

5-14-1937

M.W.A.K. Columbian, Vol. 3, No. 19

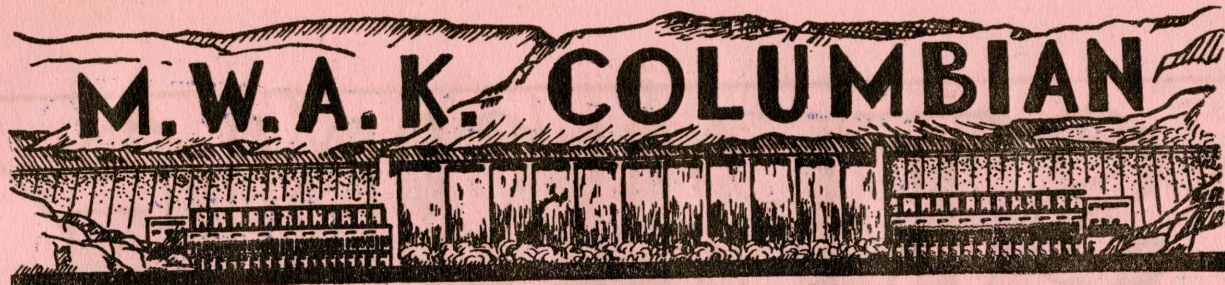
Mason-Walsh-Atkinson-Kier Co.

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SAFETY
DEPARTMENT

MASON-WALSH-ATKINSON-KIER CO.
BUILDERS OF COULEE DAM

MASON CITY
WASHINGTON

Vol. 3 No. 19

M. Pete Shrauger--Editor
Safety Engineer

May 14, 1937

COFFER GROUTING ENDS; USED 325 TONS OF CEMENT; PAVES WAY FOR HIGH WATER.

The last grout machine at the junction of the downstream and west cofferdams was moved out Monday, leaving a hidden record of sand, cement, sawdust, shavings and bentonite. Forced down into 100 holes each averaging 65 feet deep, this conglomeration showed its results in blocking out a peak of 30,000 gallons per minute of water flowing through cofferdam cells into the middle area for concrete.

Following last grouting, machine levels were immediately cleared and trucks began dumping riprap (blasted granite) onto the second cofferdam level, at 970. This will be followed by gravel fill to slope downward toward the concrete area of the middle section.

While bentonite grouting has ceased on the downstream cofferdam and nearby cells several holes have been sunk in the upstream cofferdam. How much work will be done there is not known at present. Whatever will be done will only be as a precautionary measure.

