN IN CAPITAL Big Sum Available In Reconstruction

Washington, Nov. 8 (AP)--The Housing administration agreed late today to insure a mortgage up to \$200,0000 for an earthquake-resistant, low-cost housing project in Helena, Mont.

The FHA said a tentative commitment would be issued to a private limited dividend housing corporation to be known as the Helena Development company.

The announcement followed a conference between Barclay Craighead, Montana housing director, FHA Administrator Stewart McDonald and other Federal Housing administrators, and marked the first tangible result of efforts to achieve a plan for federal assistance in rehabilitation of the earthquake-shocked city. The proposed project will include 50 or more detached or semi-detached dwellings.

Assets

"The corporation will have assets consisting of suitable building sites, free of all liens and encumbrances, located and valued in a manner approved by the Montana insuring office of the Federal Housing administration and in addition a cash capital deposited in an approved depository," the FHA said.

Craighead said after today's meeting he felt certain a definite and satisfactory plan will be worked out shortly for a wide-spread construction program in Helena.

Housing officials said they stood ready to guarantee building financing in Helena whether done by private capital or through the Reconstruction Finance corporation.

Craighead made a detailed report of the situation to housing chiefs and augmented his verbal report with photographs showing damage done to residences and other buildings. It was believed a part of the building program would be carried on through the Montana Reconstruction corporation, which is prepared to receive applications for loans from individuals, commercial enterprises, school districts and guasi public institutions.

From RFC

The Montana Reconstruction corporation would receive funds from the RFC and in turn make loans to approved borrowers. These loans, under plans being considered here, would be guaranteed by the housing administration. Whether this method would be followed for the project announced today was not revealed.

The RFC has an allotment from an appropriation approved by congress specifically for disaster relief. These loans would be designed to aid borrowers who for one reason or another are not in a position to borrow directly from the banks.

Officials of the RFC and housing administration indicated they are ready to proceed and aid the reconstruction work to the full limit of their legal authority.

[Helena Independent; November 9, 1935]

CITY GIVES DEFINITE PROOF OF RETURN TO NORMAL; ALL ACTIVITIES ARE SPEEDED UP

Residents of Helena yesterday were presenting definite proof that they have shaken off the quake wrought shackles which have restricted activities for the last week, and are fast returning to normal life and relationships.

For the last few nights, electric signs on Main street have blazed in full array and effect and each night has seen a growing parade of pedestrians on the downtown streets.

They were brought out by the desire to "window shop," to get a little exercise or just to experience "that feeling of mingling in the crowd on the streets." Only the theaters were dark.

Forget Shaking

In line with this new spirit of the people, business was generally showing improvement and stores which have remained open at all times since the short shutdown following the quake of October 18 were gratified to find an increasing number of customers in a better spending mood. All in all, the savage shaking the city got October 31 was being rapidly forgotten.

Removal of the ugly scars left by the tremors progressed rapidly yesterday as nearly 400 men continued the job of tearing down structures too badly damaged to repair, or removed dangerous or badly damaged walls and chimneys without cost to the property owners. City Engineer Oscar Baarson reported that the work was moving smoothly and that the difficulties involving the Montana block had been quickly ironed out.

Action Approved

Yesterday, an engineer sent from Denver by the owners of the property arrived and made an inspection. He gave unqualified approval to the action of the city engineer in vacating the building Thursday and stated that the owners themselves were desirous of cooperating in every way.

Crews will start today eliminating the dangerous conditions and it is expected that by Monday afternoon a portion of the building will be ready for occupancy again. The parapet walls and the large stack are to be removed and rebuilt.

"I would not care to be in that building if another earthquake came," the Denver engineer is quoted as having said to Mr. Baarson.

Boom Looms

A great building boom loomed as owners of damaged structures began to consider plans for rebuilding. With debris being rapidly eliminated and damaged superstructures removed, many are getting ready to start reconstruction. Approval for the local housing project which will erect some 60 new homes also gave impetus to the program.

Activity was particularly great in the warehouse district adjacent to the Northern Pacific depot. Many of the badly damaged warehouses are practically ready to start rebuilding work and activity is expected to be in full swing by next week.

[Helena Independent; November 9, 1935]

SEVENTEEN TREMORS FOR 24-HOUR PERIOD

After a day of relative quiet, 17 tremors were reported at the Helena weather bureau for the 24-hour period ending at midnight last night. All were recorded as weak except the one at 10:38 yesterday morning, which was described as moderate.

Yesterday was the 28th consecutive day of seismic activity in Helena, and brought the total since October 12 to 903. The last one last night was at 10:38 o'clock.

The longest period of time without a disturbance was between Thursday morning and Friday morning at 12:28, when 17 hours and 42 minutes elapsed without a tremor.

[Helena Independent; November 9, 1935]

TWO MORE LOANS ARE APPROVED BY CAPITAL CITY BODY Helena Agency Of RFC Receiving Many Inquiries

Two applications for loans totaling \$2,200, to be used for rehabilitation purposes, were yesterday approved by the members of the board of directors of the Capital City Rehabilitation corporation, and were forwarded to Washington, D.C., for final approval, it was announced by Norman Winestine, president.

One of the loans will be used for the deepening of a well, the water in which disappeared into the ground after the recent earth shocks.

Yesterday's loans bring the total of approved loans to four, amounting to \$5,700, and, according to Mr. Winestine, there are many more applications pending appraisal by the Helena agency of the RFC.

"Rebuilding is now being extensively carried on throughout the city," Mr. Winestine said, "and we expect to receive a large number of applications within the next few days." He also announced that the Helena agency of the RFC will remain open on Monday, Armistice day, in order to take care of the great number of inquiries being received there daily.

[Helena Independent; November 9, 1935]

PROCATHEDRAL WILL NOT HOLD SERVICES SUNDAY SAYS PASTOR

Although St. Peter's procathedral and parish house have been inspected by the city engineer and pronounced safe for use, no services will be held at the church this Sunday because of the ban by city authorities on public gatherings, it was announced yesterday. This situation will prevail until the ban is lifted, the Rev. Henry H. Daniels said. [Helena Independent; November 9, 1935]

HOMELESS PEOPLE INVITED TO BATHE FREE AT Y.M.C.A.

Many Helena residents, who were forced to vacate their homes following the recent earth shocks, have been taking advantage of the offer of free baths made by the Y.M.C.A. some time ago.

The officials of the "Y" have announced that the offer is still in effect, and that men, boys, girls and women are cordially invited to make use of this service.

[Helena Independent; November 9, 1935]

EARTHQUAKE DRILL ESTABLISHED FOR AUDITOR'S OFFICE

"Earthquake drill" has been established in the spacious offices of the state auditor, in the west wing of the capitol.

The staff, a large number of young men and women, must remain on duty at all times, since all paychecks and warrants are issued therefrom.

The desks and tables where most of the young people work are behind a long counter and the exits from the building are hundreds of feet away.

At the quake alarm, the employees first stand at their desks, not for long, however, and move chairs out of the way. The next move is to dive under and take refuge from possible showers of plaster.

[Helena Independent; November 9, 1935]

DRILL AWAY QUAKES, SAYS CHICAGO MAN

Postmaster Harry Hendricks yesterday learned one more way to stop earthquakes, in an unsigned letter that he received from Chicago. The latest quake-curer enclosed a map with his letter with two dots on it, one at Clancy and the other at Boulder. This is what he has to say:

"If you people in Helena want to get rid of the earthquakes, then drill inside where I have marked on the enclosed map. There is very much oil and gas in the Rocky mountains. Helena has a large gas pool, but Boulder has both oil and gas. I am interested in minerals and I know it is there."

[Helena Independent; November 9, 1935]

INTERESTING OPINION OF CAUSE OF QUAKES GIVEN BY LIVINGSTON MAN

An interesting explanation of Helena's private earthquakes is given by a Livingston man, Dr. J. E. Stuart, who has been a student of geology for many years.

Dr. Stuart has devoted his studies particularly to the formations of the Helena district and is well acquainted with the whole structure. He gives his personal opinions of the cause of the earthquakes, which seem to be as reasonable as any which have been advanced.

Dr. Stuart says, in an interview published in the Livingston Enterprise:

"According to United States geological survey, bulletin 52, published in Washington during 1913, the rock formations underlying Helena, are profoundly faulted.

"Geologically, a fault is: A dislocation caused by a slipping of rock masses along a plane of fracture.

"The geologic map of Helena and vicinity as shown in bulletin 527 discloses four distinct faults underlying or immediately contiguous to the town. Each of these faults has been distinctly traced several miles by the geologists who mapped the region. Two faults start from near the head of Oro Fino gulch and diverge in such way as to form a huge V, the western leg of which passes down Oro Fino gulch and beneath the western part of the city, while the eastern leg of the V crosses Dry gulch and continues beneath the eastern part of the town. The other two faults, showing about the same lengths and directions as the others, lie between Helena and East Helena.

"It is quite possible, even probable, almost a certainty, that the Helena quakes result from new slippages in one or more of these big faults. More than likely all of them are slipping for, since they are so closely associated, it would seem impossible for one of them to slip without putting all the others under stress such as to cause them also to slip. This may account for the unusual continuance of the Helena quakes.

"According to the experience of those versed in geology and seismic disturbances, we are justified in expecting early stabilization of these faults and their rock formations."

[Helena Independent; November 9, 1935]

ALL SET TO ERECT NEW DWELLINGS In Helena

Craighead and Murray Again Succeed In Their Efforts

President Roosevelt came to the aid of Helena's home building program yesterday, and after a conference with Senator James E. Murray and Jesse Jones, chairman of the Reconstruction Finance Corporation board, it was announced that the RFC would purchase the \$200,000 issue of bonds to erect between 50 and 60 dwellings in the city. Proceeds from the bonds, which will be guaranteed by the Federal Housing administration, will be used to build the houses. The houses will be new, modern, earthquake-resistant places, having from four to six rooms each.

At a meeting in Washington tomorrow, final details of the bond purchase will be worked out.

President Roosevelt's constant watch on the earthquake situation in Helena, his order that every relief need be met, and now the interest he has evidenced by giving most of a day to studying the housing project, reveals that he is eager to "go the limit for Helena," a member of the housing committee here said.

Retain Morale

"I believe," said the committee member, "that the president is cheered by the knowledge that Helena is standing on its own feet, and that despite the severe hardships this city has weathered, it has kept up its morale."

A. T. Hibbard, president of the Union Bank and Trust company, and chairman of the organization committee of the Helena Development company, was enthusiastic when news of the Washington meeting was received here.

"Helena owes a great debt to Senator Murray and Barclay Craighead, state director of the Federal Housing Administration," Mr. Hibbard said.

"While the city still was being tossed by fierce thrusts of the earth, Senator Murray and Mr. Craighead were busy with preliminary plans for the rebuilding of a greater Helena.

Meet Situation

"Senator Murray said, 'The people of Helena are meeting the situation with courage.' He came to Helena personally. He rushed to Washington to put his shoulder to the wheel and speed rehabilitation work. At the same time, constantly in touch with the local situation, he solved the plight of 140 orphans by turning over to them his hotel at Boulder."

Quickly Formed

Following preliminary plans, made by Mr. Craighead and Mr. Hibbard, a meeting of citizens was called last Wednesday afternoon and the Helena Development company was formed. More than \$8,000 was subscribed by Helena business men as working capital for the low-cost housing project.

The organization committee of Mr. Hibbard, chairman, J. E. O'Connell, J. D. MacKenzie, E. W. Brown, Alex Cunningham, Judge S. V. Stewart, H. W. Larson and J. E. Murphy quickly answered the order of the business men of Helena to "go to work."

Assisted by several volunteers the committee in two days secured almost 200 of the best building lots in this city.

These lots will be taken in for stock in the Helena Development company. With a great future confidently expected for Helena, it is likely that the ones who offered their lots under the Federal Housing Administrations insurance plan will find they have a splendid investment, but their spirit in turning over their property was, "We're doing it for Helena."

Murphy Helps

Earl J. Murphy, who coordinated the work of men who explained the purpose of the Helena Development company to the public, reported that many of the choicest lots in the city were offered without solicitation.

"Many people," Mr. Murphy said at a committee meeting, "did not wish to accept stock." With the announcement yesterday of the Reconstruction Finance corporation's intention of purchasing the bonds of the local company, it is entirely possible that the great \$200,000 building project may be but the first of several such low-cost housing projects, planned under the business-like supervision of the Housing administration.

Coupled with local plans for rebuilding, the earthquakes, which struck with such destructive suddenness and now are mounting towards the 1,000 mark, will mean the start of a greater Helena. Almost certainly, present indications are that Helena for the next year will be one of the busiest cities in the nation.

Mr. Hibbard, advised by S. L. Berg, architectural supervisor of the Federal Housing administration that homes could be built without difficulty in the winter immediately called a meeting of the organization committee for noon today.

"We are going ahead at once, spurred by this wonderful news from Washington," Mr. Hibbard said.

Architect Active

Mr. Berg, under Mr. Craighead's wired instructions from Washington, has already started work on plans and specifications for the houses to be erected in Helena.

Mr. Berg says no home can be made "quake proof--if the quake is too severe," but that residences can be made quake-resistant to a great extent.

His own home is an example of proper construction, as it emerged almost untouched by the three severe, and 900 plus smaller temblors which shook brick houses down throughout the city.

Mr. Craighead will remain in Washington until after the Monday meeting of the RFC board, when he will return to Helena. He went to Washington with word of the attitude of Helena business men, following the Wednesday meeting.

While in Washington he is securing a number of plans and specifications of the best types of homes built in the northern states.

It is these types, combining the best "quake construction" methods conceived in California, which will be erected in Helena.

At the Wednesday meeting of business men, Mr. Craighead explained that the project would do more than provide 60 fine homes for Helena families to rent on a reasonable basis.

Increase Values

"It will increase property values in the various neighborhoods," he said. "The people who rent these houses will vacate their present homes, which will give families now without proper shelter a chance to rent a liveable structure."

Under present regulations of the housing administration covering low-cost housing projects the homes can not be sold until the entire mortgage indebtedness of the project is paid in full.

Unless these regulations are changed, the development company will be in existence for 20 years, when the indebtedness of the company will have been erased on a monthly, amortized basis.

It is understood that \$2,000 for each home, which might be necessary to insure the start of immediate construction of the homes, is available through banking channels of this city.

Washington, Nov. 9 (AP)--Inexpensive methods of making buildings "earthquake-resistant" were outlined today by Barclay Craighead, Montana director of the Federal Housing administration, who estimated they would reduce damage from earth tremors by 50 per cent.

Craighead, here for a conference with housing officials on means of rehabilitating areas damaged in the recent Montana disturbances, said that all "earthquake sectors" could benefit from "quake-proof" construction.

"Damages from earthquakes to residences in most cases could be reduced by about 95 per cent with this type of construction," he said, "but greater damage on larger buildings would make the average damage reduction about 50 per cent."

Saying that on a \$5,000 house it would cost only about \$100 to fortify it against earthquakes, Craighead listed these details of construction:

Bricks should be bounded to the building frame by small steel "tees," or holders. Chimneys either should be made entirely of a special asbestos-lined tin or should be supported in each corner with steel rods.

Iron tie-rods should run through the building, giving added strength.

Joists and frame supports should be strengthened by braces or other means.

Craighead expressed the opinion that quake threatened communities might wisely take these precautions on all new buildings.

"It undoubtedly would be a wise thing," he declared. "A man would be a sap not to take advantage of these methods if he lives in an earthquake sector."

Many buildings in some such sectors already have been constructed with additional supports to mitigate earthquake damage, he said.

[Helena Independent; November 10, 1935]

BUILDING ESTIMATES REVEALED BY RED CROSS OFFICIALS HERE; ONLY FEW ARE REQUIRING HELP

Estimates made on 31 Helena homes damaged by the earthquakes revealed that it will cost \$24,693 to repair or replace them, it was announced yesterday by Albert Evans of St. Louis, sent to Helena by the American Red Cross to handle relief work here. Evans succeeds E. S. Transue, disaster relief representative of the organization, who left yesterday for Denver.

Evans said that \$9,484.68 had already been expended for repairs, which amount is included in the \$24,693. The largest single repair job on which an award has been made will cost \$1,931, the Red Cross man said. So far, 20 individual awards for repairs have been made, outside of so-called emergency jobs, which include minor repairs such as building up chimneys. These minor repairs made many homes in Helena habitable. In only two instances, so far, will the Red Cross have to build entirely new houses, and these will cost about \$2,000 each. The estimates made by the Red Cross on the \$24,693 worth of work range from \$17.50 to \$2,000.

Total Registrations

Evans said that up to last night a total of 269 registrations had been made at Red Cross headquarters. Only a few have come in during the last week, and most of these have been for building repairs.

Repairs have been completed so far on about 30 houses where Red Cross aid was sought.

Evans said that where two or more brick walls have fallen, the Red Cross is tearing down the houses and replacing them with frame structures.

The engineer in charge for the Red Cross said that not a single house in Helena had been thrown off its foundation by the earthquakes. In Long Beach, nearly every house damaged was shaken from its foundation during the big quake there in 1933. It was pointed out that in Helena, not a single house was moved more than an inch from the foundation. It would indicate that the earthquakes in Long Beach were most intense in their horizontal motion, while those in Helena did their biggest damage from a vertical motion.

[Helena Independent; November 10, 1935]

PUBLIC SCHOOLS TO REMAIN CLOSED FOR ADDITIONAL PERIOD

Helena's public schools will not reopen for at least another week, and perhaps more, but classes in several fields of music work will probably be started next week, it was announced yesterday by R. O. Evans, superintendent.

It was at first thought the buildings least damaged could be repaired in time for school to be resumed Monday, but after repair work had been started, it was disclosed that more extensive repairs would be necessary than was first thought.

The repair work is being carried on with federal funds, and the men are under the supervision of Linn Smith, general contractor.

Permission was yesterday granted Mr. Evans by the board of elders of the First Christian church for the use of that building for music classes.

As soon as is possible, the regular schedule of chorus work, band and orchestra practice and instruction will be started, he said.

The resumption of the music classes is dependent upon the lifting of the ban on public gatherings and the certification of the building for occupancy.

[Helena Independent; November 10, 1935]

CARROLL COLLEGE TO RESUME WORK MONDAY MORNING Effort Will Be Made To Catch Up On Lost Work

Carroll college, declared by engineers to be structurally sound after the two severe earthquakes here last month, will resume classes Monday, November 11, Father Emmet Riley, president, said last night. Carroll high school will resume Monday also.

Two engineers under the supervision of City Engineer Oscar Baarson today completed their inspection of the structure on Capitol hill.

The only extensive outside damage to the large stone building was the shaking down of a few pinnacles and some coping on the east and west walls of the south wing. Inside there were no defects other than some fallen plaster.

Faculty Back

Most of the students have returned to the city and all the professors and sisters in charge of the kitchen are ready to resume their work.

Classes will be resumed on the regular schedule in effect before school was interrupted by the quakes. Father Riley said effort would be centered on making up for the time lost.

[Helena Independent; November 10, 1935]

EARTHQUAKE DAMAGE AT ST. JOHN'S HOSPITAL

Damage estimated at \$500,000 was caused at the various institutions of the Catholic church in the Helena diocese by reason of the recent earthquakes, according to a letter written by Ralph L. Hayes, Bishop of Helena, to the Pope in Rome.

