

Bullets Are Used To Step Up Oil Output In States

By William H. Lander
(United Press Staff Correspondent)

Washington (U.P.) — Bullets are being used nowadays in developing oil fields.

The famous 45 mm. (3/8 of an inch) bullets are, according to expert oil men, being used in the United States, the Near East, French Indo-China, Mexico, Venezuela and almost all places where oil operations are conducted under modern scientific methods. Other calibers, ranging from 30 mm. to 60 mm. (1/2 to 1 inch) are also being utilized.

Correspondents who recently flew from Washington and New York to oil fields of the Humble Oil and Refining company in Texas saw demonstrations of bullets fired to make side holes through it pipe and the cement around it in a well.

When they first heard the technicians talking about "precision gun perforating," some correspondents thought it was simply a joke. They soon learned, however, that the science of gun perforation has been developing since 1936, and that French engineers are among the leaders in the field.

Gun Lowered Into Hole

Some of the aspects of this science were explained to the correspondents by John Bell, division petroleum engineer, when they visited the Hawkins field of the Humble company near Tyler, Tex.

"The gun," Bell said, "is cylindrical and is generally loaded and lowered into the hole. By passing an electrical charge through the cable on which the gun is lowered, each powder charge, which is placed behind the individual bullet, may be set off, following which the bullet penetrates the casing, the cement behind the casing, and the formation, thus providing an opening which allows fluid to enter the well bore."

The perfection of gun performance was one of the major milestones in well-completion technique.

Bell said that, among other things, gun perforating "affords the selective production of very thin oil sections, minimizing the production of either gas above or water below these thin sections. It is entirely logical to assume that the gun perforating method of completion has materially added to the producible reserves in the United States by affording production from such thin zones which might not otherwise have been satisfactorily produced."

Thin Oil Layers Tapped

In other words, a thin layer of oil underground, which might not be tapped by the 1 1/2 of a drill, might, under the right circumstances, be brought into production by a bullet shot.

The guns are from seven feet to 10 feet four inches long, and capable of shooting 12 to 24 bullets without reloading. Each shot is fired independently, and electrically, from the shooting board at the surface. This board looks much like the instrument panel on an airplane, as it has all sorts of recorders, indicators, controls, etc.

When the shooting control is pressed, a filament ignites the bullets, one by one. The equipment is so arranged that the exact position of the shot can be determined in advance, and there is a telephone plug that enables the operator to hear the firing of each bullet.

All the equipment can be carried on one specially-built truck. The rig for the gun can be set up in about an hour, and in about half a day's work all the holes necessary in a well anywhere from 4,000 to 10,000 feet deep can be shot.

Henry Kaiser Makes Good For Ex-Employer

Utica, N. Y. (U.P.) — When Henry J. Kaiser skyrocketed to fame as an industrial wizard, he had as an incentive the closing phrase of a letter of recommendation from a former Utica employer.

William A. Semple, Utica photographic supply dealer, recalls penning the words, "and he will accomplish anything to which he may aspire," in a letter which enabled Kaiser to take over his first business venture, a partnership in a Lake Placid firm.

The Utica man said Kaiser later told him the words of recommendation so impressed him that he adopted them as his motto.

Bulletin Classifieds bring results.

Queen Mother in Rare Appearance



Rarely photographed in public these days, 79-year-old Queen Mary, mother of the British king, retains her regal bearing in photo above, taken when she attended the recent wedding of Myra Wernher to Maj. David Butler in London. At left is Queen Mary's daughter-in-law, the Duchess of Kent.

Life-Death Choice Narrow

Philadelphia (U.P.) — Would you risk your life to save four and one-half minutes?

Lots of motorists do, says the Philadelphia Safety council. To prove it, the council conducted a novel race over a 10-mile course of city driving.

Two 1939 sedans of the same make were started off together. One driver was under orders to show no courtesy to anyone—just drive as fast as the law would allow and keep within traffic regulations. He could take all the chances he wanted. Driver No. 2 was instructed to travel at a safe, normal speed, showing the prescribed courtesies of the road to pedestrians and other motorists.

The driver who took the chances crossed the finish line in 28 minutes—just four and one-half minutes ahead of the safe-and-same driver. Car No. 1, in addition, bumped fenders and had several close calls in traffic.

To drive home the point of the race, Herbert T. Hecht, safety council field service engineer, said:

"No figure that a man of 35 has about 17,000,000 minutes of life left to him. The fast driver saved only four and a half minutes. Just figure the odds he's getting."