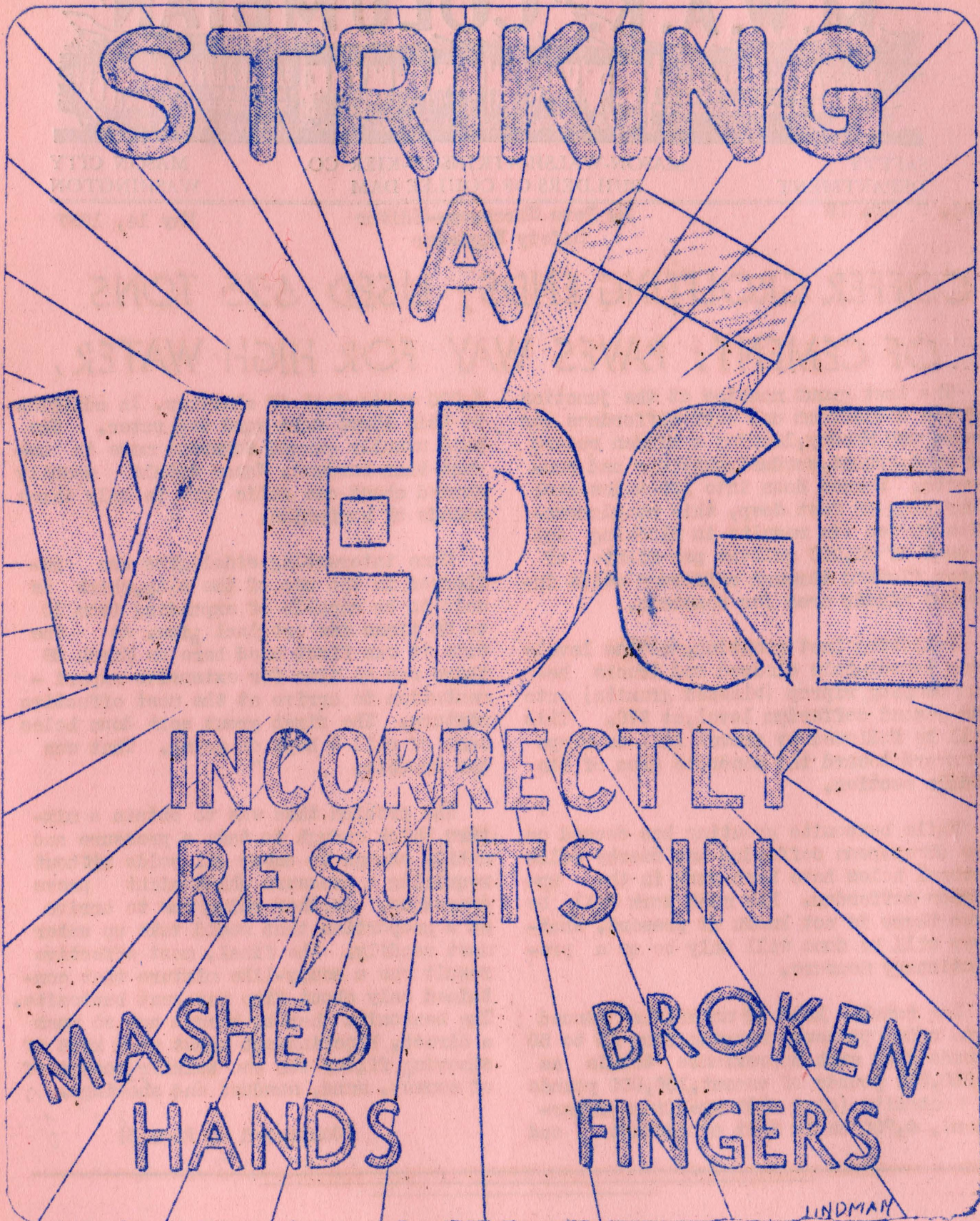
Log totals kept of materials forced down under pressure ranging from 25 to 50 pounds show such approximate totals as 1,250,000 pounds of cement, 150,000 pounds of bentonite (clay with swelling properties), 4,700 cubic feet of sawdust and

7,000 cubic feet of shavings. In addition to this there were sand and water. The sand usually ranged somewhat more in amount than sawdust. Water totals usually showed about one cubic foot to only three pounds of bentonite.

Some interesting sidelights are reflected in the use of the clay, which is said to be capable of expanding from 10 to 30 times its original size. At the time it was first used here on March 28 there was no time for extensive experimentation to arrive at the most effective mixture. The first grout sent down holes east of cell G kept on going. That was the trouble.

The problem then was to obtain a mixture thick enough to take a pressure and mobile enough to enter all voids without requiring a pressure which might prove dangerous. Another thing was to arrive at a proportion that would take up water most readily. The final, most effective result was a soupy-like mixture that contained only about five per cent bentonite. The bentonite thereby became not so much a direct, blocking-out agent as a kind of cleaving filler for the bulkier masses of of cement, sand, sawdust and shavings.

(Continued on Page 5)



STRIKING

A

WEDGE

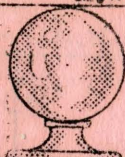
INCORRECTLY

RESULTS IN

MASHED
HANDS

BROKEN
FINGERS

LINDMAN

FROM THE
CRYSTAL BALL

JIM BIGELOW, "These rolling pins! Why were they ever made? --Corned beef and cabbage for me too,".....
 ...BILL GRAY insistent upon having an under-slung bit of doggishness.....
 J. E. YEOMANS, "Now all chime in. We'll all whistle; they'll all know we're going to blast,".....
 ...DENNY GREENWOOD catching more bottles than fish.....
 J. R. STIVERS petitioning for a badge as an A-1 meograph mechanic.....
 ...HAROLD KAESER, "If reports show that they poured a block of concrete, they must have poured it whether they poured it or not,".....
 SCOTTY GIBBS, "Oh, yes, your honor---"
 ...FRANK MAYNARD--no, it's unlikely that he takes that pipe to bed with him.....
 RALPH McKEE growing weary from poring over what will make a fish bite.....
 ...MRS. A. A. KELLY leading the Meehans through the bright lights.....
 GEORGE ALLEN playing lighthouse keeper in the eastmix.....
 ...PETE NOBLE defending raqueteering.....
 GEORGE HANSEN sending his picture for a screen test.....
 ...CECIL HEARN, "What day was my baby born?".....
 PATROL SERGEANT McGINN--Why did he recently lose a sudden interest in tear gas?....
 ...HELEN MULVANEY, "Mumsey, I'm home for a visit,".....
 GAME WARDEN--Better check up. There's something fishy; Les Thomas brought in a fish.....
 ...SAFE HABITS SAVE LIVES.....
 HAROLD HIRSCH, with a personal interest in the Kentucky Derby, crying, "Come on; come on, little horsey,".....
 ...ORVILLE LAW, with a not-so-good foot, "At that, it might be safer to walk,".....
 OMAR OLSON, "By working hard we may be able to have a little ivy-cove'd cottage,".....
 ...OTIS J. TILMAN becoming another Thomas Edison.....
 M. M. KLINEFENCER "goat-ranching" too.....
 ...LEROY WALLENBERG saving enough money to insure Wall Street.....