The following excerpts show the extent of the damage.

"Not one of our eight church institutions in Helena and East Helena escaped without severe damage; several of them are total losses.

"St. Mary's combination church and school is practically stripped of its brick walls. The rectory is severely damaged.

"St. Vincent Academy has been condemned as a total loss, and will have to be replaced. "The children of St. Joseph's Orphanage spent several nights in a barn. While they have now returned to the main building, they are not permitted to occupy their dormitories, and their school building will not be opened for many months.

"At the House of the Good Shepherd, the laundry--the principal source of revenue--is a total loss. The girls have not been permitted to return to the main building, and at present are finding shelter in the unoccupied Bishop's house.

"St. John's hospital has been forced to suspend activities and the damage is so great that it has to be entirely rebuilt.

"Carroll college, our Diocesan college, has sustained great damage. Parts of the building have fallen which has so endangered occupancy.

"St. Helena's cathedral has also suffered severe damages."

[Helena Independent; November 10, 1935]

TEMBLOR TOTAL HERE NEAR WORLD'S RECORD

Quake-stricken Helena crept closer to the world's record last night as five earth rumblings were reported by the Helena weather bureau for the 24-hour period ending at midnight. The shocks yesterday brought the total since October 12 to 909, the 29th consecutive day of seismic activity.

Five tremors were recorded yesterday at 1:35 a.m., 1:37, 2:04 a.m. and 11:20 p.m. Those at 2:04 and 11:20 were described as moderate.

In the meantime, building operations were hampered by a fall in temperature. At 9 o'clock last night the thermometer had reached 5 above. At midnight the recording was 7 above. **[Helena Independent; November 10, 1935]**

TEACHER HERE WRITES TO FERGUS FALLS OF EARTHQUAKE TERRORS

What outsiders believe resulted from the Helena earthquake of October 18 is shown in a letter written to Fergus Falls, Minn., by Miss Mildred Buckneberg, a teacher at the Helena high school to her aunt, Mrs. J. N. Rovang.

This is what Miss Buckneberg wrote to her aunt, as reprinted in the Fergus Falls Weekly Journal:

She is Thankful

"I suppose you've heard the accounts of the destruction wrought in Helena by the quakes. I thank God to have escaped uninjured. There is no account of the people killed and hurt in the terrific shocks on Friday night. I was alone at 9:30 when the terrible shock came, rocking the city and ruining my apartment house.

"We have had nearly a hundred shocks--Friday night--a week after the first one I wrote you about, we had the second series of worse shocks and it was a night of horror, with the city plunged in darkness, electric lights being cut by the quake--We camped around fires and watched building after building fall into ruins.

"Fire started and water mains broke. Scientists predicted the worst shocks were still to come inside of 36 hours. We're out of the danger zone up in the Gallatin valley, camping in the mountains. The new high school is in ruins and there will be no school--words fail to tell the terror of indefinitely. It has been terrible the last week.

Helena Vacated

"Helena is almost vacated by now and if another shock came last night there is probably not a building left, weakened as they were by previous shocks. Everyone's nerves were completely shot--we haven't heard what has happened since we left at noon yesterday (Saturday, Oct. 19). When I was trying to get things packed in my apartment (Saturday) the building was shaking with recurrent shocks.

"Last night we slept as we haven't done for a week. But as I say we are so thankful to have escaped with our lives--when we are nerved to do it we will return to Helena. This is such an upset literally. I haven't any idea what I'll be doing. The bad shock lasted about two seconds less than the San Francisco earthquake. I am going down the valley to a store for supplies, walking. This is a beautiful valley--mountains, the Gallatin river, the gateway to Yellowstone park."

[Helena Independent; November 10, 1935]

FORT BENTON RAISES \$500 FOR HELENA; TO MAKE A SECOND DRIVE

Residents of Fort Benton, the birthplace of Montana, have shown a sympathetic feeling toward Helena in her time of need, according to John M. Power, who received a letter from J. Ritter, president of the Pioneer Mercantile company, stating that more than \$500 had been mailed to the Helena chapter of the Red Cross by residents of Fort Benton. Nearly every employed person in the town contributed to the fund, the letter stated, and it was expected that another amount of the same size will be raised and sent here. Should another amount of the same size as the first one be received here by the Red Cross, the total fund raised by the residents of Fort Benton will average about \$1 per capita.

[Helena Independent; November 10, 1935]

MANHATTAN WILLING TO AID HELENA FOR EARTHQUAKE PERIOD

Although Manhattan already has raised \$100 by public subscription for Helena's earthquake relief problem, the little municipality is ready and eager to go the limit, according to Oliver H. Campbell, superintendent of schools there.

Mr. Campbell was in Helena yesterday to inspect the earthquake damage here and to offer all the resources of that city to aid people here.

"We have several unused rooms in our high school building, to which the Helena schools are welcome, if they desire to send their pupils there for the winter," he said. The offer was made to Supt. of Schools R. O. Evans.

[Helena Independent; November 10, 1935]

FALLS TEACHERS WILL HELP HELENA PEOPLE

Teachers in the schools of Great Falls have gathered a fund of \$331.50 to help Helena people who suffered during the recent earthquakes, City Superintendent R. O. Evans was advised yesterday by Irving W. Smith, the Falls superintendent. Mr. Evans received a letter from Mr. Smith expressing sympathy on behalf of the teachers in the Electric city. Mr. Smith advised that about 18 Helena children had enrolled in the Great Falls schools since the big earthquakes here.

[Helena Independent; November 10, 1935]

ROTARIANS EXTEND SYMPATHY AND AID TO STRICKEN CITY President Joe Bossler Receives Many Wires

President Joe Bossler of the Helena Rotary club has received many expressions of regret and offers of assistance since the city began to shake. Letters and telegrams have come not only from District Governor Curtis L. Wilson of Butte, head of Rotary in Montana, and numerous Montana Rotary clubs, but also from Secretary Chesley R. Perry of Rotary International, Chicago, and clubs far distant from Helena.

Secretary Harry Meech of the Lethbridge, Alberta, club writes, "We have read with much concern the reports of the recent damage to your fair city by earthquakes. The Lethbridge members of Rotary wish to convey to your members their deepest sympathy and expression of good will. Our hearts are with you, and our best wishes accompany this expression of good will."

From Pasadena

H. L. Gianetti, secretary of the Rotary club of Pasadena, Calif., sends a sympathetic greeting, recalls similar experiences in his state, followed by a cheerful determination to rebuild and remake their cites more substantial, and adds, "You and your city will, no doubt, tackle the job in the same way, and that is why we send you this word of cheer and courage."

From Seattle comes a message from Rotary Secretary C. W. Martin which reads: "We have been reading the press dispatches from time to time regarding the damage you have sustained from recent earth shocks. We are wondering if any of your Rotary members have suffered serious losses and are in need. In other words, is there anything the Rotary club of Seattle can do to assist you? This is to assure that we would be more than glad to do so."

Praises Spirit

And also comes a message from Crombie Allen, trustee of Rotary International, resident of Ontario, Calif., saying, "Remembering the pleasant time I had in Helena when visiting the Fred Sanden family a few years ago, it has grieved and distressed me to read of the plight of the good people of your city following the series of earth shocks. But I have rejoiced to note the splendid spirit of the citizens in planning to go ahead. I am enclosing a small check to add to the funds for relief. Hoping that the quakes may be at an end and congratulating your citizenry for carrying on in such a serious situation, I am, sincerely yours, Crombie Allen."

[Helena Independent; November 10, 1935]

GEOLOGIST EXPLAINS HOW EARTHQUAKES FUNCTION History Shows Man Terrorized Always By Earth Rumbling Helena Quakes Are Traced To Faults In Under Strata

By Dr. Harold W. Scott

Geologist, State Bureau of Mines and Geology

Montana School of Mines, Butte, Mont.

Throughout the history of civilization no natural phenomenon has been such a terror to mankind as the earthquake. Its mysterious nature, its frightful destructiveness to property and life, and its sudden unexpected occurrence accompanied with the screams of the hysteric and injured instill untold fear in the human mind.

We find records of earthquakes in the Old Testament, "Thou has made the earth to tremble; thou hast broken it; heal the breaches thereof; for it shaketh." Again, in the 114th Psalm, "The mountains skipped like rams, and the little hills like lambs . . . tremble, thou earth, at the presence of the Lord."

Only a few years ago superstitious peoples of the world attributed the shaking of portions of the earth to the wanderings of animals beneath the surface. In India it was a large mole; in Japan, a large spider, though in modern times this has given place to a giant catfish; in China, a subterranean hog; by some of the old philosophers earthquakes were thought to be due to underground fires, gases, or winds. Even to this day many people are little better informed in regard to the cause of earthquakes. Recent rumors of volcanic ash and fire issuing from fissures, 40-foot crevasses, the freezing of geysers in Yellowstone park resulting in a great explosion in Helena valley are all indications of our desire to believe the ridiculous and preposterous.

Some Great Earthquakes

On Nov. 1, 1775, a deep sound resembling thunder issued from the ground below Lisbon, Portugal, and almost immediately followed a quaking which destroyed most of the city. In a few minutes 60,000 people perished. The city caught on fire. The sea retired from the land, carrying boats with it, only to return in a few moments in a wave 60 feet in height to complete the destruction of the city.

On April 18, 1906, California experienced the worst earthquake in the history of the state. The area of destruction was about 400 miles long and about 50 miles wide on either side of the San Andreas fault. In San Francisco about 500 people were killed and at least \$250,000,000 property damage resulted from the quake and the fire which followed it, destroying most of the city.

The most recent disastrous quake occurred in Japan on Sept. 1, 1923, when 99,000 people lost their lives, 128,000 houses completely collapsed and 447,000 houses were burned. Great fires often follow a major earthquake because the water mains break, leaving the city defenseless against the fires which start when stoves or lamps are overturned, electric wires break and short circuit, or from other causes.

It is obvious that the Helena earthquake was of moderate intensity when compared with some of the great quakes of the past.

Causes of Earthquakes

The progress of the science of geology has produced evidence that the major earthquakes result from sudden yielding to strain in the earth's crust. The rocks in the crust are constantly required to adjust themselves to excessive pressures from above or lateral pressure from the side. If this adjustment takes place within six miles or so of the surface it is accomplished by one rock mass moving against another. The zone along which the

movement takes place is a fault. The actual slippage is almost instantaneous and causes a severe jarring of the near by region. The resulting jar is an earthquake. The waves which are set up by the jar are propagated through and around the earth. In the area where the faulting occurs the waves come to the surface and have a tendency to project loose objects from the surface just as a marble lying on a floor will bound into the air several inches by a tap of a hammer upon the floor some distance away.

Volcanic activity is also recognized as a cause of some earthquakes. However, such quakes are not of the first magnitude and the disturbed area is very small. Earthquakes caused by volcanoes may destroy houses which are situated directly above the disturbance, but the waves will not be felt for more than a few miles in any direction. The volcanic earthquake is localized, the waves set up do not travel over wide areas, and the focus is very shallow.

The fact that the Helena earthquakes send waves far out in all directions is sufficient evidence to consider their cause as slippings along a fault.

Seismographs

Earthquake waves are recorded on delicate instruments called seismographs. A seismograph consists of at least three parts; one which remains steady during the earth movements; a second which consists of a frame from which the steady mass is suspended, and a third part, a recording device consisting of a revolving drum or plate. The recording device in addition to its own revolution also moves in accordance with the earthquake waves and the trembling of the earth is magnified so that an irregular line is made on a chart which can be analyzed by the scientist. He can determine the intensity, direction of motion, and the distance in miles from the earthquake area. Every major earthquake is recorded by many of these sensitive instruments. They are playing an exceedingly important part in the advancement of our knowledge concerning the interior of the earth and the nature of earthquakes.

The shock is recorded on seismographs in different parts of the world because the waves are propagated laterally in all directions from the center of the disturbance as well as through the earth. The zone on the surface directly above the disturbance is called the epicentre. Here the intensity is greatest. The intensity decreases as the waves move out from the epicentre. The rate of decrease may be due to the kind of rock strata though which the waves pass. Lines can be drawn marking zones of equal intensity; these lines are known as isoseismals. The intensity scale ranges from 1 to 10. For example, zone 1 represents a shock so weak that only an experienced observer can detect it; zone 4 is marked by a shock strong enough to disturb movable objects and is felt by several persons in motion; zone 6 represents a shock strong enough to cause the swinging of chandeliers, stopping of clocks, agitation of trees and shrubs, and general awakening of those asleep; zone 9 is marked by partial or total destruction of some buildings.

The Helena Earthquakes

Careful field observations following the shocks of the 12th, 18th and 31st of October establishes beyond any reasonable doubt that all of these shocks have been caused by faulting (slipping of one rock mass on another in rocks far below the surface of the Helena valley.) The fault unquestionably trends northwest and almost certainly dips to the northeast. This conclusion which was reached as soon as the effects of the relatively mild shock at about 1 a.m. on the 12th could be examined and which has been further established by the shocks of the 18th and 31st, is corroborated by the records from the instruments set up in the federal building at Helena by Messrs. Ulrich and Carder of the U.S. Coast and Geodetic Survey after the shock of the 18th.

Because of the deep cover of gravel and sand in the Helena valley it is impossible to identify the particular fault plane along which movement has taken place. If the fault plane was expressed at the surface then it would be possible to measure the amount and direction of the movement, but such is not the case in this particular instance.

The actual movement which has taken place is unquestionably small, probably an amount measurable in inches. Of course, only slight movements of large masses of rock are necessary for the development of moderate earthquakes.

When the waves reach the surface of Helena valley they cause a slight rolling of the ground so that the surface is alternately under pressure and tension. On Oct. 18 the tension caused minor shallow surface cracks in the vicinity of Stanchfield lake and the compression caused shallow subsurface water to flow out of these newly developed fissures for a short period of time. It is only natural that the water which flowed out would carry small quantities of mud and sand. The flow of water in some springs, mines and wells increased, but in a short period of time this flow will probably return to normal. A few small rock slides occurred at distances not greater than 15 miles from Helena valley. All were of minor importance.

In the epicentre of major earthquakes, fences, telephone lines, roads and other straight lines may show considerable displacement. No such conditions have been observed in the Helena valley.

The moving of loose objects, the twisting and overturning of tombstones, the falling of chimneys, the cracking of windows and plaster, the failure of veneer brick walls, and the overturning of copings and parapets, accompany all moderate shocks if the epicentre is near inhabited areas.

Major shocks may destroy the best of buildings if these buildings were not constructed with a view to resisting the lateral stresses set up by earthquake wave.

Aftershocks

Usually many minor shocks follow the major one. The great number of aftershocks is in striking contrast to the infrequency of foreshocks. After the Mino-Owari earthquake of Japan in 1891, 3,365 after shocks were recorded over a period of two years; 10 were violent, 97 strong, 1,808 weak, 1,041 feeble, and 409 were earthsounds. Nine of the 10 violent shocks occurred within the first four months following the major earthquake. The Tenpo, Japan, quake of 1830 was succeeded by 681 after-shocks in the first six months; the Zenkoji, Japan, earthquakes of 1847, by 930 shocks in the first 31 days; the Assam, India, earthquake of 1897 by 561 in the first three days and many more hundreds during the year.

At present it is too early to speak of the after shocks in the Helena area.

Possibility of Future Quakes

Everyone is intensely interested in the possibility of predicting future earthquakes. Unfortunately, it is impossible to predict the exact time, place, or intensity of future quakes. However, the recent earth movements under Helena valley, though of moderate proportions, should be taken as a warning that the area is one of seismic activity in which moderate shocks may be expected to occur in the indefinite future.

It is entirely possible that after-shocks will continue for a year or more. However, the number of after-shocks in Helena are more numerous than in most cases where the actual displacement of rock masses is small. A great number of small after shocks usually indicates a healthy condition; that is, the strain is being taken up gradually instead of suddenly.

Stories concerning fissures 40 feet wide, volcanic material of recent origin being ejected from earth fissures, underground vacuums and fires, and other reports of a like character find no support either in geologic science or in the history of earthquakes in other parts of the world.

[Helena Independent; November 10, 1935]

HELENA DEVELOPMENT COMPANY PROCEEDING SWIFTLY, "COPPER" HOMES PLANNED FOR PROJECT

Helena, in its \$200,000 low cost housing project, assured by information that the Reconstruction Finance corporation will purchase bonds of the Helena Development company, will build from 50 to 60 of the most modern houses in America. Barclay Craighead, state director of the federal housing administration, acting on instructions of the organization committee of the Helena Development company, is now engaged in securing plans and specifications of the latest developments in home construction.

Modern Structures

"Air conditioning and the most modern ideas will not be neglected in building the houses in Helena," A. T. Hibbard, chairman of the organization committee, said yesterday, following a meeting of the committee.

"Acting for our committee, Mr. Craighead, who is now in Washington arranging final details for purchase of the bonds, is securing completed plans for the most modern residences. "Among the houses he is inspecting is the copper house being finished at Bethesda, Penn.

"Copper House"

"This house has aroused the attention of world famous architects. It is ultra-modern to the last degree. It has almost startling departure from former home design, and is said to be of strong earthquake resistant features which may make it particularly suitable for this region," Mr. Hibbard said.

"The men in charge of the initial work of the Helena Development company are going to consider building probably 10 of these and other modernistic residences.

"It is entirely probable that the building of these might cause an entirely different Helena to grow from the ruins of the old-style brick "box" structures, which in the past have been so popular here. The Bethesda "copper" house, which has attracted so wide attention and is air conditioned, is sheathed with copper."

Earthquake Resistant

"Other designs to be considered by the local committee are the modernistic house of straight lines, with flat roofs, windows at the corners and other innovations which break sharply with former building practice.

Members of the committee of the Helena Development company pointed out that if a number of "copper" houses were included among the 60 homes to be built here in the immediate future that the Montana mining industry would be helped.

"The contractors of America, who build homes, will watch the initial project of Helena, J. E. O'Connell, a member of the committee said. "If successful they will build similar structures."

"It is said that a copper home will weather more attractively than brick, has advantages in that it saves the home owner in paint and repair bills and is practically 'perpetual' when once erected."

Need Modern Homes

Mr. Hibbard pointed out that Helena has a need of any number of modern homes.

"Before the earthquakes Helena had a housing shortage," Mr. Hibbard said.

"The erection by the Helena Development company of from 50 to 60 homes will help solve this housing shortage, but will not entirely cure it. It is entirely possible that this will be but the first low cost housing project in Helena, and that others will follow until our citizens are enabled to secure homes suitable for their means."

Regaining Spirit

Committee members who contacted lot owners and others have found, Mr. Hibbard said, a growing optimism among Helena people.

"The people of Helena intend to build their own homes. The 50 houses we erect may influence many in the building of houses next spring.

"The Helena Development company intends in its erection of this group of houses to give an example to those who now plan to build later. No house will be cheaply built. Each house will be earthquake-resistant to the highest degree known to modern engineering." Work of the Helena Development company today followed news from Washington yesterday that after a meeting between President Roosevelt, Senator James E. Murray and Jesse Jones, of the Reconstruction Finance corporation, that a plan had been drawn by which the RFC would purchase bonds of the Helena company.

