

RESOURCES

Pipelines Delayed

Construction of refineries also may be held up by shortage of steel now developing. Need dry weather months for laying new pipelines.

➤ A SHORTAGE of steel, already developing, means further delay in the construction of refineries and pipelines to decrease the threatened fuel oil and gasoline shortage. Production the first week of July was about three-fourths capacity.

Decreasing steel production is due to the increasing shortage of coal resulting from the miners' walkout in protest against the Taft-Hartley bill, according to the American Iron and Steel Institute.

An increased shortage of steel now will have far-reaching results. The good-weather period is here and ahead, when the construction of buildings and bridges proceeds rapidly. Dry-weather months are essential in laying new pipelines, and new lines are necessary before the Midwest will have a plentiful supply of liquid fuels again.

Industry expected, and was somewhat ready for the scheduled coal miners' two weeks vacation the first half of this month. It was not prepared for the early walk-out coupled with the vacation. It

is almost entirely unprepared for any threatened extended "vacation" that may follow.

The threatened shortage of coal is also beginning to worry railroad officials. It is the season when crop movements and passenger travel are high. Electric and diesel locomotives have been widely advertised, but train movements are still principally powered by coal. This is particularly true of the freight engines that are now moving wheat and other crops.

Steel shortage will affect industry building expanded plants in all parts of the country. A summer shortage of coal will be serious to northern factories because the summer and early fall is the season when northern manufacturing plants stockpile coal for the winter. Industrial areas bordering lakes Superior, Huron, and Michigan rely upon lake transportation for much of their fuel for heat and power. Delivery by boat must take place while the Great Lakes are still open.

Science News Letter, July 12, 1947

OCEANOGRAPHY

Lost—Large Iceberg

➤ A LARGE iceberg "lost" in the foggy weather of the North Atlantic is sufficiently menacing to steamship travel to cause the scheduled shift northward of trans-Atlantic routes due on July 1 to be postponed.

Last sighted on June 25 by the International Ice Patrol, the berg is believed to be between 100 and 200 feet long. Although the U. S. Coast Guard ships are equipped with radar and other new searching devices unknown in pre-war days, foul weather over the Grand Banks has prevented them from picking up the great floating piece of ice since last Friday. It was then at 43 degrees, 55 minutes north latitude and 48 degrees, 59 minutes west longitude. This is too near for safety to scheduled new track C which "turns the corner" of the Atlantic when longitude 50 degrees west crosses 43 degrees north lat-

itude for westward ships and 42 degrees north latitude for eastward ships.

Until the berg is located, which will be done quickly by air patrol as soon as the fog lifts, ships will stay on the more southerly track B. Those Europe-bound will travel farther east before they set a course on the great circle that will lead them most directly to the channel ports.

May is usually the month during which icebergs, coming down the Labrador current from their birthplaces in Greenland glaciers, are most plentiful. Sometimes there is another wave of floating ice toward the end of June, but usually it does not reach so far south and does not menace ships. The International Ice Patrol has a saying: "Home by the Fourth of July" but its sailors were still standing guard against another Titanic disaster this Fourth.

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ANTHROPOLOGY

Tepexpan Man Is Young for His Age

➤ FOR ALL his age, Tepexpan Man is "modern," scientists studying him at the National Museum have found. His high-domed, thin-walled skull contained a brain of the same size as those of present-day Indians. His eyebrow ridges are rather prominent, but not more so than those of many a still-living head. His lower jaw is solidly built, but is not Neanderthaloid. In particular, a sharply prominent chin separates him from the Neanderthal type. (See SNL, July 5)

He was middle-aged when he fell on his face in the marsh and died. This is shown by the solidly united seams in his skull, and by the completely ossified ends of his arm and leg bones. He was probably 40 or over when he went on his fatal last hunt.

He had lived hard before he died. One of his right arm-bones had broken just short of the wrist and had healed again. He suffered from a stiff neck, for there are limy deposits on the vertebrae showing that arthritis had set in. There were only three teeth left in his upper jaw. All the molars had departed from his lower jaw some time before he died, for the place where their sockets had been is quite smoothly healed over. The remaining lower teeth—incisors, eye-teeth and premolars—are considerably worn but otherwise in good condition.

That much of his story Tepexpan Man



PUZZLE—This picture shows how the fragments of bone are painstakingly fitted together in restoring the ancient skull of Tepexpan Man.



OLDEST MEXICAN—The recently found bones of an ancient man are spread out before the scientists who are busy with his restoration. Dr. T. Dale Stewart of the U. S. National Museum (left) holds the skull of a modern Indian for comparison. At the right is the Mexican anthropologist who made the discovery, Dr. Javier Romero. The case in which Dr. Romero brought the bones by airplane to Washington is shown at the far right.

told a little group of scientists and newspapermen at the U. S. National Museum after his arrival. The rest will come out as his much-broken face bones and what is left of his skeleton are pieced together by Senor Javier Romero and Dr. T. D. Stewart of the National

Museum. After comparative studies, in which the huge collection of Indian skulls will be used for comparison, Tepexpan Man will return to his native country, where he will be "in residence" at the Mexican National Museum.

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AERONAUTICS

Supersonic Flight Ahead

Unconventional planes, still cloaked in military security, may lead to man's flying faster than the speed of sound. New planes do not have limits of XS-1.

► THE ARMY is building new, high-speed aircraft for research on flight faster than the speed of sound, Col. Philip B. Klein of the Army Air Forces Air Materiel Command, Wright Field, Ohio, revealed at the meeting of the American Society of Mechanical Engineers in Chicago.

Describing the AAF's experimental rocket plane, the XS-1, Col. Klein said

that the new planes will "give us the answers beyond the limits of the XS-1."

The new aircraft are still cloaked in military security, but Col. Klein reported, "all of them are rather unconventional in appearance in that they have either swept-back wings, very thin wings with a very small aspect ratio or are tailless or semi-tailless."

The XS-1, Col. Klein declared, was

not designed for flight at speeds faster than the speed of sound. The XS-1's job is "to explore the transonic region and to provide us with actual flight data which might enable us to build a supersonic plane in the near future," he said.

"We want to be certain that when we do venture into the transonic region we have an aircraft strong enough and controllable enough to cope with whatever unpredictable effects may be manifested," the AAF officer explained.

The XS-1 has several advantages from being launched from a "mother" B-29, Col. Klein told the engineering society.

Launching the high-speed plane in the air avoids dangers from heavily loaded take-offs with rockets for power, makes possible test glide flights without power, saves fuel and simplifies transportation of the plane, he said. Another advantage is raising the potential speed of the XS-1 from 1,100 miles per hour from a ground take-off to 1,700 miles per hour from launching in the air.

These speeds are strictly "potential," Col. Klein warned. "For quite some time our flying will be done at subsonic speeds (less than the speed of sound)" he stated.

Col. Klein said the AAF does not know when it will be able to fly faster than the speed of sound, but, he added, "So far as we know, there is no limit as to how fast a man-carrying aircraft can be made to fly."

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METEOROLOGY

Radar Now Used To Spot Invading Storm Clouds

See Front Cover

► RADAR apparatus like the one shown on the front cover of this week's SCIENCE NEWS LETTER, which during the war kept an alert watch for enemy airplanes, now is used in weather observation.

The radar can pick up the electrical forces generated in thunderclouds and possible electrical disturbances to communication. It is also used to follow the balloons that carry radios for broadcasting weather data from aloft.

The apparatus shown on the cover is at the Air Weather Service Station at the guided missiles proving ground at White Sands, New Mexico, where the Army Air Forces has a staff investigating atmospheric conditions at altitudes previously inaccessible.

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