-oOo-

A YEAR AGO

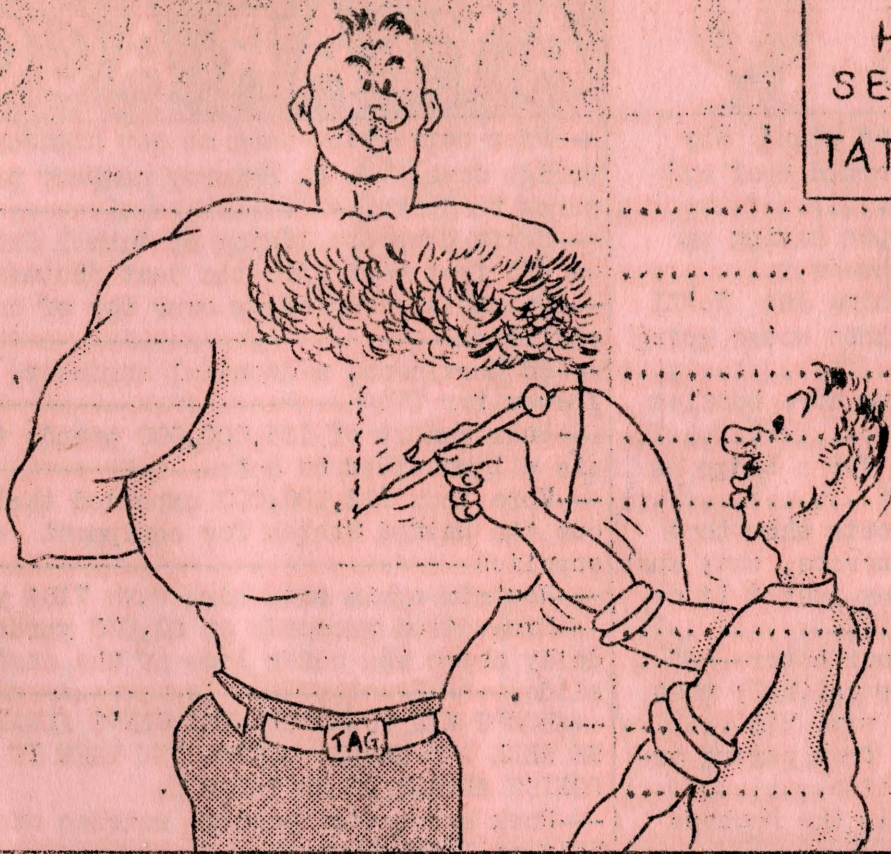
---Pier correction work on new highway bridge done. J. H. Pomeroy company prepares to leave.....
 ---Begin concrete lining of tunnel drilled 475 feet back into the west abutment.
 ---Columbia river edges over top of east cofferdam.....
 ---Ed Martinson, mechanical engineer, leaves for TVA.....
 ---Bulk cement of 136,000,000 pounds totals all received to date.....
 ---More than \$12,000,000 expended throughout the United States for equipment and supplies.....
 ---Westmix again sets high with 7164 yards.
 ---Excavation proceeds at 20,000 yards daily above the water line of the east side slide.....
 ---DON'T KID YOURSELF--YOU CAN'T ALWAYS BE WELL AND UNHURT UNLESS YOU MAKE IT A POKICY ALWAYS TO BE CAREFUL.
 ---Rock excavation yardage reaches one-half million mark.....
 ---Spillway Players, dramatic group, hold last meeting.....