Bonds Underwritten

These bonds will be insured by the Federal Housing administration.

S. L. Berg, architectural supervisor of the housing administration, is now at work on preliminary plans for the erection of the houses.

Final plans will not be approved until Mr. Craighead returns from the east about the middle of next week, bringing with him the specifications for the "copper" house, as well as others he is now inspecting in New York.

One of the facts brought out by Mr. Berg in statements to members of the committee was that brick construction could be made earthquake-resistant to a high degree.

"The proper tying-in of bricks, and other slight precautions make brick residences earthquake resistant," Mr. Berg said.

"The modern brick home should not be considered as unsafe as the old structures erected years ago, before it was even considered that Helena was in an earthquake zone."

[Helena Independent; November 11, 1935]

INSTRUCTION SCHOOL ON QUAKES WILL BE DISCUSSED AT MEET Big Meet To Be Held In Helena But Real Facts Known

That Helena may receive the finest structural engineering suggestions, in the hope that the Capital city again will be the leading dome for all municipalities in the state, groups of architects, structural engineers and all others interested in the rebuilding of Helena, will meet this afternoon in the Placer hotel.

One of the features of the meeting will be the address of R. McC. Beaufield, consulting engineer, member American Society of Civil Engineers, member of the American Society Mechanical Engineers, and a member of the Seismological Society of America.

This Los Angles engineer is sponsored by the chamber of commerce of that city. He is closely identified with rehabilitation work in California, having rehabilitated more than 40 schools and many other structures.

Mr. Beaufield designed the Shrine temple and the St. Vincent's hospital in Los Angeles, and received the Norman Fowler award of the American Society of Civil Engineers for 1931. He is past president of the Structural Engineering Association of Southern California. He is president of the local section of the American Society of Mechanical Engineers of Los Angeles.

He played a prominent part in forming the uniform building code of California. He has had considerable experience in the Orient, especially during the Japanese earthquake of 1926, rehabilitating damaged structures and designing buildings that would be earthquake-resistive.

Dr. Dean S. Carter of the U.S. Coast and Geodetic survey, also will deliver a paper on the Helena earthquake situation. He is in charge of the seismological instruments. He will speak on "Earthquakes and Their Design and New Structure."

This is the first of a series of talks and round table discussions planned by Oscar Baarson on construction and materials to be used in earthquake resisting structures.

The papers and lectures will be of popular nature, but will have sufficient technical detail to be of value to those interested in design.

A quiet Sabbath was enjoyed in Helena yesterday with a noticeable dearth of tremors. To add to the pleasure of the quake weary population, a predicted cold wave proved to be of short duration and the sun beamed down for most of the day with the weather for tomorrow forecast as warmer.

Only three jolts were recorded today at the federal building, all minor with no damage reported. The first was recorded at 12:17 a.m., the second at 9 a.m., followed closely by the third and last at 9:35 a.m., bringing the total recorded to date to 914 shocks.

[Helena Independent; November 11, 1935]

PACIFIC FIRE UNDERWRITERS SAY BAUSCH NEGLIGENT IN HIS DUTIES DURING RECENT QUAKE

In a comprehensive report on the Helena earthquake and condition in the city, the board of underwriters of the Pacific condemns the present city administration, particularly Mayor C. J. Bausch.

The report is signed by H. F. Badger, secretary manager, after receiving the reports of a score of field men, all strangers to this community, who came here to investigate conditions for all the board insurance companies doing business in Montana.

"The mayor of the city, C. J. Bausch, refused to aid or cooperate in emergency measures necessary to safeguard life and property," says the report in the very lead. It goes on to say:

"A number of engineers, architects, geologists and others volunteered their aid in carrying out inspections and other necessary emergency work. The city authorities gave no cooperation and actually discouraged their efforts.

"The city engineer, Oscar Baarson, did all one man could to carry on emergency inspections and to expedite reoccupancy of structures where this could be done with safety.

"The plea of the city engineer for aid and additional personnel was flatly refused by the mayor."

In justice to Police Commissioner Amos Shellady, it should be said that he should not be included in the severe condemnation of the Helena city administration. There has been no complaint whatever of the conduct of either the police or fire departments. In fact the people of Helena have nothing but praise for the conduct of Commissioner Shellady, Chief of Police Roger Smith and his men, Fire Chief Martin Juhl and his men.

Being strangers to the community, the fire underwriter inspectors centered the criticism on the mayor and "city authorities."

A "Yes" Man

The mayor was personally to blame for the conduct of himself and Commissioner Evans. Since he was elected, Noble P. Evans has been merely a "Yes" man for Mayor Bausch and was a party to refusing emergency aid or cooperation. He voted with the mayor to refuse additional help for the city engineer and in all other things let it be known that he was and is just 100 per cent behind Bausch.

When the fire underwriters of the Pacific refer to the city administration in their reports, they mean the majority of the commissioners, Bausch and Evans.

[Helena Independent; November 11, 1935]

RFC OFFICES ARE TO REMAIN OPEN TODAY

The offices of the Helena agency of the Reconstruction Finance corporation will remain open today in order to take care of the large number of applications which has been received within the last two days.

Although four applications for rehabilitation loans have been approved by the Capital City Rehabilitation corporation and the Helena agency of the RFC, up until the last two days the agencies have been receiving mostly inquiries from property owners.

Friday the applications started pouring in, and by Saturday night, the RFC force was swamped with work, as each application must be checked over, and the property to be rebuilt or replaced must be appraised by the office appraiser.

Officials of the Helena agency of the RFC will be in the offices all day today, to furnish prospective applicants with information concerning loans, and to receive and check applications.

[Helena Independent; November 11, 1935]

ON! * * * * * * * * SO SAYS CITY RELIEF

Although Helena has very few minor rumbles as Mother Earth is rapidly regaining its natural posture, the church of the wildwood, which is a section of the Green Meadow warehouse was filled with an enthusiastic congregation as the Rev. Harvey Batey delivered an inspiring message entitled "Press On."

Persons at the Green Meadow Refugee Base maintained by the Salvation Army spent a quiet and peaceful day and are all of the belief that period of nervousness is something to tell their grandchildren and be forgotten.

[Helena Independent; November 11, 1935]

GEODETIC OFFICIALS OBTAIN FINE ACCOUNT OF LAST MAJOR QUAKE IN CITY, ONE OF BEST

...terrific tremors of Oct. 12 and 18, are told by Dr. Dean S. Carder of the United States Coast and Geodetic Survey, that the recurrent shake of Oct 31, although sharp and devastating, was one-half the intensity of the California temblor of the Long Beach, Calif., quake of March 10, 1933.

Epicenter Determined

The geodetic survey had no instruments in Helena to record the movements of the first two major shocks, but a full account was obtained on Oct. 31, showing plainly that the focus of the earthquake lies within 4 miles of the Helena post office in a north to northeast direction. The records indicate that the depth of the focus is three miles, placing the epicenter within three miles of the city to the north or northeast.

Helena people recall the gigantic movements of Oct. 12 and 18, but the lesser one of Oct. 31, recorded by the geodetic survey, discloses with vivid description the full account of the subterranean shock. Dr. Carder, in explaining the graphs registered by his sensitive equipment, says:

"The record of the earthquake of Oct. 31 indicates that the horizonal intensity, measured in our terms, was 16 per cent gravity. For example, if the house you live in weighs 100 ton and a giant should shake the foundation with a force of 16 tons in the frequency of the earthquake motion, that is, five to seven times a second for four seconds, then the effect upon the house would be the same as if this earthquake had struck it."

"Using the same method of measurement the intensity of the Long Beach earthquake of March 10, 1933, was nearly twice that of the Helena earthquake of Oct. 31," Dr. Carder said. The accelerograph set up in Helena was brought here from the Golden Valley park in San Francisco.

A similar instrument recorded the Long Beach earthquake in 1933. Dr. Carder said that the records of Helena's last major shake, together with the Long Beach writings, are the best records of major earthquakes taken in the region of greatest activity, in existence. The great work done in recording and explaining the movements of the earth is best set

forth in Dr. Carder's own words:

Officials Arrive

"The U.S. Coast and Geodetic Survey through its division of seismology and terrestrial magnetism, has taken an intensive interest in the science of earthquakes, especially with respect to the toll on property and human life. California, which is believed to be the most active earthquake region of this country, has been chosen as the laboratory in which to test earthquake activity. Franklin P. Ulrich, San Francisco, is in charge of this work in the western division, including the intermountain region as well as the Pacific coast. "The toll of human life by a destructive earthquake may be prevented in one of two ways, man can move out of the region where an earthquake is apt to occur, or one can build houses that an earthquake is not apt to destroy. The former course, obviously, is not practical. The only alternative then, is to build earthquake resistance structures. In order to do this, a knowledge of what the earth is doing, what forces are in play, and the way these forces are acting during a destructive earthquake and the region of the greatest activity is necessary.

"The splendid seismological laboratories in Berkeley and Pasadena, Calif., can give us a picture of earthquake activity from a distance, but they cannot tell us what is happening at

the site of the earthquakes.

"If these delicate instruments should have been placed at Helena during the heavy tremors of Oct. 18 and 31, they would have given us the exact time and direction of the first impulse and that is all. The record of what happened during the greatest disturbance would have been lost.

Well Equipped

"As a means of obtaining a picture of earth movements and forces during the time of greatest disturbance at its site, the U.S.C. of G.S. has developed the strong motion seismograph. To date, 51 of these machines are distributed in advantageous positions throughout California, especially in centers of population, and are being kept in proper adjustment. They are not in continuous operation as are the delicate instruments which pick up earth tremors from the opposite side of the world, but they are sitting waiting for something to happen. These dormant machines need something more than just a slight jar to wake them up. It takes more than the vibrations from a passing truck or street car. But if a tremor reaches damaging proportions, the platinum point on the bob of a little pendulum hanging inside a small platinum cup makes an electrical contact by the point touching the inside of the cup and the whole machine springing to life.

"An electric motor drives a drum carrying photographic paper, a lamp is lit, and a clock beats off half seconds. The image of the lamp filament is reflected by three mirrors, one of each attached to a small pendulum which vibrates in response to the earth motion in a given direction. The three pendulums are set to respond to earth motion in three directions, for instance, E-W, N-S and vertical. Three beams of light are hence reflected onto a cylindrical lens and from thence to a spot on the drum of photographic paper. As the little pendulums respond to earth motion, the beams of light move backward and forward, and thus describes a wavy line on the paper. The paper is developed and a permanent record of the earthquake is obtained.

"The instrument described is called an accelerograph because it measure the forces in play during the earthquake. There are 34 of these machines. It also maintains six instruments which register earth displacement directly, and 11 others which record on a plate of smoked glass. The accelerographs are the most useful.

Arrive Speedily

"Directly after the Helena earthquake of October 18, 1935, Mr. Ulrich, chief of the California seismological program and myself were sent to Helena to investigate the earthquake activity there. We left San Francisco on the night of October 19, and arrived in Helena on the afternoon of October 21 in spite of a serious accident which wrecked our car but did not seriously damage our instruments or ourselves. Mr. Ulrich later returned to San Francisco and fortunately I stayed on as we have nearly a complete record of the earthquake of October 31, and many minor tremors, some of which caused considerable damage."

"We have recorded nearly a dozen tremors in their entirety, that is, the instrument was running when the first waves came in from the disturbance. From these records, it is possible to locate the center of the disturbance which is called the focus. The epicenter is a point on the surface directly above the focus.

"From all indications, the focus lies within 4 miles of the federal building in Helena in a north to northeast direction. The records indicate that the depth of the focus is three miles or more, which would place the epicenter within three miles to the north or northeast. "The record of the earthquake of October 31, 1935, indicates that the horizontal intensity, measured in our terms, is 16 per cent gravity. For example, if the house you live in weighs

100 tons and a giant should shake the foundation of the house with a force of 16 tons in the frequency of the earthquake motion, that is, from five to seven times a second for four seconds, then the effect upon the house would be the same as if this earthquake had struck it. Using the same method of measurement, the intensity of the Long Beach earthquake of March 10, 1933, was nearly twice that of the Helena earthquake of October 31."

[Helena Independent; November 11, 1935]

SINGLE CHANGE IN HELENA'S NEW BUILDING ORDINANCE IS RECOMMENDED BY ENGINEER

But one change in the city's recently enacted ordinance in regard to constructing "earthquake resistant" buildings was recommended by R. M. Beanfield, a consulting engineer from Los Angeles, who last night addressed a crowd of 200 or more Helena people on the mezzanine floor of the Placer hotel on "Earthquake Rehabilitation." The present ordinance provides that every fifth layer of brick shall be bonded, or that every fifth row of brick in a new building shall have a row of bricks running diagonally. Mr. Beanfield recommended that this portion of the ordinance be made more strict, and that every third row of brick be bonded. The matter of making this amendment will likely be considered at the next meeting of the city council.

Dr. Carder Talks

Beanfield and Dr. Dean S. Carder, U.S. Coast and Geodetic survey representative, who is here in charge of seismographs, were the only speakers last evening. They were introduced by City Engineer Oscar Baarson.

Dr. Carder gave an interesting talk in which he explained the response of different types of buildings in earthquakes, while Mr. Beanfield told of what should be done in new construction.

Beanfield has had wide experience in rebuilding structures after devastating earthquakes, both here and abroad. In California he has designed more than 60 earthquake resistant school houses as well as the Shrine Temple at Los Angeles and St. Vincent's hospital there

After his talk last night, Mr. Beanfield answered numerous questions not only for architects and builders, but for the public in general. He spent more than an hour answering queries on earthquake-resistant construction.

Prominent Engineer

Mr. Beanfield is a member of the American Society of Civil Engineers, the American Society of Mechanical Engineers, the Seismological Society of America, and the Los Angeles Chamber of Commerce. Mr. Beanfield's coming here was through the courtesy of the Chamber of Commerce.

The visiting engineer was in 1921 awarded the Norman Fowler award of the American Society of Civil Engineers.

He was also instrumental in framing the uniform building code now in effect in California. Mr. Beanfield has had considerable experience in the Orient, particularly after the Japanese earthquake of 1926, rehabilitating damaged structures and designing buildings to be quake resistant. He is a past president of the Structural Engineering Association of Southern California.

[Helena Independent; November 12, 1935]

INSPECTION OF BUILDINGS WILL BE RESUMED TODAY; CONSTRUCTION SPEEDS UP

With the Helena Development company preparing to embark on its \$200,000 home building program and with other reconstruction plans shaping up, City Engineer Oscar Baarson expects to resume the general inspection of buildings today to determine their fitness for occupancy.

Only a few inspections have been attempted since the October 31 shake, partly because the city engineer was handicapped by a lack of assistance and partly because it was decided that it would be good policy to wait until the shaking had subsided somewhat. With 10 days elapsed since the last severe shock, Mr. Baarson has decided that it is safe to start re inspecting the more important buildings again, especially since the churches and other public and semi-public buildings desire to hold gatherings as soon as possible. Nearly all of the principal buildings in the city and a large number of dwellings had been inspected before the October 31 quake, and this work must be done over in most cases. Probably half a dozen buildings have been checked during the last few days because of emergency conditions that made their use mandatory but outside of these, no certificates of occupancy have been issued.

City Engineer Baarson now has a staff of six or eight engineers to assist him with the work and will push the examinations with all possible speed.

No Day of Rest

Although Monday was a holiday, it was no day of rest for the workmen demolishing wrecked buildings and removing debris. The full crew carried on the task of rehabilitation without interruption and the results of their efforts were apparent in all parts of the city as the more serious scars left by the tremors were being removed.

Reconstruction of a number of the commercial buildings of the city was proceeding rapidly, notably in the warehouse district at the Northern Pacific depot. Badly damaged, the Nash-Finch, A. M. Holter and other warehouses are nearly restored to their former condition to meet the demands of their business. Repairs to the Larson block on Helena avenue, hard hit, will soon be completed and work on the Northern Pacific depot and other Northern Pacific buildings is making good headway.

All over the city, home owners are putting their dwellings in shape for occupancy, and in a few instances new structures have been started. The city's big building program, however, will not get under way for another month or two, it is estimated.

[Helena Independent; November 12, 1935]

BUILDING LOTS TO BE CHECKED TODAY BY HOUSING GROUP Committee's Work Is Progressing, Says Earl J. Murphy

The committee in charge of securing lots for the Helena Development company will spend the next few days in the field, it was announced last night by Earl J. Murphy, who is in charge of the workers.

Mr. Murphy said that the work progressed in good shape yesterday when the committee began its field work. There are some 200 lots that the workers will check up on, to ascertain their owners, and if the title to them is clear.

To Build Homes

The Federal Housing administration has agreed to insure a loan for \$200,000 to construct between 50 and 60 new, modern, earthquake-resistant dwellings in Helena, and the Reconstruction Finance corporation has agreed to buy the bonds of the newly-organized company.

Mr. Murphy said that the directors of the company met late yesterday afternoon and discussed the progress of the project to date. Recommended articles of incorporation were received from the FHA, and they were carefully scrutinized. It is expected that the development company will incorporate before the end of this week.

When the list of available lots is ready to submit to the FHA for approval, Mr. Murphy said that it would embrace about 100. This will give plenty of leeway in case some of the property does not meet with the approval of the federal agency.

[Helena Independent; November 12, 1935]

HIGH SCHOOL WILL BE PUT BACK INTO PERFECT SHAPE Martin Will Request Grant Of \$175,000 To Do The Job

With the statement that more detailed inspection has shown Helena's new high school building was not damaged by earthquakes so extensively as first believed, A. H. Martin, Jr., executive assistant to Secretary Ickes, yesterday announced a supplemental application is being made for a grant of \$175,000 to restore the building. "That sum, it is estimated, will put the Helena high school in perfect condition and again make it something of which Helena can be proud," Martin said. Martin added that although the deadline is past, it may be possible to transfer some PWA allocation and make available about \$50,000 for restoration of the Bryant school in the sixth ward.

Here From Coast

Martin, who had been on the Pacific coast, returned to Helena to determine what action might be taken in regard to the restoration of Helena's damaged schools. He left yesterday afternoon for Butte, where he expected to take a plane for Washington, D.C. Gathered Monday afternoon at the headquarters of J. H. Rowe, personal representative of Frank Walker, were Martin, E. G. Bauer, special engineer in charge of school construction for the PWA; John E. Fields of Denver, irrigation specialist who came here at the request of Mr. Martin, and members of the Helena school board.

"What we want to emphasize," declared Rowe, "is that the Helena high school is not 'wrecked,' current reports to the contrary, and also that the inspection just completed under the direction of Mr. Bauer has shown that there was no structural weakness."

That the \$175,000 grant, if allowed, will be ample to restore the high school to its former condition is the estimate of Engineer Bauer. It is, however, subject to possible revision, as it is based on what Bauer termed a "preliminary inspection." That inspection, it was intimated, was much more thorough, nevertheless, than any previously made.

