

Carload of "Oyster Shell Grit" Is Mostly Rum

City and railroad police and federal agents seize box car from Biloxi, Miss., at Kansas City, Mo., and discover scores of cases of liquor hidden beneath bags of crushed oyster shell.



Tornado Whims Puzzle to Science

Vagaries Make Research Work Very Difficult.

Washington.—The vagaries of tornadoes, one variety of which recently snuffed out more than 800 lives in the Middle West, have almost completely baffled the researches of science. The suddenness with which they strike, and the destructive force of their attack, have made scientific study extremely difficult.

Prof. William J. Humphreys of the weather bureau describes a tornado as "a violent rotating storm of small dimensions." The chances are, he says, that not once in 1,000 years would a tornado hit the same spot twice.

Name Comes From Africa.

The name tornado originally was applied to a violent thunderstorm on the west coast of Africa. The variety of storm now called by that name, however, is peculiar to the Mississippi valley region of the United States, and rarely occurs in any other part of the world. Doctor Humphreys' records show that it does not occur west of Denver; is found only occasionally in southern Canada; is rare in the eastern part of the United States, and is not destructive in or east of the Allegheny mountains except in Alabama and Georgia.

The explanation is that the Rocky mountains, extending generally north and south, guide the cold air draining to the south from the Canadian Rocky region. The drift of winds comes across the warm waters of the Gulf of Mexico and starts north across the United States.

The meeting of these cold and warm currents of air starts up a rotation between them, Doctor Humphreys explains, adding that no other part of the world has that geographic configuration existing in the Rocky-Gulf area.

Less Than Mile High.

The passage of these currents establishes violent rotations at cloud levels and the whirl bends itself down to the bottom, usually from a level of less than a mile above the earth, to the ground.

The tornado only occurs in connection with a big rain or snow-bringing storm, and is usually from 1,000 to 1,500 feet wide.

The peculiar phenomenon of the tornado "skipping," striking a spot and jumping over a stretch of country, leaving it undisturbed, is not so well

understood. The upper part of the tornado seems for some reason to move ahead, breaking off its lower portion, and then, as it speeds on, the whirling wind finds its way to the ground again.

40-Room Residence Moved Three Miles

Los Angeles, Cal.—Another feat in house moving was completed recently by moving a 40-room residence valued at \$150,000 a distance of three miles in three nights without interruption to traffic on one of the city's most-used boulevards.

The dwelling is the largest dwelling of its kind moved from one foundation to another in the United States.

To enable the dwelling to be transported quickly and without suspension to traffic, the house was sawed into three sections, one of which was moved from the old foundation each night between midnight and dawn. Sawing the house and jacking up the individual sections required about six weeks. After the three parts were on the new foundation the house was assembled into one building again.

Forty workmen were employed in moving the dwelling, which is of frame construction. A large truck, especially

100 Seek to Be Wife of Lonely Widower, 68

Edwardsville, Ill.—C. H. Spillman, postmaster here, needs help to handle letters for D. B. MacCracken of Waldron, Ark., who advertised that "I desire a nice Christian woman for a life companion."

MacCracken, who explained that he owned a 270-acre well-stocked and improved farm in Scott county, said he was a widower of sixty-eight, "but in looks I am forty," and that he wished to marry a woman who would live on a farm.

More than one hundred letters were received. Among replies from Chicago and Dixon, Ill., was one which read:

"I am fifty-eight years old, feel sixteen and look like a two-year-old. I try to be a good Christian and have lived on a farm all my life."

designed for transporting large structures, rolled the sections to the new foundation constructed for the dwelling.

Conscience Stricken

Clarksburg, W. Va.—City Manager H. G. Otis has received a two-dollar bill and a letter from E. L. Oliver at Kenmore, Ohio. The letter states that several years ago the writer was the cause of breaking of street lamps here and has recently been conscience stricken.

Telescope Reveals Four Billion Stars

Observatory to Bare Wonders of Firmament.