---According to records which go back to 1915, more males are born every year than females. The difference is about 50,000 annually in a total of approximately 2,100,000 births. In proportion to the population of the country, the birth rate has dropped from 25.1 in 1915 to 16.9 in 1935. The death rate, however, dropped from 14.1 to 10.9.....
 ---The life span of certain creatures, according to reliable information, is: elephant, 150-200 years; the falcon, 162; vulture, 118; golden eagle, 104; swan, 102; goose, eider duck, raven, parrot, tortoise, 200-300.....
 ---New York City's population consumes annually about 7,000,000 pounds of food.....
 ---The average cost of educating a public school pupil in New York city for 1934 was \$103.33; in Spokane, \$56.66.....

-oOo-

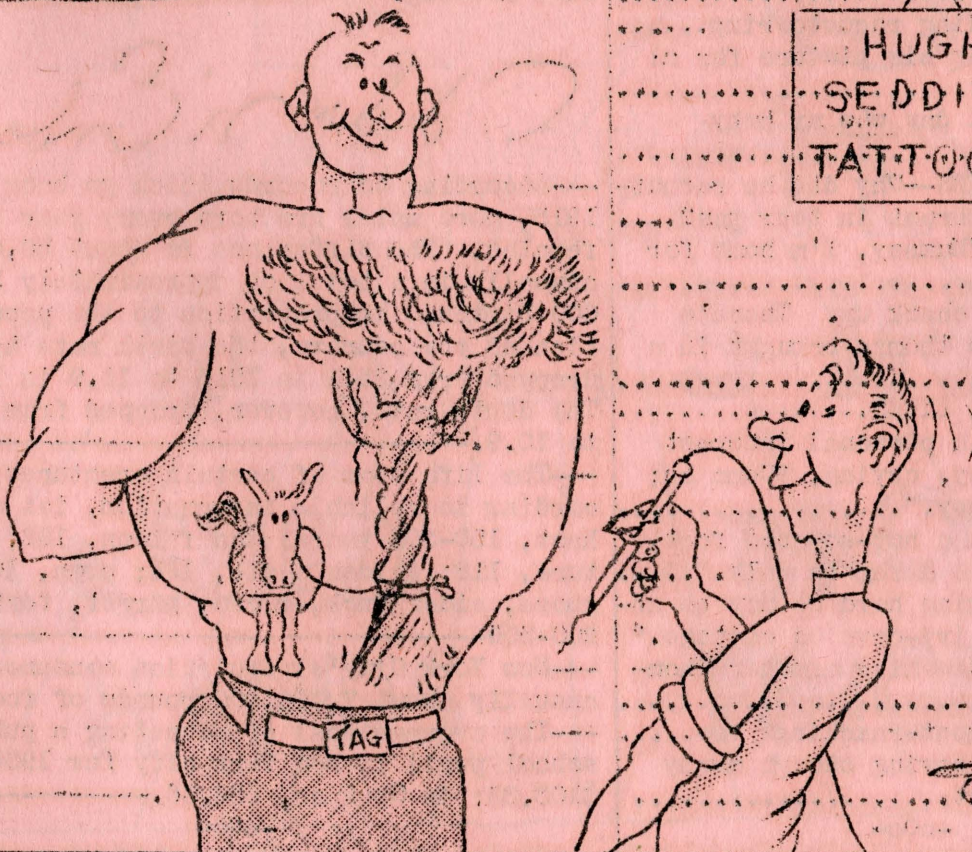
SAFETY ALLWAYS

HUGH
SEDDITT
TATTOOING



SAFETY ALWAYS

HUGH
SEDDITT
TATTOOING



COFFERDAM— (Continued from Page 1)

The cement was important because it is a good sealing material but it, like bentonite, tended to flow away through the porous area of the leak. Use of sand provided the necessary weight; shavings and sawdust, more bulk. The bentonite acted as a kind of gel to fuse the whole mixture, hold it together, and its swelling properties helped the mass to fill all voids in the seepage area.

The answer to effective use of the mixture came with amazing suddenness. After 10 days of studied variations of mixtures, the leak cut suddenly. On April 14 the flow was only 3,000 gallons per minute. Since that time drilling and grouting has been only for the purpose of finishing the job thoroughly.