[Helena Independent; November 12, 1935]

RED CROSS BOARD TO HOLD MEET TONIGHT

To check over plans and estimates for repairing and replacing homes damaged by the earthquakes, the advisory board of the Lewis and Clark County Red Cross chapter will meet this evening, it has been announced by Albert Evans, who is in Helena representing the American Red Cross. He said that two registrations were made at headquarters yesterday, bringing the total to 271. He does not expect that many more registrations will be made, except by those who discover damage done to their homes that they had heretofore overlooked. At this time, Mr. Evans said that but few were registered for groceries and bedding, most of them being for home repairs.

[Helena Independent; November 12, 1935]

CARROLL COLLEGE HAS RESUMED CLASS WORK

Classes were resumed both in the college and high school departments of Carroll college yesterday with nearly the entire enrollment ready for the year's work. Dr. Emmet Riley, president of the institution, said that every effort would be made to make up for the lost time. The school has been closed for a little more than three weeks. Under the supervision of City Engineer Oscar Baarson, two engineers made a careful inspection of the school building on Sunday, and declared that it was structurally sound. Damage to the college caused by the earthquakes was principally confined to the east and west walls of the south wing. On the interior, some plaster fell.

[Helena Independent; November 12, 1935]

NATIONAL GUARD HAS STARTED CLEANING UP

Under the direction of Col. E. H. Williams, state adjutant general and commander of the 163rd infantry, national guard, workmen were cleaning up Camp Cooney yesterday, converted into an earthquake refugee camp after the tremor of October 18. Another crew was cleaning up debris in and near the badly shattered state armory. Army motor trucks and other military equipment have been removed and stored in garages and at the capitol.

[Helena Independent; November 12, 1935]

KALISPELL LEADS ALL IN DONATION OF FUNDS FOR EARTHQUAKE VICTIMS

The little city of Kalispell, always noted for it up-and-coming spirit and its modern aggressiveness, leads all of those throughout the state in the generosity of its contributions to aid those who have suffered in the Helena earthquakes. That city has sent more than \$2,500 to the Red Cross here for earthquake relief.

Incidentally, the donations were entirely voluntary and there was no direct solicitation for funds. Helena's situation was presented through the newspapers and the radio and immediately funds began to pour in to the Kalispell Chamber of Commerce. The total collected amounts to about 50 cents per capita for that community.

An interesting account of the response by the people of Kalispell and Flathead county is contained in last week's Monitor, weekly paper published by H. J. Kelly. It follows in part: "Kalispell people with those of other towns in Flathead county this week and last contributed at the rate of \$100 per hour for a total of \$2,200, which was sent to the Red Cross in Helena to be applied 100 per cent toward relief activities.

"Members of the chamber board of directors met Saturday morning, called Helena to determine what could be done and immediately set about to assist other agencies in the relief work. The first contributions, taken from members of the board, stared the pot off with \$50, and from that time on contributions rolled in at the rate of \$100 per hour during the time headquarters were open at the chamber of commerce. The rapid rate at which the fund grew was due in a large measure to the publicity given by the Inter Lake and by KGEZ, both of which published names of those who had contributed.

Many Participate

"Not one solicitation was made by those in charge of the Helena relief fund, but all contributions were made by persons who either called the chamber and later mailed in their contributions or by those who made them direct to the chamber office. One of the most interesting features of the drive was the fact that all contributions were relatively small but were unusually wide-spread. The largest contributions were \$25 and many ranged on down to \$5, \$3, \$2, \$I and less.

"Room "K" at the West Side school turned in \$2.60, representing contributions from every child in the room, ranging from 1 cent to 25 cents.

Organizations Contribute

"Organizations also did their part. Among those to contribute were The Owls, American Legion, Legion Auxiliary, War Mothers, Council of Catholic Women, Modern Woodmen, Veterans of Foreign Wars, Business and Professional Women, the Ku Klux Klan, Lakeside Ladies' club, Scandinavian Fraternity, Loyal Order of Moose, Somers I.O.O.F.

"Town and communities also united to do their part in the relief work. Whitefish, Columbia Falls, Bigfork, Somers contributed liberally in a lump sum while individuals at Coram, Nyack, Big Arm, Lonepine, Camas, Marion and Polson sent in donations."

[Helena Independent; November 12, 1935]

MAYOR BAUSCH WILL FINE EVERYONE IN CITY TO PAY DEBT

Helena's municipal administration wrangle evident during the recent emergencies, bobbed into the foreground again yesterday when Commissioner of Public Safety Amos Shellady vigorously resented the attitude of Mayor C. J. Bausch toward payment of emergency debts.

The situation came to a head when the city council was asked to provide for the payment of \$2,600 to 38 enlisted men of the national guard who served after the October 18th and 31st earthquakes.

More Arrests

Commenting upon the situation the Helena mayor evoked the wrath of the commissioner when he suggested the city police department should "work harder" and by "making more arrests and levying fines and penalties" raise funds to liquidate the lately added indebtedness.

"The Helena police department," Shellady retorted, "is not operated as a collection agency or revenue producing organization, but is for the protection of life and property and the preservation of public peace. Fines and penalties are incidental to those activities and it is regrettable when it is necessary to impose them."

Although a number of the guardsmen who served through bitter cold weather are now in need, city officials were advised, they received little encouragement that pay might be forthcoming. The mayor on the other hand, suggested it might be necessary for the legislature to act on the claim when it meets more than a year from now.

[Helena Independent; November 13, 1935]

LOCAL SCHOOLS WILL NOT OPEN UNTIL THE FIRST OF THE YEAR

Until a competent engineer makes a detailed report and a thorough investigation of all the buildings of the Helena school district, classes will not be resumed, according to Superintendent of Schools R. O. Evans.

This, he indicated, will be not earlier than the first part of December.

At the present time, a committee of the Helena school board is taking steps for the selection of the engineer and it is thought that some suitable man will be hired by the board within the next few days.

Repairs are going ahead on some of the buildings at full speed but school officials express themselves as doubtful if the work can be completed inside of three weeks. Superintendent Evans pointed out that even if the schools are not opened until after the first of December, it will be possible to get in the required number of days for full accreditment this year. Before the earthquakes hit Helena, schools were in session 40-odd days and a schedule could be arranged so that the minimum number of 170 could be included, he believes.

By cutting out many holidays and holding classes on Saturdays it would be possible to finish the full year if the classes were not resumed until January 1 or after, it is said. "Not until we receive all the facts in regard to the damage and we are sure the children will be safe, will the school work be resumed," the superintendent stated today.

[Helena Independent; November 13, 1935]

ENGINEER SHOULD HAVE SUPPORT OF ALL, SAYS WALES Long Beach Engineer Tells Kiwanians Of Huge Job

That City Engineer Oscar Baarson has not had the proper official cooperation or support, in the tremendous task that has confronted him as a result of the earthquakes, was strongly intimated yesterday by Charles Wales, Long Beach engineer, in an address before the Helena Kiwanis club.

Mr. Wales, who was city engineer of Long Beach at the time of the 1933 quake there, described that disaster and told of conditions in Long Beach following the tremor.

Had Big Staff

Declaring that City Engineer Baarson should have the fullest cooperation and unlimited backing in the work of inspecting buildings and rehabilitating the city, Mr. Wales drew a comparison between the situation here and that in the California city. When the Long Beach shock hit, he had a regular staff of 10 engineers in his office, but for the first 30 days after the tremor this force was increased to 100 and for the next six months he was permitted from 30 to 40 extra engineers at all times, he said.

Mr. Wales gave the Kiwanians a good idea of the huge task before Helena's city engineer at the present time and asserted that everything possible should be done to lighten the burden.

Conditions in Long Beach were not much different than here insofar as the one- and twostory buildings were concerned, he said, but there were many taller buildings there which received major damage. Utilities leading into Long Beach also suffered more heavily, he said, and at some points the gas was off for as long as six weeks.

"However, your city engineer needs a lot of help and the fullest cooperation from everyone in order to carry on the process of rehabilitation successfully," he said.

"He will have to insist that public safety be put above any private interests," he stated.

[Helena Independent; November 13, 1935]

NEW BUILDING MAY BE SOLUTION FOR METHODISTS HERE Repairing Of Present Church Would Be Most Costly

Because of the great expense that would be involved in repairing the structure and making it earthquake-resistant, officials of the board of the Methodist church and officers of the organization, at a meeting last night, gave every indication that a new building would be sought to replace the present St. Paul's church at Ewing street and Broadway. The meeting, held at the Opp and Conrad chapel, was presided over by Rev. Reuben Dutton of Missoula, superintendent of the Rocky Mountain district of the church. The matter of funds to finance the new building will be submitted to the Methodist Home Mission board, and the church members at large. A new church would be constructed with all of the earthquake-resistant features.

Dr. Torbet Here

Dr. Walter Torbet of San Francisco, western representative of the Home Mission board of the Methodist church, attended the meeting last evening. He is on his way to Philadelphia to attend a meeting of the board Nov. 17 to 20, and he will there present the application of St. Paul's church.

Also in attendance at the Philadelphia meeting will be Bishop Titus Lowe of Portland, who will return here November 25 to further discuss the church building problem. A final decision as to what will be done will be made at that meeting.

In the meantime, the Methodist church congregation and Sunday school will meet Sunday afternoons at the Presbyterian church here.

[Helena Independent; November 13, 1935]

'QUAKE DANCE TO BE GIVEN AT MISSOULA'

Missoula, Nov. 13--Western Montana is to be covered thoroughly in the effort of the American Legion to raise funds for the relief of Helena earthquake sufferers, it was announced by the chairman of the committee in charge of the local post's fund-raising quake dance. Every legion post in the western part of the state is being contacted to assist in conducting the drive and to cause a large crowd of supporters to come to Missoula from outlying cities.

Not only is the local post arranging to contact every legion post in this region, but posts in northern Idaho and central Montana are being asked to help the victims of the catastrophe in Montana's capital city. All civic organizations are to be contacted as well, and the committee is seeking to line up the support of Lions, Kiwanis and Rotary in nearby cities through the local clubs.

[Helena Independent; November 13, 1935]

RED CROSS APPROVED RELIEF AWARDS AGGREGATING \$14,969; 286 FAMILIES NOW SEEK AID

Thirty more cases involving awards aggregating \$14,969.95 were approved by the awards committee of the Lewis and Clark chapter of the Red Cross at a meeting last evening. With these 30 cases, the total number disposed of now comes to an even 100, and the total of awards made amounts to \$25,619.95.

Up to yesterday there were 286 registered with the Red Cross, 10 of which came in yesterday. Albert Evans, representative of the American Red Cross, of St. Louis, said that he expects there will be about 300 registrations before the work is finished.

Not a single case recommended by the Red Cross workers has been turned down by the local committee. R. E. Towle is chairman of the awards group, and others at the meeting last night were A. T. Hibbard, J. D. MacKenzie, Quay Painter, John Gough, Sam Roberts and Dick Tobin.

Each of the five workers submits the cases she has been investigating, and after the history of the family is read, the committee acts on the recommendation. Most of those last night were for building repairs or replacements. Estimates submitted for the work are compiled by the building advisor of the Red Cross.

Those from Helena who suffered losses during the earthquakes feel most fortunate in having such a sympathetic group in charge. Although the cases are submitted by numbers, there are few that committee members do not recognize. Under the capable leadership of Mr. Towle, the cases are handled in rapid order. As interrogators, the committee members have a remarkable faculty of confining their questions only to those necessary, and as a result the meetings are conducted without any pointless discussions that would make them long-winded affairs. From attending the meeting it is apparent that the members have the greatest of interest in each case, so the brevity of the questions could not possibly be interpreted as meaning that the work is done haphazardly.

All Are Aided

That the work of the Red Cross is done with the "human side" in view is revealed by the fact that no discrimination is made as to color, position or creed in the study and investigation of cases. Last night there were cases discussed and awards made to two Chinese families whose property was damaged by the quake.

In several cases submitted by the workers, the applicants had telephoned or called at headquarters during the last few days and advised that they had found other means of meeting their needs. A most independent and resourceful attitude has been largely displayed by Helena people who suffered losses.

It was brought out that there are several, perhaps many people in Helena, who are really in need of assistance, but that their pride prevents them from registering at the Red Cross. Some cases will be investigated where applications have not been made, it was decided. "It should be remembered," said Mr. Evans, who is handling the Helena relief work, "that the funds allotted or awarded by the Red Cross do not represent charity, but "neighborly helpfulness."

Mr. Hibbard announced to the committee that checks totaling \$2,306.50 had been received by him from the chamber of commerce at Kalispell, this amount representing what was raised in that city alone. The campaign for funds is continuing throughout Flathead county. In submitting the funds, the secretary of the Chamber of Commerce said that although it was most sincerely hoped that there would never again be such a catastrophe in Helena, that should the occasion ever arise when the city was in need of assistance, "we hope that

you will call on us again."
It was announced that several of the smaller Red Cross chapters had sent to national headquarters amounts aggregating \$1,958.50 for use at Helena.

[Helena Independent; November 13, 1935]

Section 7

Articles 301-349 (11/13/1935 to 05/28/1936) Back to Overview

Headline: Baarson Starts Inspection Task In Helena Again

Date: 11/13/1935 Info Categories: A, I, R

Headline: Governor And Frank Walker Hold Conference; Assurance Is Given

Of Aid For Helena

Date: 11/14/1935 Info Categories: A, I, P, R

Headline: Murray And Hines Discuss Fort Harrison Situation

Date: 11/14/1935

Info Categories: R

Headline: Four Tremors Bring Grand Total To 935

Date: 11/14/1935

Info Categories: E

Headline: Buildings Certified For Occupancy

Date: 11/14/1935

Info Categories: A, P

Headline: Temporary Barracks For The Students At Hawthorne Proposed

Date: 11/14/1935 Info Categories: A, I, P

Headline: St. Vincent School Is Closed For Years

Date: 11/14/1935

Info Categories: I, P

Headline: First Lutheran To Hire Engineer And Repair Properties

Date: 11/14/1935

Info Categories: A, I, R

Headline: Building Work At Children's Home Is Proceeding Rapidly

Date: 11/14/1935

Info Categories: A, I, R

Headline: Rent On House Here Raised \$38 A Month

Date: 11/14/1935

Info Categories: I, P

Headline: Mayor Is Finally Convinced There Is Legal Emergency; Special

Claims To Be Paid

Date: 11/15/1935 Info Categories: A, I, P, R

Headline: Trustees Study Perplexing School Problem Of Helena; Engineer

Due Here Monday

Date: 11/15/1935 Info Categories: A, I, P, R

Headline: Tremors In Helena Now Stand At 941

Date: 11/15/1935

Info Categories: E

Headline: Seismograph Will Remain In Helena Carder Is Advised

Date: 11/15/1935

Info Categories: I, S

Headline: Awards Committee For The Red Cross Will Meet Tonight

Date: 11/15/1935

Info Categories: A, I, R

Headline: Expect Craighead To Be Here Today From Washington

Date: 11/15/1935

Info Categories: A, I, R

Headline: Many Communities Give To Aid Quake Sufferers Here

Date: 11/15/1935

Info Categories: A, P

Headline: Liquor Firm Sends \$1,000 to Governor For Quake Refugees

Date: 11/15/1935

Info Categories: A, P

Headline: Long Beach Expert Approves Baarson's Work In Emergency

Date: 11/15/1935

Info Categories: P, R

Headline: Rehabilitation Is Progressing With Increasing Speed

Date: 11/16/1935

Info Categories: P, R

Headline: Kessler School To Begin Monday, Will Use Shotgun Club

Date: 11/16/1935

Info Categories: A, I, P

Headline: Great Northern Will Start Rehabilitation Of Its City Property

Date: 11/16/1935 Info Categories: B, L, R

Headline: Chief Of Coast And Geodetic Survey Is Highly Appreciative

Date: 11/17/1935

Info Categories: A, P

Headline: Emergency Fund Ordinance Ready For City Council

Date: 11/18/1935 Info Categories: A, I, P, R

Headline: Unemployment No Problem In Helena At Present Time; Estimated

800 Men At Work

Date: 11/18/1935 Info Categories: I, P, R

Headline: Helena Development Company Expects To Hold Meeting Today

Date: 11/18/1935

Info Categories: I, R

Headline: BONG; Courthouse Clock To Ring No More

Date: 11/18/1935

Info Categories: B, R

Headline: Helena Shaken By Another Heavy Shock But Damage Is Light;

Great Falls Is Hit

Date: 11/29/1935 <u>Info Categories</u>: B, E, I, N, P

Headline: Helena People Are Anxious To Convey Appreciation To Neighbors

Who Have Helped

Date: 11/29/1935

Info Categories: A, P

Headline: Offer 20 Coaches For Use By High School Students; Railway

Companies To Provide Cars At No Charge

Date: 11/30/1935

Info Categories: A

Headline: Great Falls House Damaged By Quake

Date: 11/30/1935

Info Categories: B, E

Headline: Report Reveals How \$100,000 Federal Fund Expended In

Earthquake Rehabilitation

Date: 12/01/1935 Info Categories: A, I, R

Headline: School Repairs
Date: 12/01/1935

Info Categories: R

Headline: First Quake Resistant Dwelling Of Brick Being Constructed Here

Date: 12/01/1935

Info Categories: P, R

Headline: Helena Gets \$50,000 For Quake Fund From Hopkins; Government

Allocates. Additional Sum, Is Word

Date: 12/02/1935 Info Categories: A, B, I, R

Headline: New Policy Covering Earthquake Accident Announced In Helena

Date: 12/02/1935

Info Categories: A, I

Headline: High School Classes To Be Resumed Soon In Coaches Loaned

To City At No Cost

Date: 12/03/1935 Info Categories: A, I, R

Headline: More Earthquake Loans Are Passed By RFC Unit Here

Date: 12/03/1935

Info Categories: A, R

Headline: Just A Suggestion

Date: 12/03/1935 <u>Info Categories</u>: A, B, H, I, P, R

Headline: Federal Building At Dillon To Be Made Quake Proof

Date: 12/03/1935

Info Categories: A, R

Headline: Red Cross Grants To Helena Folks Total \$69,300.65

Date: 12/04/1935

Info Categories: A, R

Headline: Children's Home Revamped

Date: 12/04/1935 Info Categories: B, P, R Headline: Earthquake Of 1872 Recalled By Hilger

Date: 12/04/1935

Info Categories: E

Headline: Tremor Recording Is Displayed At Starz

Date: 12/05/1935

Info Categories: E

Headline: Tape On Seismograph Lists Nov. 28 Quake As 12 Seconds Long

Date: 12/05/1935

Info Categories: E

Headline: Earthquakes In Montana Will Be Research Object

Date: 12/13/1935

Info Categories: A, I

Headline: High School Classes Resume This Morning In Railroad Coaches

Date: 12/15/1935 Info Categories: A, I, P, R

Headline: Temperature Rises In City But Snow And Quakes Remain

Date: 04/05/1936

Info Categories: E

Headline: Bowen To Check Plans For Grade School Buildings In Event

\$100,000 Bond Election Is Passed

Date: 05/28/1936

Info Categories: A, I, R

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

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BAARSON STARTS INSPECTION TASK IN HELENA AGAIN Six Engineers Are At Work On Urgent Project

Six structural engineers and their six assistants yesterday began the task of re-inspecting every structure in Helena damaged by earthquakes of October 18 and 31.

They planned to speed the work as much as possible, in consistency with sound inspections.