School On Wheels Gives Drivers Safety Lessons

Chicago (U.P.) — Kansas, Indiana and Iowa now operate a school-on-wheels program for drivers, the American public works association reports.

The Kansas highway department operates a bus that tours the state, equipped with two-way radio, a public address system, a sound film projector and safety movies, emergency first aid supplies and equipment to give training and tests to drivers.

History Of Abacus, Counting Device, Traced To Ancients

Washington, D. C. — The curious counting device called the abacus, which proved to be faster than mechanical calculating machines in contests at Yokohama and Tokyo, is used by every oriental merchant, bookkeeper, banker, and money changer. Many of them click the brightly-colored wooden beads for such simple sums as two plus two.

Though the principle is possibly of Egyptian origin, the abacus was developed by pre-Christian Greeks and Romans, says the National Geographic society. Abacus is the Latin form of the Greek word by which the counting table originally was known.

Pebbles were first used on the counting tables, which were lined in parallel columns for units, tens, hundreds, etc. The pebbles were moved up and down, just as abacus beads are pushed on their metal wires or rods.

From the Latin word for the pebbles thus used came the English words "calculate" and "calculator."

This ancient abacus progressed to a board containing parallel grooves, with longer slots below and shorter ones above. In the grooves were inserted small wood knobs for counters.

Woman Tourist Bags One Ton Moose

Anchorage, Alaska (U.P.) — Men are men in Alaska, but women tourists know how to handle a gun, too.

Mrs. Frank Graham, Auburn, Wash., abashed local soundboughs here recently by bagging a record moose in the Rainy pass area. The animal's antlers spread 71 inches, weighed 90 pounds, and the rest of the carcass weighed 1,800 pounds.

Municipal Strikes Would Be Barred

Chicago, Nov. 21 (U.P.) — Representatives of 600 cities called today for federal and state legislation to prohibit municipal employees from striking.

The resolution, passed at the American Municipal Association's convention late yesterday, also urged a legal ban against inciting any strike which might imperil public safety, health and welfare.

The resolution asked that "sympathy" strikes by other unions in municipal disputes be outlawed and that members of "any labor unions which do not profess allegiance exclusively to the government of the United States" be barred from municipal government.

The group elected Mayor Woodall Rodgers, Dallas, Tex., president and Mayor Fletcher Bowron, Los Angeles, vice president. Rodgers succeeds Mayor R. E. Riley, Portland, Ore.

FORTUNATE FORTUNATE

San Jose, Calif. (U.P.) — Fortune Gonzales appeared in police court on a vagrancy charge. The judge gave him a 30-day jail sentence, then suspended it. "I'm fortunate," said Fortune.

Locks on River Open Seven Days

Oregon City, Ore., Nov. 21 (U.P.) — Col. O. E. Walsh, district army engineer, has ordered the locks at Willamette falls here restored to seven-days a week operation in an effort to relieve the glut of logs in the upper basin waiting to move downstream.

A presidential order had placed the locks on a five-day operation as part of the economy order to reduce federal expenses.

A total of 225 lockages were reported awaiting passage through the canal downstream, nearly all of them being log rafts which virtually choke the river from bank to bank for several miles upstream.

Gearhart Buys Bathing Beach

Gearhart, Ore., Nov. 21 (U.P.) — The city of Gearhart has announced the purchase of more than 4500 feet of beach front and tidal lands on the Pacific ocean and the Necanicum River for public beach use.

The land, comprising three long, narrow tracts along the river limits of the city, was purchased from the O. W. Taylor estate at a price of \$3,000, according to George C. Lindner, city auditor.

Eating Peas With Knife Made Easy Long Ago

Cleveland (U.P.) — Douglass Lyons has satisfied a long-time urge to eat peas with a knife.

Lyons, an executive of the Hotel Altierto, discovered a 19th century pea knife during the hotel's silver inventory. He thought it was an elaborate knitting needle. European-born members of the hotel's culinary staff identified the unusual utensil as a British pea knife used by English gentry during the 19th century.

"It works," said Lyons, after using the knife on a dish of peas. "The peas rolled up the silver alloy like returning bowling balls."

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No. 5 cans
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No. 5 cans
- Grapefruit Juice can 29c**
No. 5 cans
- Blended Juice can 39c**
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No. 5 cans
- Red Sour Cherries can 49c**
No. 2 cans
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No. 2 1/2 cans
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No. 2 1/2 cans

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11 oz. pkg.
- Sundried Peaches pkg. 29c**
11 oz. pkg.
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No. 1 cans
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