Another side light on the course of the leak itself: The sand seam that permitted the passage of water near the 896 elevation (below river bed) showed the peculiar qualities of quicksand. Under pressure the sand pushes apart, allows a weighty material to sink down into it; then the sand returns to cling about the material. The breakage of the clay resting on the seam somewhat explains the sinking of the surface of cofferdam cells. There was never an unbroken channel through the cofferdam, however. This fact further explains the why of grout treatment.

Churn drills, up to seven in number, began their job of drilling. They would drill from eight to 10 feet, then drive 4-inch tubing down into the hole. They would continue this procedure until the bottom of the hole was reached. This would mean passing through the gravel of cofferdam cells into clay for several feet. Below would be the disturbed clay resting atop the seam. The clay through which the tube passed prevented the grout from escaping upward from outside the tube. The mixture then had to permeate the unsolid clay and voids in the sand seam.

As a result some holes were self-grouted, further explained Donald O. Nelson.

Company structural engineer. In such a case the grouting of one hole would grout another. In two instances the grout from one hole appeared in another more than 90 feet away.

The first plan for drilling became to locate the water course and retard the flow, then widely encompass the area, further consolidate inside, and then completely blot out the flow. The first step took a little bit of time. Over 5,000 gallons of dyed water were sent down through hole No. 5 to locate the course. No traces showed up. A plan of hole locations, however, show that some of these early holes, especially those numbered between 20 and 30, were at the scene of the leak. Today seven holes are grouted at the source of the leak, 10 inside. The course angles southeasterly from the straight line cells of the west cofferdam and the cell cluster which ties in with the downstream cofferdam.

Three general methods in the use of grout to seal off the area were: First, to use a pure mixture of bentonite ranging from three to seven per cent under a pressure up to 35 pounds. Second, to follow this, if necessary, with a heavier mixture of 50 pounds bentonite in 14 cubic feet of water with such dry materials as 16 cubic feet of shavings, eight cubic feet of sand, six of sawdust, two sacks of cement and 30 pounds of coarse bentonite. The third step was to make the final seal with but five cubic feet of water, 25 pounds of bentonite and five sacks of cement. Of the bentonite used, about 10 per cent was coarse. This would help to maintain the expansiveness of the mixture.

Three of 100 holes grouted took more than 35 per cent of bentonite used (B16, 35 and 42). Two holes (B37 and 38) used nearly 30 per cent of cement that went in to grout.

-o-o-

A POOR WAY TO GET ALL WRAPPED UP IN YOUR WORK IS TO FIND YOUR LOOSE CLOTHING WINDING AROUND MACHINERY AND YOURSELF TRY TO PULL AWAY FROM THE GEARS.

DON'T WEAR FLAPPING GARMENTS. TURN THAT JOB OVER TO A SCARECROW.

Mason City Theatre

Famous
Gonzaga

Glee Club

Featuring
"I
SMELL
SMOKE"

20
Outstanding
Musicians
20

Pep Band

Musical Treat of the Season!
SUNDAY ONLY

JULES VERNE



SUN MON

CHURCH

CATHOLIC CHURCH—Father A. Farrelly, pastor

On Sunday, May 16, mass will be said in St. Benedict's church, Mason City, at 9 a.m. and in Grand Coulee at 11 a.m. Instructions for children will be given Saturday at 10 a.m.

COMMUNITY CHURCH—The Rev. W. V. Sloan, Ph. D., pastor

9:45 a.m. Church school
11:00 a.m. Morning Worship; subject, "THREE BAPTISMS."
11:00 a.m. Junior church
7:00 p.m. Three services: vesper, subject, "Francis McCormell"; junior high group, senior high.
8:00 p.m. FRIDAY (tonight), social hour for all older young people in the community and carry.
8:00 p.m. Next Thursday, continuation of study on "The Story of Christianity."

CHURCH OF JESUS CHRIST OF LATTER DAY

SAINTS—R. E. Nuttall, superintendent (Mason City high school building)

10:30 a.m. Opening exercises
11:15 a.m. Departmental works.
Gospel doctrine: adults
Church history: juniors
Primary

ELECTRIC CITY UNION CHURCH—M.

L. Bennett, Pastor

11:00 a.m. Sunday School
12:00 a.m. Morning worship
6:30 p.m. Young people's group
7:30 p.m. Evening worship.

—oOo—

**YOU CAN'T BUY
BACK YOUR HEALTH
IF YOU'RE CARELESS
TO LOSE IT.**

APRIL ACCIDENTS

A climbing employment month found no fatal accidents chalked up for it. Sixty-one claims for more than three days time loss each are listed. The 61 accidents actually occurred during the following months: December (2), January (1), March (13) and April (45). The claims, in these cases, were not recorded until April. The time loss accidents in parentheses for the months previous to April do not mean that these constitute all the compensable accidents actually sustained during those periods.