Oscar Baarson, city engineer and ex-officio building inspector, who is in charge of the campaign of inspection, said certificates of occupancy would be issued as rapidly as reports of the engineers can be written up and filed in his office.

Where a report on a structure indicates it unsafe for occupancy, a second inspection will be made by another engineer and the two reports compared before definite action is taken, Baarson said.

Nine FERA crews were in the field, leveling structures which embodied hazards. Working with these groups are rehabilitation forces, repairing the ravages of the quakes as fast as possible.

Classes will not be resumed in the public schools until all repair work has been completed and until occupancy of the various buildings has been authorized by engineers, perhaps not until early December, school officials said.

Superintendent R. O. Evans said he believed it would be possible to get in the required number of days for full accreditment this year, by cutting out many holidays and holding classes on Saturdays.

[Helena Independent; November 13, 1935]

GOVERNOR AND FRANK WALKER HOLD CONFERENCE; ASSURANCE IS GIVEN OF AID FOR HELENA

"The government is sympathetic and will continue to aid Helena in its earthquake disaster," Governor Frank H. Cooney said yesterday following a conference with Frank C. Walker of Butte, head of the National Emergency council and direct representative of President Roosevelt. Governor Cooney said that the conference was "encouraging" and that the president's representative indicated to him that the government would do everything in its power to assist Helena in its rebuilding program. "He is right with us," the governor said of Mr. Walker.

Help for Schools

While the question of rebuilding and repairing the damaged Helena schools was not definitely settled, the governor said that he was confident government aid could be obtained for such purposes. The governor and Mr. Walker were in conference for about a half hour.

He said that Mr. Walker expressed gratification that the government had been able to help out. "He didn't say that we wouldn't get further assistance," Governor Cooney said. Mr. Walker, the president's right-hand man, left nothing unseen when he visited the Helena quake zone yesterday. Arriving here early from Butte after stopping briefly at Boulder for breakfast, the New Dealer immediately began an extended tour of the stricken sections of the city.

Until he had completed his tour of Helena, J. H. Rowe, emergency director here, announced Mr. Walker "would be available to no one." With the former Butte man on his tour were former State Senator Tom Walker, his brother, also of Butte, Mr. Rowe and others closely connected with the Helena program of rehabilitation which gained rapid impetus under the direction of Rowe.

Deplores Situation

As he halted for luncheon Walker said the Helena situation "was bad" but added his belief the work of rehabilitation was in competent hands.

The president, he said, is vastly interested in Helena and her recovery.

Mr. Walker said the city might expect federal aid for the restoration of the high school and perhaps some money toward replacing the destroyed Bryant school.

Direct financial aid for the use of householders, however, can only be supplied through the Red Cross, he said. Although Mr. Walker spent most of his time here in a personal investigation of conditions, he returned to the governor's office in the afternoon and talked over the entire situation.

President Sympathetic

"It is quite distressing," he commented, "to return to Helena under such circumstances. I know personally many who have suffered severe losses, and I sympathize with them and all others similarly afflicted. The president has repeatedly expressed his sympathy for those so troubled here."

He said that aid will be continued for Helena through the FERA, the WPA, the Red Cross and other national agencies. He added that the question of federal aid for the restoration of damaged county and city buildings would be given most serious consideration in Washington. After making a hurried survey of the city he returned to Butte.

[Helena Independent; November 14, 1935]

MURRAY AND HINES DISCUSS FORT HARRISON SITUATION

Washington, Nov. 13 (AP)--Senator James E. Murray, Montana democrat, today discussed plans for rehabilitation of Fort Harrison hospital at Helena, Mont., with Gen. Frank T. Hines, director of the veterans administration.

General Hines told the senator he was awaiting a complete report of damage at Fort Harrison by recent earthquake shocks. He said the Veterans administration desired to retain the hospital and rehabilitate it as speedily as possible. No estimate of damage or of funds necessary for rehabilitation has reached the Veterans administration.

Murray said he was satisfied Hines will act with all speed and that there is no intention of removing the hospital.

Only One in State

"Hines said it would be a grave mistake to remove the hospital since it is the only veterans facility in Montana," Murray said.

[Helena Independent; November 14, 1935]

FOUR TREMORS BRING GRAND TOTAL TO 935

Four slight tremors were recorded in Helena yesterday, the last one being 10:02 in the morning. This brought the total to 935 as the city went through its 33rd consecutive day of seismic activity.

Although the big cold wave, due yesterday, failed to materialize, the prediction for last night was unsettled weather and colder. At 6 o'clock in the evening the mercury stood at 36 above, and by midnight it had fallen to 24.

[Helena Independent; November 14, 1935]

BUILDINGS CERTIFIED FOR OCCUPANCY

While new certificates of occupancy have not been issued yet, a number of Helena buildings have been inspected during the last two days and found safe, City Engineer Oscar Baarson announced yesterday.

Reinspection of the buildings was started Tuesday, and due to the press of business the city engineer has not had time to write out the certificates of occupancy. He expects to start doing this today when he will take up the reports of his inspecting engineers in earnest.

Lack of Time

Up to last night he had been able to look over only a few of these reports. Buildings which Mr. Baarson had checked inspection reports and was able to announce as safe for occupancy yesterday were:

Power Block, Sixth and Main.

Power Block Annex, Sixth avenue.

Gold Block, Main street.

Helena Independent, Main street.

Record-Herald, Broadway.

First Christian Church, North Benton.

Placer Hotel, Main Street.

Montana Children's Home and Hospital buildings, Helena avenue.

Federal Building, Sixth and Park.

Many other structures have been examined but the reports of the engineers will not be prepared until today, Mr. Baarson said. Although handicapped by lack of assistants, the inspection work will be pushed as rapidly as possible.

Loses Engineers

Starting today Mr. Baarson's staff will be reduced to four inspecting engineers and a few assistants. The two state highway commission engineers, E. F. Moyle and Maxwell Mason, loaned to Mr. Baarson for the emergency, must return to their regular places in the bridge department of the highway commission.

Their services can be spared no longer, it was pointed out, because the highway body has a large number of projects which must be prepared for letting by December 15. If they are not let by this date, the state will lose a large amount of federal funds.

The services of Engineers Moyle and Mason were made available to the city thorough the courtesy of D. A. McKinnon, chief engineer, and B. J. Ornburn, head of the bridge department, of the highway board. They have been helping the city engineer almost constantly since October 18 and have been on the job a full month. The four engineers that Mr. Baarson has left were provided by the FERA and are being paid by that agency.

[Helena Independent; November 14, 1935]

TEMPORARY BARRACKS FOR THE STUDENTS AT HAWTHORNE PROPOSED

West side parents will provide barracks for Hawthorne school pupils to attend classes in until the regular building has been thoroughly repaired and inspected, it was announced yesterday following a meeting of R. E. Towle and E. D. Patenaude with the school board here.

The barracks will be paid for by the parents, with none of the expense to be borne by the school district.

This plan was proposed because the parents feel that it may be months before the school building is ready for occupancy.

Public school teachers, all under contract, will be furnished by the school board, but this does not represent an added cost in view of the fact that they have all been paid during the shut-down.

The plan is to have a barracks of about 12 rooms, which will be built of rough material, lined with a composition wall board, and heated by gas furnaces. Lots on the west side will be secured for the building.

[Helena Independent; November 14, 1935]

ST. VINCENT SCHOOL IS CLOSED FOR YEAR

Students of St. Vincent's academy are requested to call at the institution today to get their report cards, gymnasium equipment and return all text books.

It was announced that school has been suspended for the remainder of the school year as facilities for continuing the courses are not available at the present.

[Helena Independent; November 14, 1935]

FIRST LUTHERAN TO HIRE ENGINEER AND REPAIR PROPERTIES

A special engineer will be employed to make a thorough inspection of the First Lutheran church on North Rodney street and then to supervise the needed repairs, it was decided Tuesday night at a special meeting of church members.

Assurance of ample funds from the East to assist in the repair work was received. While the extent of the loss is not known, it is estimated that \$2,500 will cover it. The building was declared unfit for occupancy after the October 18 earthquake.

[Helena Independent; November 14, 1935]

BUILDING WORK AT CHILDREN'S HOME IS PROCEEDING RAPIDLY

The Montana Children's home buildings on Helena avenue are being put in shape rapidly in order that St. John's hospital may be moved in there as soon as possible, Milo Dean, superintendent, said yesterday. It will probably be a month or six weeks before the job is completed.

Both of the buildings, the partially completed hospital and the main children's home building, are to be used by St. John's. Mr. Dean said the work of the home was going on as well as could be expected and that most of the children are being sheltered at the boys' building in the Helena valley. Others have been placed in private homes for the time being. The federal government, the hospital and the children's home are cooperating on the work of making the city buildings ready for occupancy by the hospital. All of the hospital equipment from the evacuated St. John's building on Catholic hill will be moved into the new location as soon as possible. The hospital building at the children's home is one of the few earthquake-resistant structures in Helena.

[Helena Independent; November 14, 1935]

RENT ON HOUSE HERE RAISED \$38 A MONTH

The case of how a landlord raised the rent of a house from \$12 a month before the earthquakes to \$50 a month now is submitted by B. F. Clough of 1720 Walnut street. Clough said that he had lived in the place for two years and had "paid my rent every month in advance and do not owe them a penny."

The first year, Clough said he paid \$15 a month, and that this rent was reduced to \$12 up to the present time.

"Now they want me to move out by the 15th of this month," he said, "or if not by the first they will charge me \$50 a month from now on."

[Helena Independent; November 14, 1935]

MAYOR IS FINALLY CONVINCED THERE IS LEGAL EMERGENCY; SPECIAL CLAIMS TO BE PAID

It took am emphatic opinion of the city attorney and nearly two hours of discussion to determine that an emergency really exists in Helena, when the council met in special session yesterday afternoon. Mayor C. J. Bausch conducted most of the discussion. The meeting was called to consider for the fourth time the claims presented by Commissioner of Public Safety A. M. Shellady and City Engineer Oscar Baarson for emergency expenditures made by their departments for the protection of life and property since the October 18 earthquake. On all previous occasions the mayor had refused to approve them.

Total Not Great

Commissioner Shellady had claims for the payment of the national guardsmen who patrolled the city for three weeks; for preparing temporary quarters for the fire and police departments and for other miscellaneous expenses incurred in policing the city. Mr. Baarson's claims were for routine expenses in connection with the inspection of buildings and for the salary of one engineer he employed after October 18.

It is estimated that the emergency expenses incurred to the present time are only a little in excess of \$3,000 and that the total probably will be less than \$6,000. The chief item in the claims now before the council is that for payment of the national guardsmen.

Yesterday's meeting was scheduled to start at 3 o'clock but Noble Evans, street commissioner, failed to put in an appearance and Mayor Bausch would not call the meeting to order. The other two commissioners, the city attorney and other officials waited until 4:30 o'clock, at which time Evans was finally located at the Senate beer parlor. The meeting got under way about 5 o'clock.

City Attorney John W. Mahan then explained his opinion, asked by the mayor in regard to the legal right of the city to expend money to meet the liabilities incurred since the earthquake. The mayor had questioned the expenditure on the ground that it would force the city to exceed its budget.

Mr. Mahan explained that the budget had nothing to do with it and that the statutes gave the city or any other political subdivision the right to expend money to meet any sudden extreme emergency such as fire, flood or earthquake.

Unlimited Powers

"There is a definite limitation upon expenditures by the city for general administrative purposes, which means the normal and usual operation of the city government," Mr. Mahan pointed out, "but the city is given unlimited scope in meeting an emergency if the need arises.

"No person can say, under any conceivable construction of the statutes, that an emergency caused by an earthquake such as we have had constitutes general administrative expense. It is an emergency under the definition of the law and the city may expend money to meet it without regard to the budget. It is only necessary to declare an emergency by resolution and to issue emergency warrants. Provision for payment of the warrants shall be made by a special levy when the next city budget is prepared.

Legal Since Oct. 21

"This council formally declared the emergency on October 21, and since that time the mayor and the city clerk have had full legal authority to draw and issue emergency warrants for payment of any emergency expenses without further notice or hearing." City Attorney Mahan emphatically recommended in his opinion that an Earthquake

Emergency fund be created and warrants be issued against for payment of emergency expenses incurred.

Mayor Bausch was not yet satisfied and the budget law was trotted out for an airing. It was thoroughly dissected, and finally the city attorney made it emphatically plain that the emergency expenditures had nothing to do with the current city budget and in no way affected it or interfered with the appropriations for the various departments.

Changes Suddenly

Then the mayor suddenly capitulated and, with an unusual display of harmony, agreed that all the claims presented should be approved and paid.

He then explained that he had never really been opposed to payment of the emergency claims, but had merely held back because he feared the expenditures would be charged against the several administrative departments and would force the city to exceed its budget. He had wanted to be sure this would not happen, he said. His explanation occasioned great surprise among those present who were under the impression that the mayor previously had been flatly opposed to expending any money for emergency purposes.

It was finally decided that the city attorney should draw an ordinance formally creating an earthquake emergency fund and that the claims would be paid when this was officially passed.

[Helena Independent; November 15, 1935]

TRUSTEES STUDY PERPLEXING SCHOOL PROBLEM OF HELENA; ENGINEER DUE HERE MONDAY

A further discussion on Helena's perplexing school problem took place at a regular meeting of the trustees of the school district here last evening.

Dr. T. L. Hawkins, who was appointed to secure an engineer to check over all of the school buildings and determine whether or not they are safe for occupancy, reported that an engineer would be here Monday from California to do the job.

This engineer was secured after Dr. Hawkins had written to the deans of leading engineering schools in the West and Middle West for recommendations. The engineer, whose name is being withheld for the present, asks for \$100 a day and traveling expenses.

Cannot Accept Work

It was stipulated that whoever the engineer is, he cannot in any way accept any work in repairing or rebuilding the schools here.

The question of erecting barracks for the use of high school as well as grade school pupils was discussed, but was left somewhat up in the air, pending the arrival of the engineer next week. Chairman E. M. Hall felt that it would not be wise to spend money for barracks if that amount would repair the permanent buildings and make them earthquake resistant, especially in view of the fact that this school district has nearly reached its constitutional limit in the issuance of bonds.

The district cannot bond for more than \$60,000 additional.

Sigvald Berg, supervising architect for the Federal Housing administration here, appeared before the board and congratulated the members on the engineer that they had selected to investigate the school buildings. He said that the engineer was well acquainted with earthquake-resistant construction, and that he will undoubtedly give an unbiased report. One of the reasons for getting the independent engineer is to clear up any rumors about the construction of the new high school.

Cannot Occupy

Berg said the engineer would likely recommend that considerable new design and construction be done on the school buildings, and added that he does not believe they can be occupied for the remainder of this school year.

Mrs. George W. Langdorf, president of the Central School Parent-Teacher association, appeared before the board to express the sentiment of east side parents in regard to the opening of the schools. She said that these parents were just as interested in getting the schools open as any in the city, but that they were more interested in the safety of the children than a hasty and ill-advised resumption of classes. She expressed the confidence of the east side parents in the school board, which, she said, they believed would act wisely.

Chairman Hall submitted some estimates on the cost of constructing barracks for school use. He said that the barracks would come to about \$725 a room, and that to house all the pupils in the district in this manner would cost in the neighborhood of \$50,000.

A motion was carried to return to the Unionville school district the sum of \$420 for pupils who would have attended the Helena schools the first semester of this school year.

Repairs by WPA

The board was advised that the Works Progress administration was expending \$6,500 to repair the old high school building. Included in the repairs is the installation of tie-rods to keep the walls intact. The WPA asked that a formal lease be approved by the board on the building, subject to cancellation by either party upon 30 days notice. This is a new practice

required by the procurement division of the treasury department, and the trustees voted to enter into the lease as outlined.

In his report to the board, City Superintendent R. O. Evans said that the minimum school year under the Montana statutes is 170 days, and that this many days of school could be had if classes were resumed on December 1, without the use of Saturdays. Usually the school year here lasts for 190 days. If school could start on January 1, Superintendent Evans said, the required 170 days could be gotten in by the use of Saturdays, with the school year closing June 5.

It was reported that 20 out of 30 students enrolled in the aviation classes of the high school were reporting for work each day at the airport. A plan to use the basement of the Christian church for orchestra, band and glee club was deemed inadvisable at this time by the board.

E. J. Decker of the West Coast Construction company told the board that 30 class rooms at the high school could be made available 60 days after reconstruction begins, with all the earthquake resistant features.

Summer School

The matter of resuming school here is still most indefinite, but it was brought out that if necessary, classes could go on until July 1 with the use of Saturdays.

A proposal was discussed to hold classes in residences throughout the city, but this was believed inadvisable.

Alex Wardlaw, chairman of the buildings and repairs committee of the board, reported that repairs would probably be completed this week at Broadwater, Central, Jefferson and Emerson schools, and would be ready for the inspection of the engineer who is coming here Monday.

On motion of Trustee Hawkins, the board turned down the idea of allowing teachers, now under contract with the district, to tutor in private homes for a fee. This applies only during the existing emergency.

A system of paying Jack Smelser, radio weather report man at the airport, through the school district, was approved by the trustees. Smelser will get \$25 a month from the city for his duties, and \$25 from the state. He will act as assistant instructor in aeronautics. William Fahrner is the instructor.

Before adjourning, the board approved the tearing down of towers on the old high school and the removing of loose stones, to be paid for by the WPA.

[Helena Independent; November 15, 1935]

TREMORS IN HELENA NOW STAND AT 941

Thursday, Helena passed its thirty-fourth consecutive day of earth disturbances, and the score at midnight was 941, according to the Helena weather bureau. Tremors reported yesterday were described as weak, except one of two seconds duration at 6:35 in the morning, which was moderate. There were four recorded yesterday. Although warmer weather in the state was the prediction at the weather bureau yesterday, the mercury fell from 30 at 6 o'clock last evening to 22 at close to midnight.

[Helena Independent; November 15, 1935]

SEISMOGRAPH WILL REMAIN IN HELENA CARDER IS ADVISED W. E. Maughan Will Be In Charge Of The Instrument

The "strong motion" seismograph which was brought to Helena from Golden Gate park in San Francisco is to be a permanent decoration at the federal building.

Dr. Dean S. Carder of the U.S. Coast and Geodetic Survey was advised from Washington, D.C., yesterday that the instrument shall remain in Helena.

Only a few weeks ago Postmaster Harry Hendricks asked Senator James E. Murray to do what he could to have a seismograph set up in this city. The matter was immediately taken up with the Coast and Geodetic Survey headquarters there and the results desired were obtained.

Maughan in Charge

In Helena the instrument will be under the charge of W. E. Maughan, meteorologist at the weather bureau. For the next two or three days Dr. Carder will give Mr. Maughan instructions on the operation of the machine.

The San Francisco man was highly pleased with the action of the government in authorizing him to leave the machine here.

Helena's seismograph does not record the slight temblors, but only those that are strong enough to set it off. It was on this machine that Dr. Carder obtained what he believes is one of the best earthquake records ever obtained. This occurred on October 31.

A special dark room in the basement of the federal building has been assigned to Mr. Maughan for the seismograph. It will be wired to the weather bureau offices on the top floor so that if a shock is strong enough to trip the pendulum, those in the offices will know immediately that the instrument is in operation.