Seattle.—This city soon is to have the largest stellar telescope in the world and the greatest astronomical observatory, in the gift of Charles H. Frye, capitalist. The plant for the huge mirror, which will be open to the public during the summer, now is being erected.

The task of preparing the mammoth speculum, the largest ever cast in the world, is being completed by T. S. M. Sheridan, Canadian astronomer and telescope builder, in specially constructed shops in Vancouver, B. C. The

great mirror, 120 inches in diameter, must be ground down by hand work until it possesses the correct focal curvature.

Other Big Ones. The largest existing telescope today is the instrument at the Mount Wilson observatory, mounting a 100-inch speculum. The next in size, 73 inches across, is at Little Saanich, B. C., Canada.

The Frye observatory is remarkable for several features. It is the first erected primarily for public education. The mirror is the first large optical lens ever cast on the North American continent. The observatory itself will contain a collection of astronomical photographs gathered from every part of the world.

There are about 5,000 stars visible on a clear night to the naked eye. A 60-inch reflector makes 219,000,000 stars visible. The Mount Wilson speculum brings into view 320,000,000, while the big Frye telescope will, according to conservative estimates, make visible at least 400,000,000 of the twentieth magnitude or outside the farthest boundaries of the universe, as the best imagination of man conceives the universe.

Huge Dome. A huge dome 100 feet in diameter and 150 feet in height will house the heavy machinery used to manipulate the ponderous reflector and refractors of the big telescope.

Scientists are awaiting anxiously the completion of the mirror in the hope of viewing Mars and several other planets which will be in favorable oppositions to the earth this summer and autumn.

Munich Stenographers Sell Funeral Orations

Munich.—Stenographers out of jobs in Munich have found a source of revenue in the local cemeteries. It is their custom to attend all funerals and take down the words of the officiating clergyman. These they transcribe neatly on mourning paper with a black border, and then offer their work to the relatives of the deceased. In almost every case the relatives buy not only the first transcript, but often order a considerable number of carbon copies.

Jardine Gets Tips From Two Shepherd Senators



Senator Francis E. Warren of Wyoming (left), seen at work with the automatic sheep shearing machine; Senator Robert N. Stanfield of Oregon (center), shearing the sheep, and Secretary of Agriculture William Jardine, surrounded by some of the members of the debating team of the Oregon Agricultural college at the government experimenting station at Beltsville, Md. The two senators, champion sheep men of the United States senate, gave the secretary of agriculture a few tips on the shearing of sheep. Senator Stanfield is the "king" of the sheep industry in the United States, being the largest producer of wool and mutton in this country.

Unknown Area Will Be Explored

Science Expects Much From Expedition.

Washington.—Scientific information of high value will accrue from the exploration of the world's biggest unknown area by the MacMillan Arctic expedition under the auspices of the National Geographic society with the active co-operation of the navy, according to a bulletin issued at the society's Washington headquarters.

"Data which will be collected by members of the expedition and observations made by the United States navy flyers are of potential value to navigators, farmers and fishermen," the bulletin explains.

"The major geographical fact is that the huge unexplored area, a million square miles, lies between two American flags, that which flies over Alaska, and that which Peary planted at the North pole. In this area, more than three times the size of Texas, there is the possibility of a new continent being discovered, and the probability of land of some kind.

Why Land Is Expected.

"The existence of this land is postulated on reports of explorers who have skirted the edges of the unknown area, and of observations of tides and ice conditions along this fringe, which conditions indicate the existence of land.

"Should such land exist it will be of great future economic importance in view of the commercial flying that, in years to come, will be done across the Arctic regions.

"The combination of aircraft and radio in Arctic exploration is a new feature of exploration, which not only adds romance and adventure to the undertaking, but which enhances the scientific value of the expedition.

"Hitherto our information about the Far North has been from explorers who had to penetrate it in winter, when the ice was continuous; summer flying makes possible observations of entirely different conditions, with 24 hours of daylight to aid the flyers.