Proper cleanup of your work place might have made a substantial cut in the totals.

—oOo—

SPORTSMEN OF THE AREA INTERESTED IN hunting and fishing are invited to attend a dinner-meeting at the De Luxe hotel in Grand Coulee next Tuesday night at 7:30. Plans will be laid for a fish feed by the local chapter of the Poggie club. The dinner costs 50 cents.

—oOo—

TENNIS ENTHUSIASTS MAY ATTEND THE FIRST meeting of the year by the Coulee Dam tennis club in the government school at 7 p.m. Monday

—oOo—

SOFTBALL PRACTICE

for anyone interested swings under way on the Mason City Community church grounds nearly every night of the week.

—oOo—

SEVENTH DAY ADVENTIST CHURCH (Electric City Union church)

Services are held every Saturday at 9:45 a.m., followed by Bible study.

—oOo—

The new Fuller-Kenyon screw pump under construction at the cement silos will work independently on a separate pipe line to the westrix. The Fluxo will pump only to the east.





The staggering drunk re-
lated this to us the other
day;

He accosted a pious and
uncommonly homely spinster.

"Lady," he said, "you're
the homeliest person I ev-
er saw."

"And you, sir," replied
the spinster, "are the
drunkest man I ever saw."

"Maybe so, lady, but I'll
be okay tomorrow."

-oOo-

SHE HAS JUST JOINED THE
GREAT MAJORITY.

SHE JUST MARRIED A MAN
NAMED JONES.

-oOo-

A certain girl pretty
well known around here
was introduced to an old
flame of hers. She decid-
ed to high-nit him.

"I didn't get your name."

"That isn't your fault.
You tried hard enough."

-oOo-

(Why should they have
asked US such a question?)

Question: Does a per-
son have to spend six
years in college and pass
an examination before he
can practice before the
bar?

Answer: That's the
silliest question we've
ever heard. All you got-
ta do is bust right in
and start bending the el-
bow.

-oOo-

LIFE IS SWEET, SO IS
GOOD HEALTH.

WHY LOSE BITTER?

-oOo-

"I know something I
won't tell," said the lit-
tle girl, as little girls
do. Mother gurgled: "Oh, how funny!
Now try bouncing on his tum-

"Never mind, child,"
said #6432. "You'll get
over that, when you're a
little older."

-oOo-

Barber: "Was your tie
red when you came in?"

"No."

"Gosh!"

-oOo-

FAMOUS LAST WORDS-----

"I'll bet that signal
means she's going to turn
right."

-oOo-

WATCH, THINK, LOOK,
HEAR, HEED, ACT--
AND LIVE!

-oOo-

CORRECT THIS SENTENCE--

"Yes, he has a tooth,"
said the young mother,
"but that isn't unusual,
is it?"

-oOo-

NO MATTER HOW PROUD
A MAN MAY BE OF HIS AC-
COMPLISHMENTS HE IS NEV-
ER QUITE IN THE CLASS OF
A HORSE IN EATING CORN
OFF THE COB.

-oOo-

Blacky Armstrong: "Sor-
ry I bumped into you. I
didn't see you."

"Tiny" Allison: "Flat-
terer!"

-oOo-

"My dad gives me a dol-
lar every birthday. Now
I have \$17."

"How much does he owe
you?"

LITTLE Willie, well past four
Threw his father to the floor
Mother gurgled: "Oh, how funny!
Now try bouncing on his tum-

my!"
Little Susie, full of chowder,
Sprinkled Pa with itching
powder.

Ma said, "My dear, what's
this you've hatched?
It's Papa's horse that's us-
ually scratched."

-oOo-

OLD-TIMER--One who can remem-
ber when most of the Ten Com-
mandments hadn't been repeal-

-oOo-

REMEMBER THAT A MAN WORK-
ING BELOW CANNOT ALWAYS LOOK
UP.

-oOo-

She: "How was your party
last night?"

Voice: "Oh, we're having
a swell time."

-oOo-

There may be something to
the rabbit foot bringing good
luck, after all. We know a
man last night who had one in
his pocket, and when his "old
Lady" went through his pocket
for loose change she thought
it was a mouse.