Dr. Carder especially emphasized the fact that sight-seers will not be permitted to see the machine.

Machine's Description

In Dr. Carder's own words, following is a description of the instrument to be kept in Helena permanently:

"As a means of obtaining a picture of earth movements and forces during the time of greatest disturbance at its site, the U.S.C. of G.S. has developed the strong motion seismograph. To date, 51 of these machines are distributed in advantageous positions throughout California, especially in centers of population, and are being kept in proper adjustment. They are not in continuous operation as are the delicate instruments which pick up earth tremors from the opposite side of the world, but they are sitting waiting for something to happen. These dormant machines need something more than just a slight jar to wake them up. It takes more than the vibrations from a passing truck or street car. But if a tremor reaches damaging proportions, the platinum point on the bob of a little pendulum hanging inside a small platinum cup makes an electrical contact by the point touching the inside of the cup and the whole machine springs to life.

Motor Driven

"An electric motor drives a drum carrying photographic paper, a lamp is lit, and a clock beats off half seconds. The image of the lamp filament is reflected by three mirrors, one of each attached to a small pendulum which vibrates in response to the earth motion in a given direction. The three pendulums are set to respond to earth motion in three directions, for instance E-W, N-S and vertical. Three beams of light are hence reflected onto a cylindrical lens and from thence to a spot on the drum of photographic paper. As the little pendulums respond to earth motion, the beams of light move backward and forward, and

thus describes a wavy line on the paper. The paper is developed and a permanent record of the earthquake is obtained."
[Helena Independent; November 15, 1935]

AWARDS COMMITTEE FOR THE RED CROSS WILL MEET TONIGHT

Pushing ahead with routine rehabilitation work in Helena, Albert Evans, Red Cross field representative here, announced a meeting of the Lewis and Clark county committee tonight to consider and check further rehabilitation and rebuilding estimates that have been turned in during the last three days.

Evans said he expected that 30 or 40 estimates would be ready for presentation. There were 30, all approved, for consideration at Tuesday night's meeting, bringing the total expenditure to over \$25,000 for 100 projects. Three more registrations have brought the total to 289.

Although there is plenty of government money available through loan channels here, the Red Cross represents the only way that heads of families without enough security for loans can rehabilitate their buildings and get back to a position where they can become safe financial risks in the future.

In that respect the Red Cross is bearing the burden of rehabilitation and rebuilding for certain families.

[Helena Independent; November 15, 1935]

EXPECT CRAIGHEAD TO BE HERE TODAY FROM WASHINGTON He Will Bring Plans For Houses To Be Built In City

Barclay Craighead, Montana director for the Federal Housing administration, will arrive here this noon from Washington, D.C., with all of the plans and specifications for houses to be created under the dwelling project of the Helena Development company. The company proposes to build between 50 and 60 new homes in Helena with the aid of the FHA and the Reconstruction Finance corporation through a \$200,000 bond issue.

A. T. Hibbard, chairman of the board of directors of the new company, said that in all probability a meeting of the board would be held this afternoon with Mr. Craighead. It was announced yesterday that articles of incorporation are all prepared and are ready to be filed. They will be gone over at today's meet.

Line Up Lots

In the meantime, the matter of securing lots on which to build the houses went ahead yesterday, according to Earl J. Murphy. Mr. Murphy will meet with the county commissioners this morning in regard to obtaining tax title property for building. The office of County Assessor Charles Martien is established in the Empson building, and the force has been busy the last two days aiding the lot committee of the development company check up on the ownership and title of property. Valuations on the real estate have also been submitted.

Mr. Murphy said that several of the lots which have been thoroughly checked, have been submitted to the state FHA offices here for their approval and appraisal. The company can pay for the lots, in stock, only the amount set by the FHA. Mr. Murphy said that although he believes the company has managed to list "all of the choice lots in town," he is still receiving many calls every day in regard to listing additional property.

[Helena Independent; November 15, 1935]

MANY COMMUNITIES GIVE TO AID QUAKE SUFFERERS HERE

Montana communities, large and small, dug deep into their money pockets and came up with definite and concrete expression of sympathy for Helena in its earthquake disaster. Business leaders, officials and the persons who lost heavily in the quakes commended the spirit of self sacrifice and helpfulness shown by sister cities of the capital.

Donations of \$2,500

O. C. Lamport, secretary of the Helena reconstruction committee has received to date donations totaling \$2,518.80 and more are arriving daily. The money will be turned over to the committee's finance group, composed of T. O. Hammond, Cecil V. Wilson and Hugh R. Adair, for disposition, Lamport said.

From the Missoula branch of the Helena Relief fund yesterday morning came a check for \$1,000 with a letter that said in part:

"We are happy to enclose a check for \$1,000. We are continuing the effort and will unquestionably have \$2,000 at least. This last amount will include the funds collected through the Red Cross for the same purpose, but will be handled directly through their organization."

J. D. Scanlan, publisher of the Miles City Star, sent the reconstruction committee a total of \$586. His letter said:

"Enclosed you will find checks and draft for \$586, with detailed list of individual contributors to the Helena relief fund. For your information I desire to state that there were no personal solicitations made. Every contribution was volunteered and with a good heart.

Newspaper Campaign

"We started the campaign asking for \$500 with an announcement on the first page of The Star, and this is the result.

"These few little contributions are entirely independent of anything that the Red Cross may do in this community. The sympathy of all Miles City goes out to your good people in their tribulations. However, we cannot help but feel that their troubles will soon end. Out of them will come a bigger and better Helena."

The central Montana Chamber of Commerce at Lewistown forwarded a remittance of \$250, and said:

"The members of this organization sincerely hope that this money will at least help in a small measure to relieve the distress occasioned by the earthquake. You may be sure that the citizens of Lewistown stand ready at any time to give any assistance possible." A donation of \$148 has been received from the Junior Woman's club of Red Lodge through Mrs. Martha Kimball, the corresponding secretary, who expresses hope that "we can alleviate some suffering or help in your tremendous task of reconstruction."

Manhattan and Ronan

Two remittances of \$100 each came from the Ronan Commercial club and Manhattan, respectively. The letter of transmittal written by Secretary B. F. Johnson said in part: "This is a donation by the Ronan Commercial club and the people of Ronan to the people of Helena to be used for the immediate needs of those who have suffered by the quake. We suggest that these funds be placed in the proper channels to accomplish the most good at the time."

The Manhattan State bank's letter read:

"Our check for \$100 is a contribution from the citizens and business men of Manhattan for Helena and its people on account of the damage and suffering occasioned by the recent earthquake.

"Having gone through a similar experience here, our people are in a position partially to realize, at least, what you have all gone through, and hope that the old earth will settle down so there may be no more recurrence of such a disaster."

A contribution of \$84 was sent in by the Fullerton auxiliary to post No. 2986 of the Veterans of Foreign Wars at Polson. The accompanying letter signed by Eunice Cowan, president, and Georgia Swart, chairman, said:

"Enclosed find \$84 to be used to aid those stricken by the earthquake. This money was raised by the auxiliary among the townspeople and with a penny drive at the school."

Drummond Masons

The \$50 donation of Ruby Lodge, A.F. & A.M., at Drummond was recorded as was that of H. T. Cumming, a past master of the organization, who personally gave \$10. He said it is "our hearts desire that Helena and its good people will soon be able to go to their homes and be happy once more."

What probably was a 100 per cent membership contribution of \$40.80 has been received from the Glacier Park Commercial club, with a letter that said:

"Attached please find check in the amount of \$40.80. This is a donation from our community to be used as you deem fit to assist those afflicted by your recent calamity. Sorry the amount is not larger, but our community is small and most of us are not in good shape financially. Should you need further assistance, we shall be glad to help as far as our means permit."

The Augusta Commercial club and the Augusta American Legion post each forwarded \$30 "To be used where it will do the most good in your present troubles," adding: "We feel deeply sorry for your people in this trouble and trust things will straighten themselves out soon. If there is any way we can be of service to you, please advise."

Personal contributions have come from Mrs. Annie F. Velie, a former Montana resident, \$25; Frank B. Linderman of Somers, \$25, the Local Activities club of Big Sandy, \$10, and G. W. Covington of Santa Monica, Calif., former Helena resident \$5.

[Helena Independent; November 15, 1935]

LIQUOR FIRM SENDS \$1,000 TO GOVERNOR FOR QUAKE REFUGEES

Governor Frank H. Cooney was advised by wire yesterday that the National Distillers Products corporation is contributing \$1,000 for the relief of earthquake suffers here. President Seton Porter of the liquor concern telegraphed the governor:

"On behalf of our subsidiary companies doing business with the state of Montana, and in a spirit of genuine sympathy with the people of Montana, I have this day instructed the Chase National Bank to telegraph you through the First National Bank and Trust company of Helena for use of your earthquake relief committee \$1,000."

Governor Cooney replied: "Let me assure you of Montana's deepest appreciation of generous donation announced in your wire today. Helena people are making splendid progress in heroic work of rehabilitation, and your gift and expression of sympathy inspire them to greater efforts."

[Helena Independent; November 15, 1935]

LONG BEACH EXPERT APPROVES BAARSON'S WORK IN EMERGENCY

Approval of the manner in which City Engineer Oscar Baarson, ex-officio building inspector, has conducted and kept records of inspection of buildings after the recent earthquakes was voiced here Wednesday by C. D. Wales, Jr., of Los Angeles, who was chief building inspector at Long Beach, Calif., when the severe earthquake occurred there March 10. 1933.

Mr. Wales, widely known for his competency and his excellent work after the Long Beach temblor, is now district structural engineer for the Portland Cement association. He came here to study the Helena quake situation.

Mr. Wales said that the forms of reports now being used by City Engineer Baarson are virtually the same as those employed at the time of the Long Beach disaster and which proved most satisfactory.

"We found many people," Mr. Wales said in speaking of his Long Beach experience, "who were eager to capitalize on the disaster in order to break leases, collect insurance and all phases of 'rackets,' and found that our records, made by competent men, served to protect against this particular phase of activity."

Mr. Wales expressed surprise when informed that the Helena engineer has been able to obtain only four engineers to put out on inspection work. The size of the job here, he commented, calls for a larger force if it is to be completed satisfactorily and in a reasonable time.

[Helena Independent; November 15, 1935]

REHABILITATION IS PROGRESSING WITH INCREASING SPEED Building Activity Is Spurting With Each Day

Reconstruction activities and building inspections continued to grow apace yesterday as Helena's citizens pressed the repair of their buildings and dwellings and City Engineer Oscar Baarson pushed the job of examining damaged structures.

Since November 1, building permits have been issued in an amount exceeding \$22,000 and the number of applications are increasing daily. In addition, there is work under way of probably an equal amount for which no permits have been applied to date.

Will Check

City Engineer Baarson plans to make a check on this work at an early date as the city building codes are strict in their requirement that permits be obtained before work is started. Because of the emergency and general conditions, the city engineer has purposely been lenient in this matter since the earthquakes. Once things are settled somewhat, however, he plans to enforce the ruling as thoroughly as possible. Demolition work was likewise being pushed rapidly and the FERA organization, under the supervision of James H. Rowe of Butte, has its full force of men and trucks working overtime removing debris and tearing down dangerous structures. A number of large buildings are at present in the process of being partly or wholly razed and work is started on others each day.

Records Stolen

Will all this transpiring and with his force of four engineers being hard pressed to meet the demand for their services, another incident occurred late Thursday night or early Friday morning to plague the city engineer.

All reports of inspections made Thursday by the engineers assisting Mr. Baarson in determining the safety of structures damage by the recent quakes were stolen from his office in the Y.M.C.A. building.

Baarson recently moved his office to the second floor of the "Y" and has not had time to arrange his files so they can be checked accurately. Other reports were scattered about the office when Baarson reached there yesterday morning.

What motive prompted the theft is not known, as the reports are of no value to anyone else. The office door was not locked. The depredation may have been, Baarson suggested, a piece of spite work, but he is at a loss to know who could have held a grudge of that nature. Theft of the reports entails many re inspections.

[Helena Independent; November 16, 1935]

KESSLER SCHOOL TO BEGIN MONDAY, WILL USE SHOTGUN CLUB

The Helena Gun club has offered the use of its building in Kenwood for a temporary school for district No. 2, Kessler school, it was announced yesterday.

Because of the earthquakes, many of the pupils have left the city so that the clubhouse will provide ample room for the grades of the school. The building is a low frame structure and has withstood the shocks without damage.

Seats are being placed in the building along with other school equipment and it is hoped that school will begin there next Monday.

[Helena Independent; November 16, 1935]

GREAT NORTHERN WILL START REHABILITATION OF ITS CITY PROPERTY

The Great Northern railway will rehabilitate its quake damaged station here in conformity with the most modern safety practices, and will let the work to Helena contractors, officials announced yesterday.

The station was damaged by the shocks of October 18 and 31.

Four Great Northern officials, E. E. Adams, district engineer form Seattle; C. N. Harris, district engineer and T. E. Coleman, master carpenter, of Great Falls, and T. D. McMahon, architect for the road at St. Paul, inspected the station and conferred with City Engineer Oscar Baarson on repairs and alterations to be made.

Four other officials, C. O. Jenks of St. Paul, vice president in charge of the operating department, and his assistant, D. J. Kerr; J. H. O'Neill of Seattle, general manager, and T. F. Dixon of Great Falls, superintendent of the Butte division, were here to make a personal inspection of the damaged station.

The big clock tower will be razed to the roof, the parapet walls lowered to six inches or one foot, and the walls of the baggage room and express room, which were cracked, will be rebuilt.

[Helena Independent; November 16, 1935]

CHIEF OF COAST AND GEODETIC SURVEY IS HIGHLY APPRECIATIVE

Appreciation of what Postmaster Harry Hendricks did in outfitting a room for U.S. coast and geodetic survey representatives, who came here from San Francisco to set up the seismographs, is revealed in a letter which J. H. Hawley, acting director of the U.S.C. and G.S., sent to Postmaster General James A. Farley. The letter was sent on to Postmaster Hendricks by Mr. Farley.

"The excellent assistance and cooperation rendered by you to our representatives in obtaining instrumental records of the Helena earthquake after shocks is greatly appreciated by this office," Hawley advised Hendricks. "Our observer, Mr. Ulrich, reports that facilities supplied by you made it possible for him to stand by the instruments continuously and thus obtain records of shocks which might otherwise have been lost." [Helena Independent; November 17, 1935]

EMERGENCY FUND ORDINANCE READY FOR CITY COUNCIL To Provide Means To Issue Warrants In Emergency

An emergency earthquake fund ordinance, drafted by City Attorney John W. Mahan, will be presented to the city council this morning so that creditors of the city, including the national guard and engineering staff of the city engineer, may receive warrants. City Attorney Mahan said last evening that the ordinance was drafted and in readiness for presentation. At a council meeting held last Thursday Mayor C. J. Bausch withdrew his objections to payment by the city of its earthquake emergency expenses and no opposition is expected from that quarter today.

Will Be Registered

On October 21 the council passed a resolution formerly declaring an emergency. The ordinance to be presented today simply will formally created a fund against which warrants may be drawn. The warrants will be registered by the city treasurer and will bear 6 per cent interest. The council will make a special levy in formulating next year's budget to meet the earthquake expenses.

Authority to create such a fund is authorized by statute in case of a calamity such as an earthquake. As the general and administrative expenses of a municipality are limited to 15 mills, it is necessary to create a special levy. If this was not possible, it would work tremendous hardships on present funds, operating under a budget, to meet the expenses.

Engineering Needs

As Helena is now busy with its great task of reconstruction and the city is rapidly getting back on its feet after the disastrous quakes, it is apparent that the office of the city engineer will require an increased force for several months to take care of its vital work of inspecting buildings and approving reconstruction and rebuilding. Most of this expense, with others incidental to the earthquakes, must be born by the city under the provisions of the emergency earthquake fund ordinance to be presented today. The FERA is paying four inspectors but more are needed by the city engineer.

It is estimated that the emergency expenditures incurred to date amount to a little more than \$3,000 and that the total will be less than \$8,000. To carry on the activities of the city engineer's office it is estimated that about \$5,000 will be needed during the ensuing months. The chief item incurred up to the present is that for payment of the national guardsmen.

City Engineer Oscar Baarson 's claims are for routine expenses in connection with the inspection of buildings and for the salary of one engineer he was permitted to employ after October 18. They amount to a comparatively small sum, around \$200.

Another important matter will be presented at today's council meeting when the ordinance providing for the creation of a public safety committee will come up for second reading. This ordinance, drafted by the city attorney, clarifies and broadens existing condemnation proceedings.

[Helena Independent; November 18, 1935]

UNEMPLOYMENT NO PROBLEM IN HELENA AT PRESENT TIME; ESTIMATED 800 MEN AT WORK

Unemployment is no problem in Helena at the present time as this city goes about its huge rehabilitation task, nor will it be during the coming winter and spring, according to indications. If there is any resident of the city desirous of work who is not now employed, officials are not aware of the fact.

It is estimated that nearly 800 men are now engaged in rehabilitation work. The FERA has nearly 500 laborers engaged in the work of erasing the physical damage done to the city and it is believed that at least 250 skilled craftsmen and laborers are employed on rebuilding projects.

Import Some

The exact number engaged in the latter program cannot be accurately determined as many workers have come in from the outside. While the city has been able to supply its own demand for common labor, it has been necessary to import numerous workers in the skilled classifications to meet requirements. This is especially true of bricklayers and masons, cement workers and allied crafts, and to a lesser degree carpenters. The demand for these types of labor will steadily increase during the next few months, it is expected as repair work and new construction gets under way. Already building projects, including the \$200,000 new housing project, totaling hundreds of thousands of dollars are in the making and the city promises to take on the aspect of a boom center next spring and summer.

Big Program

Rebuilding of the damaged school buildings and other public, semi-public and charitable institutions alone will represent an expenditure approaching \$1,000,000, it is estimated. It is probable that St. John's hospital will erect a new building and several other Catholic institutions may be almost completely rebuilt. St. Paul's Methodist church is planning on building a new structure and will do so if satisfactory financial arrangements can be made. Various other large projects are contemplated and if all go through, Helena in 1936 will experience the greatest building activity in history.

So great has been the press of the rehabilitation work, that practically nothing has been done yet on the dozen or more Works Progress administration projects approved for this city and county. These, however, are expected to get under way as the present work proceeds toward completion. There will be plenty of work to take up any slack in employment during the next year, authorities say.

To Break Record

As an indication of what is coming, building permits for November already total nearly \$25,000, with a large amount of work in progress for which permits have not yet been taken out. It is considered certain that the month will establish a new all-time record for construction work. November is usually one of the slack months for building activities. [Helena Independent; November 18, 1935]

HELENA DEVELOPMENT COMPANY EXPECTS TO HOLD MEETING TODAY

Definite action toward the inauguration of the Helena Development company's \$200,000 house building project is expected this evening, if the meeting of the sponsors is held as planned.

Tonight's meeting is dependent upon the completion of the plans for three types of houses for submission to the Helena business men who have subscribed to the project, Chairman A. T. Hibbard of the executive committee, said yesterday.