"This same daylight, however, as radio fans will realize, is a handicap to broadcasting, because night time is radio time. The use of the new short

wave-length apparatus, under these conditions, is an experiment which will be of value to the new science of wireless communication.

"Upper air temperatures in the Far North are almost as little known as the million square miles which may shroud a long-hidden continent. Summer records of these conditions not only will have a value to future flying but may have a direct bearing on weather forecasting.

"Forecasting weather consists largely in detecting new disturbances as they show up on the western and northwestern borders of the United States, learning their characteristics, and figuring out the paths they probably will follow because of prevailing barometric pressures and temperatures ahead of them.

Tracking Weather to Its Lair.

"The great majority of what the weather forecasters call the 'lows'—that is the areas of subnormal barometric pressure—seem to originate over the warm sea south of the Aleutian Islands in the winter, and over the interior of Alaska during the summer. But some of the conditions which cause these 'lows' to be 'built up' in those places and create 'highs' to the east have their birth farther north in the polar regions, and a better knowledge of temperatures, pres-

CHECKING 6,000 SKULLS



This is a picture of Miss Miriam Tildesley, at the Royal College of Surgeons' museum, London. Her occupation is that of cataloguing 6,000 human skulls, one of the largest collections in the world.

sure and wind changes there undoubtedly would facilitate weather forecasting.

"In the search for the beginnings of its weather the United States is not concerned with the entire polar regions. It is most concerned, it happens, with the unexplored territory which lies north of Alaska.

"Temperatures, pressures and wind conditions—the vital weather factors—are not known in the regions north from Alaska to the pole. Exploration of this area is a preliminary to making detailed observations of these conditions which directly affect farms and orchards of the United States."

Speaking of the navy's part in the expedition, Dr. Gilbert Grosvenor, president of the National Geographic society, said:

"Two of the outstanding men of their generations in the history of polar explorations were officers of the United States navy—Charles Wilkes, who discovered the Antarctic continent on January 19, 1840, and Robert E. Peary, who attained the North pole on April 6, 1909.

"It is a matter of pride to the members of the National Geographic society that the monuments to Peary and Wilkes in the Arlington National cemetery were placed there by their society.

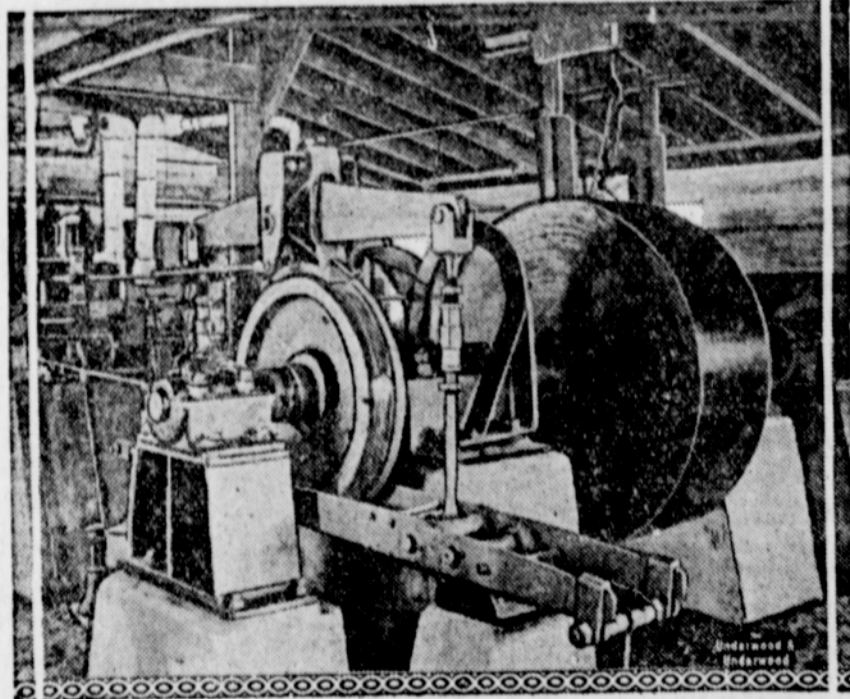
"With these two names may be grouped other navy men whose enterprise and daring have added to our knowledge of the world. Among them are Charles Francis Hall, who pushed north from Thank God Harbor to within less than eight degrees of the North pole in October, 1871; George W. DeLong, who lost his life in polar work; William Francis Lynch, who in 1848 conducted a valuable official survey of the Jordan river and the Dead sea; Matthew Calbraith Perry, who so diplomatically opened Japan to the outside world in 1853, and Thomas Oliver Selfridge who conducted surveys for a canal across the Isthmus of Panama in 1869-73."