-oOo-

Jeff Stevens was peeved
yesterday because his laund-
ry hadn't been returned. He
felt all out of shorts.

-oOo-

"Having a bad cold in fur-
iotes Jim," said the wife,
"because he can't risk taking
a bath."

-oOo-

AND YET YOU HAVE A TONGUE!

Not long ago notices were posted that an increased number of employees would mean more new and green men and that these should be advised as to proper safe practices.

We know that most employees who have adjusted themselves to the new conditions they face are capable of producing and at the same time carry on their work in a safe manner, with the chief threat to their physical well being becoming an attendant carelessness.

It is not quite the same with employees coming to work for the first time. The new men will find it difficult to concentrate both upon work details and upon proper protection. Even an experienced construction man, when he first arrives here, is temporarily at a disadvantage because he is at a new scene and must face readjustment also. Whatever help can be extended to him and to others further minimizes the possibility of accident and further adds to his value as a workman.

These are big items.

Trying to view the matter from your own eyes when you first went to work: Would not you have been better off and a little more sure of yourself if the men who work beside you had manifested constructive interest in how you might better yourself in your work, how you might avoid chances of accident?

No man is so self-sufficient that he knows everything. No man is good enough to avoid outer circumstances so that he can never have an accident. When he thinks he can, he's one of those fools who believes he lives "a charmed life." This sounds too much like something to do with charm, and an object of charm is without life. If a new man, or old, labors under such a conviction, he needs correction.

Safety is largely a matter of common sense, but re-adjustment is a matter that can be quickened by others before common sense has its best opportunity to function. If you are an ordinary mortal, agree that other men, especially green, really need your help and that you are not overstepping any bounds when you give friendly advice.

ADD RECREATION HALL FOR LADIES

Ladies and couples now find at the Mason City recreation hall a room set aside for them.

The social room of the recreation hall last week has fitted up for use by ladies and by ladies attended by escorts. Games, such as ping pong, are played and refreshments served.

Hours are the same as the recreation hall proper: from 8 a.m. to 1 a.m. for all days except Sunday.

-oOo-

Dr. Francis E. Townsend, head of the National Townsend Recovery plan, was a brief visitor at the dam site last Friday.

-oOo-

To avoid unnecessary hot weather in classrooms, Ceulee Dam public schools have adopted the policy of opening one hour earlier, at 8 a.m. and closing at 3 instead of 4. There has been no sustained hot weather, however, since.

-oOo-

Under installation now at the cement silos is a second pump, a Fuller-Kenyon, to pump aerated cement from the silos to the Eastrix. The pump in use now has an average capacity output of 350 barrels an hour or cement for 350 cubic yards of concrete to the Eastrix.

A second pump can take over some of the steady grind which would otherwise face the one pump during the climbing records of concrete pouring.

-oOo-

OWNERS OF HORSES WINNING MASON CITY

theatre "Sweepstakes":

Ray Demarest, first; Mrs. C. E. Blackstone, second; Robert W. Wilch, third.

Next week the "purse" will be \$109.

-oOo-

LOST ANYTHING?

Held at Mason City police station:

One zipper cloth coat inked with pictures, left at tennis court.

Several sets of car keys.

Lunch bucket with number 8283.

Lost, by Joe Fernandez, one black billfold with valuable cards and identification. Cash contained considered of minor importance to billfold and other contents.