Work Sunday

Architects of Federal Housing administration worked all day yesterday to get the plans and drawings in shape and hoped to complete them this afternoon. If this is accomplished, the meeting will be held as scheduled. Otherwise it will be postponed until Tuesday evening. The directors of the Helena Development company desires to present the detailed plans and drawings of the types of houses proposed to be erected, in order that the subscribers may see and understand exactly what is planned. Of the three types being prepared at the present time, two are for four-room dwellings and one is a five-room project. It is likely that one or two more types will be added to provide more variety in design. No two houses exactly alike will be erected in the same neighborhood.

All steps taken up to the present time will be submitted to the board of directors and, if approved, action will be taken immediately for final organization of the company and filing of the articles of incorporation.

The concern has the assurance of the Federal Housing administration that that agency will insure the project for a loan, and under this condition the RFC has agreed to purchase up to \$200,000 worth of bonds. The company is ready to start building as soon as the organization is perfected and the bonds can be issued.

[Helena Independent; November 18, 1935]

BONG * * * * * * * * *

Courthouse Clock To Ring No More

The courthouse clock is no more. The "highboy" of Helena which lifted its sad face to the four winds, each telling a different story of the time, is to be permanently done away with. After fifty years of faithful service, during which time at least one face always told the correct time, the old clock gave up the battle and fell a prey to the earthquake bugaboo. It was ordered removed along with all the heavy chimneys and fancy brownstone work which constituted hazards to the building and the public.

When the courthouse building was erected in 1885, the crowning touch of glory to the massive stone structure, was the tower and clock on the north face of the building over the front door. Because of the manner in which the building was situated in its full block of grass, flower beds and walks and the near proximity of Broadway to the rear, the front door was often regarded as the back and the back door as the front and the side door on the east, through which prisoners were brought from the courtroom to the jail, as the door of sorrow.

Saturday morning the south face of the clock, which lifted up its hands to the noonday sun and asked for prompt payment of all tax obligations, was taken down by workmen who tenderly removed it from the tower and consigned it to the land of forgotten things. And so today the face on the north which says 6:15 and the face on the east which says 8:32 and the face on the west which says nothing, will be retired from public life.

[Helena Independent; November 18, 1935]

HELENA SHAKEN BY ANOTHER HEAVY SHOCK BUT DAMAGE IS LIGHT; GREAT FALLS IS HIT

A grim reminder of the major earth shocks of October 18 and 31 aroused a sleepy and unsuspecting Helena at 8:41 o'clock yesterday morning but left its mark on only a few already damaged buildings. The main shock, lightened by a slight break half way through it, lasted fully 15 seconds.

A quick check revealed little or no new damage, but bulging walls on several badly wrecked buildings were partially shaken down or cracked.

At the same time reports from the outside indicated that the quake was felt in an area nearly 500 miles in extent and was the heaviest yet recorded at many of these points. It was particularly strong at Great Falls, where some damage was reported done, according to word received here by long distance telephone from residents of the Electric city.

Felt Sharply

At Butte also it was reported to be the heaviest yet felt and it was pronounced at Missoula, Kalispell, Deer Lodge and other places. The duration of the shake at Great Falls was declared to be 10 seconds.

Bozeman reported the shock as light, but in Livingston window panes were broken and it was reported to be moderate in Billings. At Townsend, goods were knocked from the shelves of stores but little real damage was done.

The shock, described as the fourth heaviest in the present series, was approximately as long as that of October 12 which caused the first damage in Helena and was nearly as long as the October 31 shake which added the final touches to the damage done on October 18. However, its intensity was not so great and it is believed that this fact is all that prevented another heavy toll in property loss.

More brick were shaken down from the damaged wing of the new high school building but this occasioned no damage as the section must be almost entirely taken down when it is rebuilt.

In the South Main street section, the front or rear walls of several old buildings were so badly loosened that it was necessary to pull sections of them down. State Fire Marshal Arthur Parsons superintended some of this work and personally pushed down the gable of the old building that formerly housed the Canton Noodle parlors. Areas of danger on South Main street were again roped off.

The front wall of the Weggenman market on State street, loosened and bulged by the previous quakes, had a narrow section knocked out of the fire wall and was rendered so dangerous that it was roped off to be torn down.

At Intermountain

Additional damage was reported to Intermountain Union college buildings, which suffered severely on October 18 and 31, but the loss was considered light since it consisted chiefly of loose brick work that would have had to come down anyway. More plaster was shaken down as was the case in many buildings and homes in the city. The new loss is largely to plaster and chimneys, a survey indicated. Buildings which had been repaired since October 31 appeared to have come through the Thanksgiving day episode practically untouched. A considerable amount of stone was shaken down at the courthouse. Donald Bean of the Fidelity and Deposit Insurance company, after a check of earthquake insured properties this morning, said he found little damage of a serious nature. More chimneys were knocked down, especially in the Sixth ward, and some plaster fell. Outside of that substantial buildings were unhurt.

At the Bristol hotel annex, a part of the parapet wall on the north side fell into the street and the remainder was in such a dangerous condition that at 10 o'clock preparations to take it down were under way.

Street Closed

Part of Park avenue was closed to all traffic because of the dangerous condition of the front wall of the Walker paint shop at 11 North Park.

The sidewalk in front of the old Cosmopolitan hotel on South Main was also roped off. One story of this four-story structure has already been removed, but the remainder of the story below was seriously loosened by this morning's shake.

City Engineer Oscar Baarson, engaged in a hasty inspection, reported further damage at the Hawthorne school and said that a number of chimneys in various parts of the city had been shaken down.

Police said they had been informed that an old brick structure on Jefferson street had partially fallen. It had been in poor condition since the temblors of last month.

East Helena

At East Helena the shake was felt quite severely, according to reports of residents there. However, no particular damage resulted, it was asserted, except at the public school where one of the upper walls bulged out several inches. Inasmuch as it is planned to remove the upper story, the damage is of no consequence.

At the Smelter city the quake was of about 10 seconds duration, and of the "slow motion" variety.

Helena's earthquake damage total will easily reach \$5,000,000 and probably will exceed that figure, City Engineer Baarson estimates now in the light of the data gathered in the course of inspections by his staff of engineers. Owners of many of the downtown business and office buildings, which apparently had escaped damage, have found repairs necessary, in amounts ranging from \$100 to several times that figure. The total of damage to the homes in the city probably will ever be known accurately.

Little Confusion

While the tremor turned the city out at the time, it occasioned less excitement and confusion than any of the three previous heavy shocks. People drove hurriedly about the city in cars for two or three hours to determine if any new damage had been done. The force of the quake was sufficient to arouse fears temporarily but these were soon allayed. Worshipers attended church services in goodly numbers, undaunted by the shaking they received less than three hours before. A well filled auditorium was reported for the union services held at the First Presbyterian church and the other institutions that held services of their own announced excellent turnouts.

The Montana State college seismograph showed the disturbance this morning about equal in intensity to the jolt of October 12, but not nearly as severe as the quakes of October 18 and 31, Dr. Eric Therkelson said.

The machine indicated there were recurring vibrations over a period of one minute, he said, but failed to record evidence that the direction or epicenter was different from that of previous shocks.

[Helena Independent; November 29, 1935]

HELENA PEOPLE ARE ANXIOUS TO CONVEY APPRECIATION TO NEIGHBORS WHO HAVE HELPED

A movement to properly express the appreciation of Helena to the many surrounding communities, which have aided the Capital city with substantial financial contributions in its hour of need, is under way, it developed last night.

Thousands of dollars have been sent to the Red Cross and other local organizations to be used in assisting those who have suffered heavily from the earthquakes since October 18, and while this city has been self-reliant and anxious to meet it own problems, these contributions have lightened the burden of many individuals which might have proven too great for the city to carry, despite its willingness of spirit.

Many On List

Among the neighboring cities which have sent generous donations for the relief of Helena's quake suffers are Kalispell, Fort Benton, Bozeman, Miles City, Chouteau, Missoula, Havre, Great Falls, Manhattan and numerous others which are not at present of record here because their contributions were sent directly to Red Cross headquarters at

The movement to express adequate appreciation of this brotherly spirit of outside Montana cities which have sympathized with Helena in her present disaster was instituted by a small group of citizens at a dinner last evening. The group included E. G Toomey, Helena attorney, Mrs. Toomey, Dr. and Mrs. John G. Thompson and Dr. and Mrs. Otto G. Klein. The earthquakes were naturally a leading topic of conversation and it was brought out that to the present time that no official expression of appreciation had been made by the city administration for the kindnesses extended by outside communities.

City Fortunate

After talking it over they came to the conclusion that such an expression should be made formally through the newspapers of Helena. They expressed the belief that the entire city would subscribe to this suggestion.

Dr. Thompson likewise pointed out that while Helena has suffered severely it has much to be thankful for, and every reason to look to the future and be optimistic. Dr. and Mrs. Thompson recently returned from Europe and were in London when the major tremor of October 18 came.

"Why Helena is fortunate in many respects," Dr. Thompson said. "When we were in London and were discussing the shocks here with some friends we were informed that a small town in the northern part of England has experienced on an average of one earthquake a day for many years.

'This may sound like a fairy tale to some people but I investigated and found it was true. The people there had long since become accustomed to the situation and it is now merely a routine occurrence. They think nothing of it at all."

New Zealand, Too

The village Dr. Thompson referred to is Workington, St. Beeshead, in the mountain near the border between England and Scotland. Dr. Thompson also recalled that he met two doctors from New Zealand in Vienna, where he did research work in surgery, who told him that earthquakes were such a common occurrence in their section of the country that most of the buildings were limited to one story. In cases where two-story buildings, the limit, were permitted, the first story had to be of very heavy brick or masonry construction and the second story of light frame, so that it would not fall through if shaken down. "When we consider these things," Dr. Thompson said, "Helena really is fortunate and has

plenty to be thankful for." The people here have the right spirit and the city will come back strong without question."

These sentiments were emphasized by Mr. Toomey who was particularly desirous that the city "take time out" to convey its thanks for the splendid and wholly voluntary response of neighboring cities anxious to be of assistance to a stricken community.

[Helena Independent; November 30, 1935]

OFFER 20 COACHES FOR USE BY HIGH SCHOOL STUDENTS Railway Companies To Provide Cars At No Charge

Coming to Helena's aid again, the Northern Pacific and Great Northern Railway companies yesterday announced they would furnish eight or ten coaches each to be used here for high school classrooms at no cost to the residents of the city.

This offer was announced by T. A. Marlow, a director of the G. N. and M. S. Gunn, attorney for the N. P., each of whom wired his company concerning the coaches. Wires received from W. P. Kenney, president of the G. N., and Charles Donneley, president of the N. P., stated that each company would gladly furnish eight to ten coaches, at no charge, to be used as classrooms for the high school students.

Pending Barracks

These coaches may be used by the school board until temporary barracks have been constructed for the high school classes. They could be hooked up to the companies' power plants, thus avoiding the need of installing lighting and heating equipment. It has been announced that a special meeting of the school board will be called by Chairman E. M. Hall early next week for consideration of the offer, and the forming of plans in the event the offer is accepted.

Members of the school board and instructors at the high school were enthusiastic over the offer, and several stated that school could be resumed within two weeks by this method.

[Helena Independent; November 30, 1935]

GREAT FALLS HOUSE DAMAGED BY QUAKE

Great Falls, Nov. 29--The earthquake shock was distinctly felt in all sections of Great Falls about 7:40 Thursday morning, many describing it as about second in intensity among those which have visited this city in the last few weeks.

Many persons who had not yet arisen said that their beds moved in a manner to leave no doubt in their minds at the time that they were experiencing another temblor.

While it was generally understood today that not more than trifling damage had been done here by this morning's visitation, Mrs. D. A. McLeod reported that her family's brick house at 3500 Fourth avenue north showed plainly afterward the effects of the shock.

"The exterior brick walls about the house are cracked in many places," said Mrs. McLeod." "Old cracks made by a heavy shock several weeks ago were widened and new ones were made. Some of the widened fissures will almost admit an adult's hand.

"In addition to the damage to the outside walls, we discovered that the quake made cracks in every direction in the concrete floor of the basement. There were similar results in a cement driveway alongside the house.

"I fear that another shock of like intensity would just about make a wreck of our home, added to the damage already done and the weakening of the house which has resulted." [Helena Independent; November 30, 1935]

REPORT REVEALS HOW \$100,000 FEDERAL FUND EXPENDED IN EARTHQUAKE REHABILITATION

Only a little more than \$26,000 of the \$100,000 of federal funds allocated to the FERA for earthquake rehabilitation work in Helena was expended for demolition work and removal of debris, a tabulated report issued yesterday revealed. Most of the balance was spent in general rehabilitation work in behalf of public, semi-public and charitable institutions without resources, it was disclosed.

The statement was prepared by Tom McCabe of the county relief office, who has been in charge of rehabilitation activities. It gives a complete breakdown of the expenditures of federal funds in the earthquake emergency. It was submitted to the city council yesterday morning.

Little Left

The report showed that on November 25, the date of tabulation, approximately \$26,000 remained in the fund but the payroll and expenditures of the last week probably will reduce this to less than \$20,000, all of which is allocated to projects under way.

Before actual authorization for the \$100,000 emergency grant was received here from Washington, J. H. Rowe of Butte, personal representative of Frank Walker as assistant to the president, and F. H. Marvin, state director of the FERA, conferred and tentatively made the following expenditure allocations.

St. John's hospital, for conditioning the unfinished Montana Children's home hospital for use, \$25,000; St. Joseph's Orphans' home, \$16,300; House of the Good Shepherd, \$12,700; clearing up debris, \$12,500; demolition and propping, \$10,000; Florence Crittenton home, \$6,630; St. Peter's hospital, for finishing and providing additional beds on the third floor, \$5,500; general relief, \$5,000; grade school repairs, \$5,000; engineering and administration, \$5,000; Montana Deaconess school, \$4,800; industrial accident board premiums, \$4500; special patrol, \$2,500; Montana Children's home, \$1,500; Montana Children's home in the Helena valley, \$1,000.

Was Revised

These tentative allocations totaled \$117,930, but when authorization for creation of the FERA emergency earthquake fund was actually received it called for only \$100,000. Consequently the latter figure is taken as the real basis for the November 25 report. It is hoped that an additional grant, sufficient at least to carry out the original allocation program, will be received. Additional money is also needed to finish some of the demolition projects already started.

Although only \$12,500 at first was allocated for clearing up debris, the report shows that \$17,051.12 had been expended for that purpose up to November 25, or an "overdraft" of \$4551.12. On the St. John's hospital project at the children's home, \$10,592.31 had been paid out, and for demolition and propping, \$9,136.35.

Other actual expenditures were:

House of the Good Shepherd, \$8,262.23; St. Joseph's Orphans' home, \$8,989.57; St. Peter's hospital, \$3,759.68; grade school repairs, \$3,539.94; Florence Crittenton home, \$3,986.11; engineering and administration, \$2,004.49; general relief, \$1,190.47; industrial accident board premiums, \$1,176.67; Montana Children's home in the valley, \$656.57; Montana Children's home supplies, \$324.78; Montana Deaconess school, \$1,182.81; special patrol, \$500.

Today when all payrolls have been checked and all bills approved, the FERA will issue a supplementary report, it was said today, showing the exact unexpended balance of the \$100,000 emergency fund.

[Helena Independent; December 1, 1935]

SCHOOL REPAIRS

Residents who have been anxiously waiting to know what is to be done about the school, will be relieved to know that the government engineer found the lower floor of the building to be in good condition. After the board meeting Tuesday evening, workmen were employed at once to tear down all ceiling plaster so that its weight, in case of more quakes, will not bulge the new steel ceilings to be put in all the rooms. All loose outside bricks are being removed and a six-foot fence erected around those portions of the building where any brick might fall and injure the children. Exits will be determined later. Mr. Totten, president of the board, expects the building to be ready for use by the first of the year.

[Helena Independent; December 1, 1935]

FIRST QUAKE RESISTANT DWELLING OF BRICK BEING CONSTRUCTED HERE

Determined to demonstrate that a brick home can be made as earthquake resistant as any other type of construction, Jack Higgins of 730 North Benton avenue is rebuilding his dwelling and is employing a new method of construction that is attracting wide spread interest and attention from architects, engineers and builders.

Mr Higgins' home was brick veneer and the quake of October 31 loosened it so badly that he had all of the old brick stripped off. These were of smooth sandstone finish and he discarded them, purchasing new rough texture, pierced brick from the Western Clay Manufacturing company.

The contract for rebuilding was given to Mickey Cochrane and an unique type of construction is being used that will provide what will be the same as a reinforced concrete building.

The frame of the dwelling was first covered with 'Steel-Tex' for brick veneer, a Johns-Manville product. This product, entirely new in Helena, is a welded wire reinforcing with a waterproof paper backing. It is nailed to the sheeting with a special furring nail which presses the paper backing tight to the sheeting but holds the welded wire three-eighths of an inch from the structure. It is made in rolls 110 feet long, making it possible to completely surround the ordinary dwelling with one continuous band. The nails are placed on 12-inch centers and permit of an inch and a half of penetration.

Filled In

The brick are then laid in rich cement mortar, the courses being held away from the reinforcing one inch. As the work progresses at regular intervals the space between the brick and the paper backing is filled in with a rich cement grout. In this manner the welded wire is imbedded in the grout which adheres to the entire brick surface, making what is known as a monolithic job.

During the past two days the new construction has been inspected by a number of engineers and builders. Oscar Baarson, city engineer, inspected the work yesterday and stated he was much impressed with it. He also said it was as highly quake resistant as could be made.

The work is well along and both Mr. Higgins and the contractor will be pleased to have it examined by anyone interested.

[Helena Independent; December 1, 1935]

HELENA GETS \$50,000 FOR QUAKE FUND From Hopkins Government Allocates Additional Sum, Is Word

Helena has been allotted an additional \$50,000 for emergency earthquake relief work, according to a telegram received here last night from Aubrey Williams of Washington, D. C., chief assistant to Harry L. Hopkins, federal emergency relief administrator.

The message was received by Frank F. Kelsey, former state senator and a member of the Montana Relief commission. The city has already received \$100,000, of which less than \$20,000 remain.

While F. H. Marvin, ERA director for Montana, could not be located last night for a statement, it was believed in official circles that the work of demolishing dangerous buildings, stopped more than a week ago when the sum allocated for this purpose became exhausted, could be started immediately.

Is Imperative

Completion of this important job is regarded as most imperative by the Helena Emergency Reconstruction committee, especially in view of the fact that Thanksgiving Day shock further loosened weakened and damaged buildings, creating new hazards to human life. It has become apparent to City Engineer Oscar Baarson during the last two or three days that several more buildings were so damaged by the last quake that they will have to be taken at least partially down.

There was still a considerable amount of demolition to be done when lack of funds stopped work 10 days ago and it was necessary to leave the job half completed on a number of buildings, especially several in the south Main street section where the damage was heavy. It has been necessary to keep many of these roped off since that time to guard against possible loss of life.

Asked \$100,000

In a number of other cases, buildings had been designated either for removal of one or two stories, or for complete demolition but the work was not started.

Helena officials had requested a second allotment of \$100,000 to clean up the rehabilitation job, and they still have hopes of obtaining \$50,000 more if yesterday's allotment proves insufficient.