Solons Burned Out

Guatemala City.—The legislative assembly has been compelled to suspend its sessions until new quarters are found. The lawmakers were made homeless by the fire which recently destroyed Centenary hall. The original Guatemalan Declaration of Independence was lost in the fire.

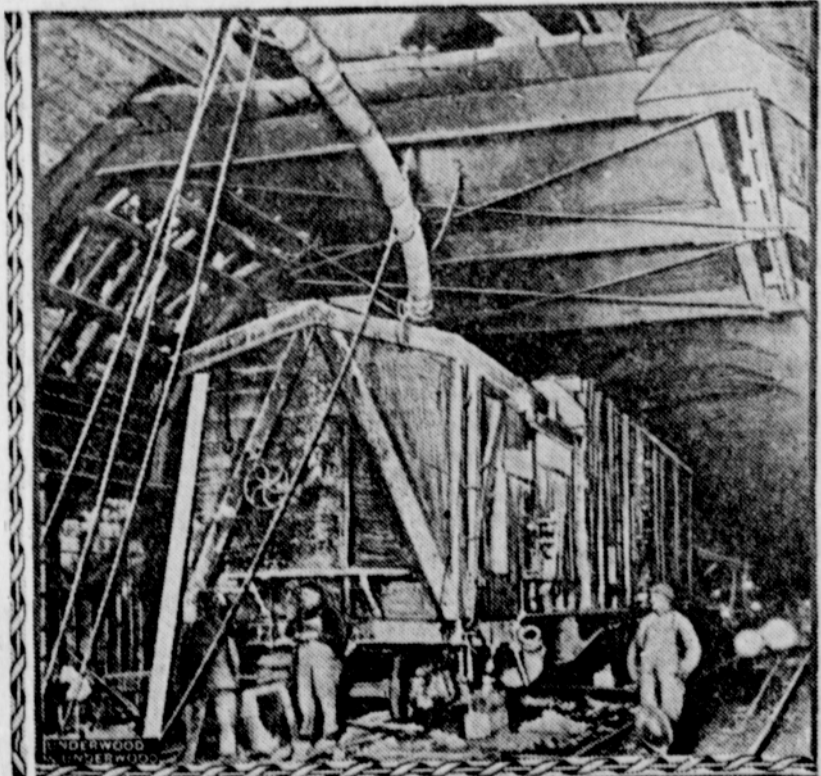
The Vernay-Faunthorpe expedition has obtained specimens of the nearly extinct pink-headed duck.

In Railway Brake Shoe Laboratory



For 35 years investigations of the properties of brake shoes, looking toward the discovery of better metal compounds than now used, have been under way. The University of Illinois has been carrying on such investigations for many years in its brake-shoe laboratory where there is a machine, shown in the picture, which measures and records the friction of brake shoes and enables the investigators to measure the weight of metal worn away in the performance of a certain amount of braking work. There are 30,000,000 brake shoes in service on American steam roads and \$15,000,000 is spent annually in renewing them.

Huge Concrete Job Is Completed



The four-year task of lining with concrete the Connaught tunnel of the Canadian Pacific railroad—longest in America—has just been completed, with half a million bags of cement and untold tons of sand and stone mixed within railroad cars in the tunnel and blown into place behind the wooden forms by compressed air through huge pipes, as shown in photograph. The work was the greatest job of its kind ever undertaken.