-oOo-

-oOo-

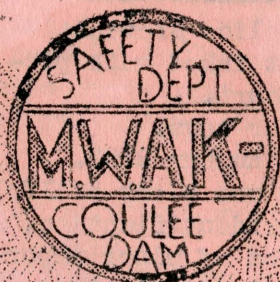
FOREMEN

YOU ARE YOUR MEN'S KEEPER

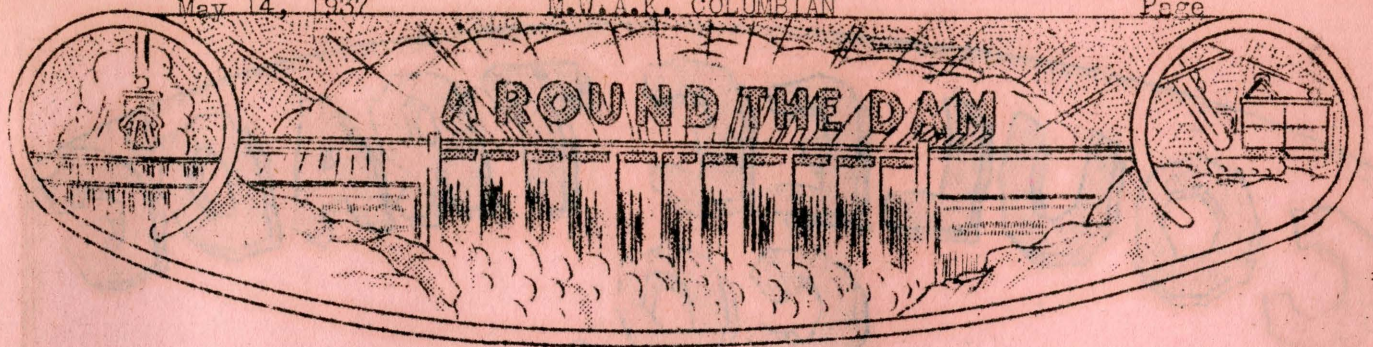
"YOU ARE A GREEN MAN ON THE LARGEST
JOB IN THE WORLD, AND THE FIRST THING
TO LEARN IS
TO WORK
CAREFULLY."



SAFETY
PAYS



LINDMAN



REACH CONCRETE HALF MARK

Early today concrete pouring for the present contract in the building of the Grand Coulee dam should be half done, with 2,260,000 yards poured for both east and west sides.

Up to Thursday 2,251,000 yards had gone into blocks and an approximate 2,268,000 remained. For the past 10 days the daily average has been 7,400 yards. This would indicate that the half mark has been passed in the early hours of the graveyard shift last night.

-oOo-

BCRN at the Mason City hospital---

May 8, to Mr. and Mrs. Herbert Prater of Grand Coulee, a daughter

-oOo-

SET ALL-TIME HIGH

Eight thousand eight hundred and eleven yards of concrete in one day became the top record for a single day of pouring at the dam last Monday. Minus the 77 yards of grout used to form a bond, this leaves a pour of 8,734 yards. The previous high of 8,364 net yards was set Sept. 21. The eastmix turned out 7,980 yards and the westmix 754 for the new record.

-oOo-

FORTY FARM COUNCIL REPRESENTATIVES REPRESENTING five Oregon counties inspected the dam Wednesday.

-oOo-

WALKWAYS AND RAMPS SHOULD BE SAFE-----
FREE FROM SLIPPING, STUMBLING
AND OTHER DANGEROUS HAZARDS.

-oOo-

EAST BLOCK COOLING CONTINUES

Two weeks after west side concrete cooled a barge began pumping water from beyond the upstream cofferdam to cool concrete for the east side. This work began April 22.

With the 48-hour pour limit in effect, cooling is highly beneficial and keeps up with the minimum level of pouring. While the area is not great, the depth is up to 100 feet.

RIVER GETS FIRST CONCRETE

The river bed of the Columbia river sees the first move toward being covered with concrete today. Forms were in place yesterday and rock cleaned off for concrete pouring some time today. The block next to block 40 will be the first of 218 in the river area to taste coverage by concrete and will be the first yardage of approximately 1,300,000 for the area. By some time next week the westmix output is expected to step up considerably for the pouring of concrete in the center.

-oOo-

500 FEET OF TRESTLE TO GO

Ten bents remain before the high trestle stretches in one line from west mix to eastmix. Six are already erected east of block 40. The general condition of bedrock indicates that erection can continue quickly.

The condition of rock for bent 49, the next in line from the east side, has held up erection there. This scarp, once level with nearby rock, is already a gorge from 20 to 25 feet lower. Just how much deeper it will have to be cut is not now known. The bottom is now at level 855, and will probably be the most troublesome in the path of the trestle.

-oOo-

Twenty-five feet of rock just off the end of the east power house blocks have largely been removed to reach the required depth for the spillway toe of the dam.

This indicates that the extension of the low trestle can soon begin, to swing rapidly over cleared bedrock toward block 40.

-oOo-

FIFTEEN MEMBERS OF THE MASON CITY BAND, practicing Monday nights regularly, are now pointing toward a public appearance soon in Moade circle in Mason City. All persons who can play brass band instruments are still eligible for membership by applying at the Mason City fire department.

COULEE TRADING CO.

SWISS STEAKS —

23¢#

RUMP ROAST

22¢#

PORK ROAST

15¢#

PORK STEAK

23¢#

PORK SAUSAGE

23¢#

MEAT DEPT