

## METEOROLOGY

# Cold to Continue

**An abnormal storage of cold air in Arctic regions during December will keep temperatures low until mid-February. The Northeast will be the hardest hit area.**

➤ MOST of the nation will continue to be gripped by colder than average temperatures until mid-February, forecasters at the U. S. Weather Bureau predict.

The Northeast will be the most hard hit by the below normal cold. They said the only area where above normal temperature averages are expected is the far Southwest.

Precipitation is expected to exceed normal along the Gulf Coast and east of the Appalachians, with frequent snows from the Carolinas northward. Greater than normal amounts are also anticipated in the Rocky Mountain states. Subnormal precipitation is forecast for the Midwest, and areas not specified are expected to have near normal amounts.

The spillovers of cold polar air that will keep temperatures low for most of the United States can really be blamed on an abnormal storage of cold air in Arctic regions during December.

Somewhat as an electrical charge can be built up in a condenser, then released, so the vast cold pools of air held in the far north by westerly winds last month are now breaking southward. This sort of thing happens every year, a part of the unceasing rhythmic flow of the atmosphere responding to the sun's radiation.

However, the timing and the intensity—how far south the cold penetrates, how cold the cold is, the degree of storminess at the boundary between the cold and warmer air and how long the cold lasts—change from year to year.

The major breakthroughs of one cold wave closely followed by another that have marked January weather so far and that are predicted to continue until mid-February are more usually a February occurrence.

High pressure areas that are relatively warm are now found in high latitudes, and low pressure areas that are relatively cold are now found in low latitudes. These pressure centers dominating the weather for the next few weeks are expected to have the following average positions: one high over the Bering Sea and northeast Siberia and another over the North Atlantic and Greenland; one low north of the Hawaiian Islands; another low displaced slightly from Hudson Bay; a third low over the south central Atlantic and a fourth over the Mediterranean.

This present pattern is a reversal of the usual weather patterns and is known to meteorologists as the "blocking effect." Normally, high pressure areas are found in southern latitudes and low pressure areas in northern latitudes.

The "block" results when the pattern of the prevailing westerlies that carry air

masses from the Pacific across the United States break down. Since air masses move from high pressure areas to low pressure ones, the polar air is expected to thrust far to the south.

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## ARCHAEOLOGY

## Peruvian Indians Had Ancient Mayan Contact

➤ ANCIENT POTTERY found in the eastern Montana section of Peru shows that prehistoric Indians there had contact and cultural interchange with far away people in South and Central America.

The finds were made by Donald Lathrap, graduate student of Harvard University, and were announced by Dr. Harry L. Shapiro, anthropologist of the American Museum of Natural History.

The site explored by Mr. Lathrap was the Shipibo village of Yarinacocha on the Ucayali River, a major tributary of the Amazon. He found that the site had been occu-

pled for a long time.

Oldest pottery found by Mr. Lathrap closely resembled ware of the far-away ancient Mayas of Central America. Chief similarity is a broad ledge of clay encircling the pot, extending out horizontally from its walls. The designs on these ancient pots, however, were not Mayan. They were more like the incised patterns found among the early cultures of the Peruvian and Bolivian highlands.

Pottery in the next, more recent, level linked these Peruvian ancients with the ancient inhabitants of the island of Marajo at the mouth of the Amazon.

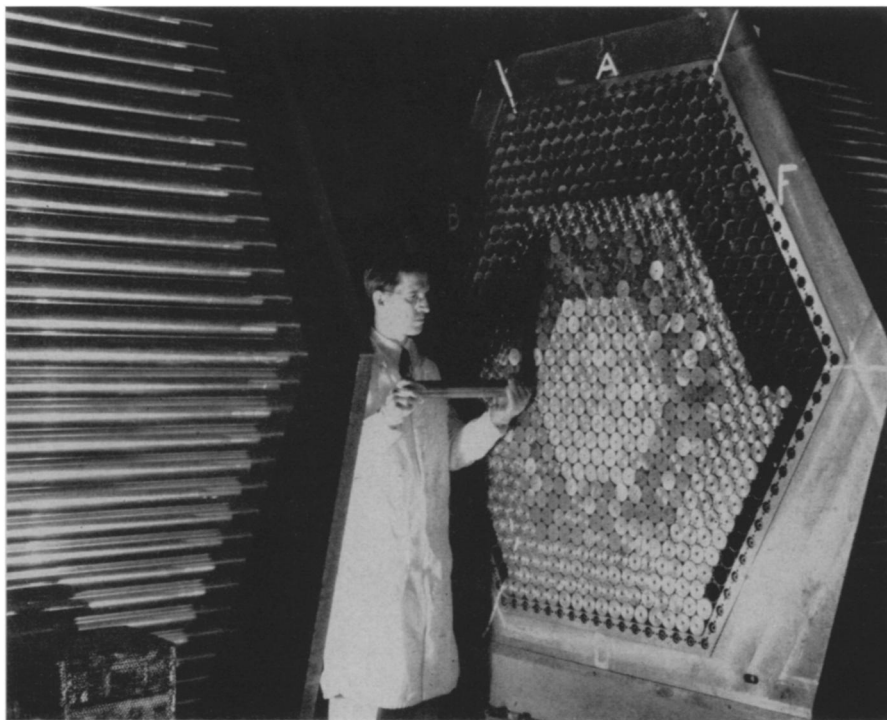
On the next level were pottery fragments linking the people who made them with another distant region. This time it was the Venezuelan shores of the Caribbean Sea. Formerly, this type of pottery had been known only from the lower Orinoco River in Venezuela and the Caribbean islands.

This ware had been credited to the Taino Arawak, a group of Indians now nearly extinct.

Further evidence of contact between the Arawak people and those of the Montana region of Peru is that marginal tribes in the Ucayali are still speaking a variation of the Arawak language.

The Indians now living along the Ucayali are considered the great artists and craftsmen of the Upper Amazon region and are known for their elegantly patterned cotton textiles, delicately carved wooden objects, and painted pottery.

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**ATOMIC HONEYCOMB**—A technician inserts a fuel rod into the preliminary pile assembly at the Knolls Atomic Power Laboratory. The reactor, first to be operated in the northeastern United States, is believed to have set a record in that it has been started up more than 10,000 times in experiments carried out on reactor designs.