S. V. Stewart, chairman of the Emergency Reconstruction committee, expressed deep gratification last night when informed of the new allocation.

"It will be a tremendous help," he said "for the money was needed desperately. I do not know whether \$50,000 will be enough to accomplish all of the work that should be done, but it will go a long way and will be a lifesaver."

Rowe May Come

A report prepared by the county FERA office revealed that up to November 25, only about \$26,000 had been expended in demolishing dangerous structures and clearing away debris. The remainder is being used for rehabilitation of public and semi public institutions in the city. It is believed that a considerable portion of the \$50,000 may be available for continuation of this work.

It was also believed likely last night that James H. Rowe of Butte, who was sent here as the personal representative of Frank C. Walker, head of the National Emergency Council, after the October 18 earthquake to survey the situation and supervise federal relief in the stricken city, would return to Helena to direct the resumption of work. Mr. Rowe supervised the big cleanup campaign which at its peak found 500 men and 50 trucks employed in the gigantic task of removing the earthquake scars.

Many Helped

In addition, the federal funds have proven to be a saving factor for such institutions as the Montana Deaconess school, the St. John's hospital, the House of the Good Shepherd, the Florence Crittenton home, the Montana Children's Home and Hospital, most of which suffered severe damage and were without resources to rehabilitate.

The federal funds also made it possible for City Engineer Baarson to conduct his inspection operations and for the city to provide adequate police and patrol service at critical times when it appeared that a collapse was imminent, through the city's failure to provide funds for these purposes.

[Helena Independent; December 2, 1935]

NEW POLICY COVERING EARTHQUAKE ACCIDENT ANNOUNCED IN HELENA

Through its general agent, Charles H. Reifenrath, Jr., with offices in the Power block, the North American Accident Insurance company is announcing a new limited accident policy, a provision of which covers "death or injury by the collapse of a building."

With the continuation of earthquakes in Helena there has been a tremendous demand for such a coverage and the fact that it may be written for any person between the ages of 10 and 69 inclusive at the low cost of \$2 per year makes it an attractive policy, the general agent points out.

Mr. Reifenrath also announces the appointment of Arthur Fabian, Ray Higgins, Maurice E. Sanford and Joseph R. Magill as agents for the North American.

[Helena Independent; December 2, 1935]

HIGH SCHOOL CLASSES TO BE RESUMED SOON IN COACHES LOANED TO CITY AT NO COST

School on wheels will be inaugurated by the Helena high school students within the next 10 days, when 18 coaches, furnished free of charge by the Great Northern and Northern Pacific Railway companies, will be placed on tracks to be laid on Lyndale avenue between the 800 and 1,000 blocks.

The offer of the railway companies to each furnish the school board with nine coaches was accepted at a special meeting of the school board held last night. The vote to accept the offer was unanimous.

The cars will be placed on two sets of tracks, each row being nine cars long. Rails and ties for the tracks are to be furnished free of charge by the railway companies, the school board paying only for the labor to lay the tracks. Supervisors for the track-laying will also be furnished by the railway companies.

Commissioner of Public Safety Amos Shellady yesterday stated that Lyndale avenue will be closed to traffic in the area occupied by the cars.

L. S. Hazzard, vice president of the school board, was appointed as a committee of one to supervise the building of lavatories and the installation of necessary plumbing and the connection of the lighting system in the cars to the power lines.

Each car is equipped with an individual steam heating plant, and the railway companies have arranged to provide as much of the special hard coal, which is used in that type of plant, as is necessary until the school board can order and receive a supply.

The school board shall be responsible for any damage done to the cars, or any injury done to the students while attending school in them.

No limit was set by the railway companies as to the length of time the coaches may be used, but, it was said, they probably will be used for the remainder of the school year. It was thought at first to place the coaches in the yards of one of the railway companies, but the hazards attached to such a plan caused it to be discouraged by the companies.

May Postpone Repairs

A motion was made at the meeting to discontinue the repair work now being carried on on the grade schools in the city, and to erect barracks to be used temporarily. This motion was made when it was announced that there were not sufficient funds available at present to repair all the schools. Architect Norman DeKay stated the Hawthorne school had received additional damages by the earthquake of November 28. Much discussion was held on the subject, with part of the board members favoring the continuance of school in the buildings after they had been repaired, and part of the members in favor of using barracks.

Plans for making the grade schools earthquake resistant were received yesterday from H. J. Brunier, construction engineer of San Francisco, and were displayed by Norman DeKay. Final recommendations have not yet been received, however.

With the board seemingly deadlocked at this point, Chairman E. M. Hall called the meeting to an end, and it was decided to halt repair work now being done on the schools until the board considers the matter more thoroughly.

Definite action was postponed for 10 days, when the group will meet again to vote on the question.

[Helena Independent; December 3, 1935]

MORE EARTHQUAKE LOANS ARE PASSED BY RFC UNIT HERE Five For \$1,000 Are Given Approval By Agency

Five applications totaling \$11,000 to be used for rehabilitation work in Helena yesterday were approved by the Capital City Rehabilitation corporation, it was announced by Norman Winestine, president.

"Yesterday's approved loans bring the total now approved by the corporation to 12," Mr. Winestine said, "and considering the large number of inquiries we have been receiving lately, we expect to pass upon many more applications within the next few weeks." Several of the applications, which have been approved by the Capital City Rehabilitation corporation and the local agency of the Reconstruction Finance corporation, have been approved by the headquarters of the RFC at Washington, D. C., and telegraphic confirmation of their approval has been received by the local body.

Need Appraisal

"To save time and expedite the procedure of securing loans through this body," Mr. Winestine stated, "prospective applicants should obtain the services of a contractor and have the cost of the work necessary on their properties appraised before securing an application."

When this has been done, application blanks can be obtained at the Helena agency of the RFC at 26 Edwards street. The project is then appraised by the RFC engineer.

[Helena Independent; December 3, 1935]

JUST A SUGGESTION

Every dollar expended from now on by the federal government in earthquake relief work in Helena, should be on carefully planned and approved projects.

If we have \$50,000 more to use in this very necessary work, it should be allocated only after a careful study of the situation is made. The local emergency relief committee, headed by former Governor S. V. Stewart, should be permitted, even requested, by the federal men in charge, to make up the list of projects and the whole submitted to a joint meeting of the federal men in charge and the local committeemen.

In this way no favoritism for any particular institution or institutions, can creep into the expenditures, and every interest will thus get a square deal and should be satisfied--will have to be satisfied and should be thankful for this assistance.

The money expended thus far has been put to the very best uses. There is a lot of loose talk about "\$100,000 having been spent for cleaning up the city." People have not stopped to read the list of these appropriations and expenditures. A study of them will demonstrate that James H. Rowe of Butte, who came to Helena to supervise this work, did not only effective work, but did it promptly, with a minimum of waste. It should be remembered that Mr. Rowe had no cooperation whatever from the city administration, and he had to be guided by what he saw of the needs and the representations made to him by the Emergency Relief Commission.

It is not true that \$100,000 was spent for cleaning up and hauling away tons of brick and stone. Only a very small amount of the fund used in Helena was spent for this purpose, but enough was used to get the work done and our streets would still have been shambles had not Mr. Rowe swept down on the city with his little army of workers.

The total amount expended for this cleaning was around \$17,051. Engineering and administrative expenses paid out of federal funds amount to only \$2,004. Cheap enough-very economically handled, considering the mess, the weather and the hours, days nights and Sundays, devoted to this difficult job.

Looking over the list of expenditures, it must be evident to every citizen that the funds were fairly distributed. The institutions assisted were:

The Deaconess home; the Florence Crittenden home; the House of the Good Shepherd; the Montana Children's home; the St. Joseph's Orphanage, and the Montana Children's home in the valley, and St. Peter's Hospital.

As a result of this planned work, the Florence Crittenden home will soon be ready for occupancy, better and stronger than ever; work is going forward on the St. Joseph's orphanage, the Children's home and the House of the Good Shepherd. The Deaconess home in the valley is probably beyond repair. The main building of this institution was an architectural monstrosity when it was first built; the Brother Van memorial at this institution was never completed and probably never should be unless the denomination fostering it gets a big windfall and can erect a new building and repair the Brother Van building. It is a waste of money to spend anything on the main building.

The Independent has the utmost confidence in the federal as well as the local men handling the job of repairing these buildings and making them safe for occupancy. It only insists now that the excitement of the earthquake period has died down to a point where the work can be carefully planned, that every dollar should be systematically expended, and only those projects accepted which are worthy and necessary. The old city hall should be wrecked and hauled away; the Bryant school should be leveled to the ground and the

old materials removed--other similar projects will be readily recognized by those in charge of the work.

Livingston invited Helena people to come down to that city and find safety from earthquake shocks. Now those who accepted, are returning to the old home town for the holidays--they prefer our own kind of shocks.

[Helena Independent; December 3, 1935]

FEDERAL BUILDING AT DILLON TO BE MADE QUAKE PROOF

Dillon, Dec. 2--With this section of Montana definitely established as an earthquake sector, plans of the new federal building now under construction here have been changed by the government. Federal funds will take care of the additional expense incurred in making the building earthquake-proof.

[Helena Independent; December 3, 1935]

RED CROSS GRANTS TO HELENA FOLKS TOTAL \$69,300.65 48 Requests Totaling \$4,106 Approved Last Night

With 103 applications for rehabilitation grants remaining to be acted upon, the awards committee of the Lewis and Clark chapter of the Red Cross last night reviewed 48 cases and awarded \$4,106 to be used in repairing and rebuilding Helena homes damaged by earthquakes.

The 363 cases now closed by the committee bring the total amount granted thus far to home owners here to \$69,300.65, it was announced by Albert Evans, director of disaster relief for the Red Cross.

"We expect to act upon the remaining 55 cases by the end of this week," Mr. Evans stated, "and the total sum of all the grants will probably reach the \$80,000 mark, although the cases passed at last night's meeting averaged less per case than those previously passed upon.

Little Increase

"Only two applications have been received for additional grants to take care of damage caused by the shock of November 28, and it is now doubtful that damage caused by that shock will increase the total amount of our grants by more than \$1,000.

"Most of the minor repair jobs for which we have granted funds have been already competed, and should the weather continue for a short time as it is at the present, many of the larger projects will be finished to such an extent that the work can be carried on during the winter.

"In the event that outside work is halted by inclement weather, funds granted to families for rehabilitation work will be held in security for the contractors selected by the families, and will be paid to them whenever the work is completed."

Need No Aid

The number of cases closed without assistance is now around the hundred mark. The major portion of these cases were ones where the application for aid had been made by a friend of the family named in the request, or by families who decided after they had applied for aid that they could finance their repair work themselves.

Many of the families whose names had been suggested as applicants for aid did not need Red Cross help.

[Helena Independent; December 4, 1935]

CHILDREN'S HOME REVAMPED

To accommodate some of the children who were placed out in homes temporarily during the earthquake emergency, the Montana Children's home and hospital has been making alterations at the valley home for boys and the work is now nearing completion, it was announced yesterday by Milo F. Dean, superintendent.

Following the shock of October 31, the organization turned its receiving home and new hospital building on Helena avenue over to St. John's hospital which was forced to evacuate its plant because of hazardous condition of the building. The Helena units have been used exclusively as quarters for girls and infants in the care of the institution.

Being Refinished

The children's home hospital had not been finished and the government is providing funds to put it in shape. As a result it was necessary to find new quarters for many children being cared for by the home. A number of the older children were transferred to the boys' home in the valley. To accommodate them it has been necessary to convert the garage and the basement playroom into dormitories for the boys. This work will soon be finished. Superintendent Dean emphasized the fact that present arrangement is only temporary and that the uptown units will be reclaimed by the Montana Children's home as soon as the emergency has passed and St. John's hospital is able to provide quarters of its own. When this is done, the institution will be able to expand its work by reason of larger quarters, due to the action of the government in finishing the new hospital building.

[Helena Independent; December 4, 1935]

EARTHQUAKE OF 1872 RECALLED BY HILGER

David Hilger, librarian for the state historical society, yesterday recalled an earthquake that occurred here in 1872, not so destructive as those that jolted the Capital city in October. Hilger said that on the day of the quake 63 years ago, he and some other boys were playing in Dry Gulch, now called Davis street, when they felt the ground shake. They did not realize it was an earthquake until their parents told them when they returned to their homes.

Bishop Daniel W. Tuttle, in his book "Reminiscences of a Missionary Bishop," tells of a still earlier earthquake here, which occurred on May 22, 1868. He and his family, at breakfast, felt the shock and heard a rumble but did not learn until later that it was an earthquake. At midnight there was a second tremor, the bishop's book set forth.

[Helena Independent; December 4, 1935]

TREMOR RECORDING IS DISPLAYED AT STARZ

An authentic copy of the recordings of the seismograph at the Helena federal building for the earth tremors the morning of Thursday, November 28, is being displayed in the show windows of Starz Pharmacy. The instrument was set off at 7:41 Thanksgiving morning, and after a short tremor, there was a pause, and then another was recorded. This was the first record to be taken since the machine was permanently located in the federal building, under the supervision of W. E. Maughan, meteorologist for the weather bureau. Helena's seismograph was formerly at Golden Gate park in San Francisco. Through the efforts of Postmaster Harry Hendricks and U. S. Senator James E. Murray, the U. S. Coast and Geodetic Survey consented to have it remain here permanently.

[Helena Independent; December 5, 1935]

TAPE ON SEISMOGRAPH LISTS NOV. 28 QUAKE AS 12 SECONDS LONG

A photostatic copy of the seismograph tape on which was recorded the earthquake of November 28 shows the duration of the quake to be 12 seconds, it was stated yesterday by W. E. Maughan, chief meteorologist of the Helena weather bureau.

The copy of the tape was returned yesterday by Franklin P. Ulrich, chief of the California seismograph machine here.

Although the epicenter of the quake was not mentioned, Mr. Ulrich showed that the east-west movement of the shock was the predominating force. The north-south movement was slightly less intense than the east-west force, but was more pronounced than the vertical movement.

Two Sharp Ones

Starting at 7:41 a.m., the quake was recorded on the tape as strong for about three seconds. Then followed minor vibrations for nine seconds, after which the shock again attained violent force for about three seconds.

The intensity of the quake for the first and last three second periods was nearly as strong as the shock of October 31.

Mr. Maughan plans to have copies of the tape made, and will perhaps place them in the lobby of the federal building as the many phone calls and personal visits to the office each day seriously interfere with the work being carried on there.

[Helena Independent; December 5, 1935]

EARTHQUAKES IN MONTANA WILL BE RESEARCH OBJECT

Washington, Dec.12--(AP)--Public Works Administrator Ickes today announced an allotment of \$10,300 to the coast and geodetic survey of the commerce department for earthquake studies in Montana.

Officials of the coast geodetic survey said they had not been officially advised of the allotment but had completed plans for the project.

Purpose

They said the allocation would provide funds for the study of actual earth movements during earthquakes. The principal objective in securing this knowledge is to plan construction of bridges, buildings, dams and other structures so they will be able to withstand stress occasioned by earthquakes.

Automatic instruments will be built and installed at strategic points, yet to be selected, throughout the state.

[Helena Independent; December 13, 1935]

HIGH SCHOOL CLASSES RESUME THIS MORNING IN RAILROAD COACHES

After a week of intensive preparation, Helena's unique "high school on wheels" is ready to open and classes will resume work at 8:15 o'clock this morning after a suspension of exactly two months.

Helena's new high school building was badly damaged by the earthquake that struck here October 18 and neither high school nor grade school classes have been held since that time.

Although the "school on wheels" consists of half as many coaches as there are class rooms in the high school building, Superintendent Evans said that he expects a fairly good year for the students, under the prevailing conditions. Twenty-one coaches have been spotted on tracks, laid a short distance north of the high school, for class rooms, laboratories and offices.

Classes will start at 8:15 a.m. and continue until 4:45 p.m., Evans said, with classes to last 100 minutes. The periods will be split up into two groups, A and B, to meet on alternate days throughout the week. School will last until the middle of June, Evans said. Superintendent Evans expects the high school to be ready for occupancy next fall, providing \$175,000 of federal funds, that have been asked for to reconstruct the building and make it earthquake proof, are granted. Grade school classes are expected to resume work shortly after the first of the year.

[Helena Independent; December 15, 1935]

TEMPERATURE RISES IN CITY BUT SNOW AND QUAKES REMAIN

Shivering Helena hoped for a spring song, but mother nature gave another rendition of "stormy weather" with sharp earth shocks as an incidental effect in the weather symphony. A 4-second tremor at 1:39 a.m. and a 1-second quiver at 1:53 boosted the total number of shocks felt here since last October's major earthquakes to 1,816, the weather bureau reported.

Helena's temperature of 12 above yesterday morning ascended to 17 plus at noon, and continued up to 20 above at 6 p.m. The snow had brought .14 of an inch precipitation to give this vicinity an excess of .02 of an inch for the month to date.

[Helena Independent; April 5, 1936]

BOWEN TO CHECK PLANS FOR GRADE SCHOOL BUILDINGS In Event \$100,000 Bond Election Is Passed

Oliver G. Bowen, consultant engineer of Los Angeles, who upon recommendation of the public works administration was employed by the school board as structural engineer for rehabilitation of the damaged Helena high school, will check plans and specifications for the Bryant and Hawthorne schools in event the \$100,000 bond election set for June 11 is successful, according to action taken by the board last night.

Plans for the rehabilitation of the Hawthorne and reconstruction of the Bryant practically are completed, R. C. Hugenin, of the architectural firm of Hugenin and DeKay, told board members last night. Mr. Bowen said he had made preliminary examination of the plans and that they appeared to be so well executed that little alteration for earthquakeresistancy would be necessary.

Seniors Protest

Work on the two structures can be begun within a short time after June 11, it was said, if 51 per cent of the qualified voters in school district No. 1 authorize the board to issue bonds to the amount of \$100,000 to cover cost of the projects. Parent Teacher associations, civic organizations and service clubs in Helena are supporting the move to equip the district with satisfactory grade school facilities.

Representing the senior class of the high school, James Cummings appeared before the school board last night and stated that the class desired their commencement exercises to be held in the Shrine temple instead of the Consistory temple, as scheduled by W. W. Wahl, high school principal.

Cummings pointed out that the Consistory temple would accommodate only 600 people, not permitting admittance to the number of persons desiring to attend the ceremonies. The board had been informed the Consistory temple could be obtained for a rental fee of \$12.50. L. S. Hazard, chairman of the board, said the Shrine temple, capable of seating 2,300 persons, could be obtained for approximately \$50 for the night's ceremonies. Cummings said the majority of the seniors were in favor of using the Shrine temple, but that Mr. Wahl had made plans for the exercises to be held in the Consistory. Mr. Hazard, and other board members, told Mr. Cummings the class' wish in the matter would be fulfilled, and the board consented to rent the larger hall for the ceremonies. Invitational bid form for the demolition work necessary on the high school building were presented to the board by Mr. Hugenin and Mr. Bowen, and were approved by the trustees. Demolition work on the structure will be done on a cost plus fixed fee basis. The bid forms will be sent to Washington for approval, and the date of submission of the bids will be set by PWA authorities.

[Helena Independent; May 28, 1936]