

## METEOROLOGY

# New Weather Map Symbols Recall Indian Picture Writing

## Presence and Movement of Air Masses Shown For First Time; Use Will Spread to All Cities

See Front Cover

**W**EATHER maps are going to have a radically different appearance before long. They will be speckled all over with new symbols that look like Indian picture-writing, with a suggestion of shorthand thrown in.

They won't be hard to read, however. Most of them have a graphic resemblance to the thing they are intended to indicate. Thus, a round dot means rain, a six-pointed star means snow, a white circle means a clear sky, a down-sloping line means falling barometer, and so on.

Cloud shapes have their symbols, which are really rough sketches of their outlines. The flat-bottomed, round-topped "woolpack" or cumulus clouds are indicated by a half-circle. A half-circle surmounted by the inverted base of a triangle signifies the lightning-charged cloud we see on hot summer afternoons, known as the "anvil" cloud or cumulonimbus. Symbol and cloud are both shown on the front cover of this week's *SCIENCE NEWS LETTER*. A straight line ending in a short curve or hook suggests the streaky, curve-ended clouds called "mares' tails" by sailors and cirrus by meteorologists.

All the symbols of the new map are as simple and graphic as that.

On each day's map, every city where there is a Weather Bureau observatory will have spotted alongside it a cluster of these symbols. Anyone who has learned the "alphabet" will be able to tell at a glance that city's temperature, barometer state, degree of cloudiness, direction and force of wind, and other weather facts.

Missing from the new maps will be the old familiar curved lines that passed through points of equal temperature—the isotherms. Isobars, marking regions of high and low pressure, will survive,

but they will be more widely spaced than at present. Significant introductions will be indications of air masses, with letters showing polar or tropical origin, and whether they are warm or cold. The fronts where they come in contact will also be shown; it is at these fronts that liveliest weather changes often take place.

Observations for the making of the new maps will be taken at 1:30 a.m. instead of 7:30 as at present. This will enable the Weather Bureau to distribute the maps earlier in the business day when they will be of more use.

The new maps will be printed and used first in Washington, D. C. Later,

## WEATHER SIGNS

*In the sign language of Uncle Sam's new weather maps, these symbols (from left to right) stand for rain, snow, thunderstorm, heavy squalls, blizzard, mixed rain and snow, hurricane, thunderstorm with hail, and sky nine-tenths clouded.*

they will replace the old-type maps in other cities. The rate at which the change-over will take place will depend largely on how rapidly funds can be made available for the alterations in the map-printing equipment.

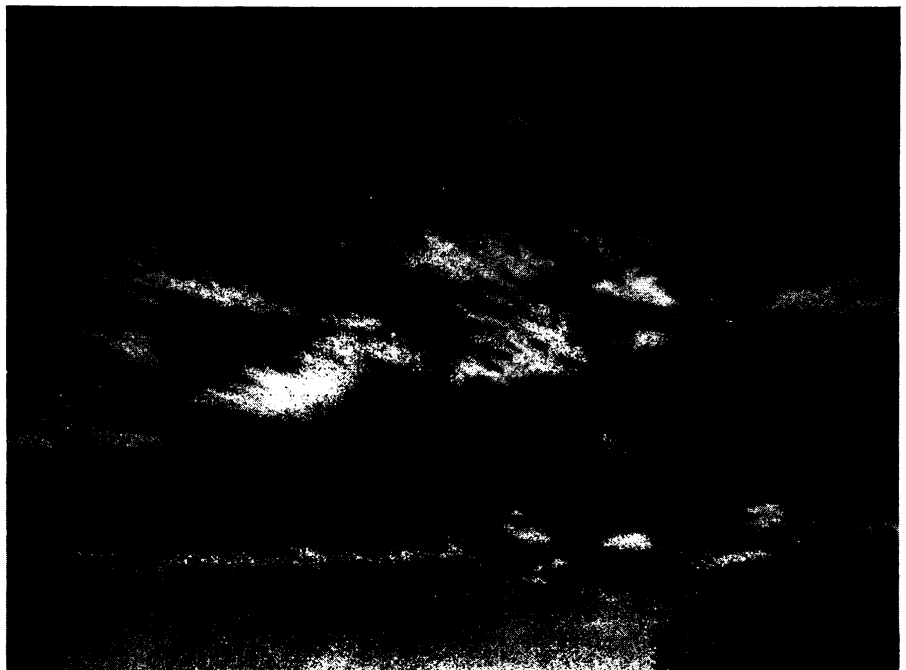
*Science News Letter, August 23, 1941*

## PHYSICS

## Change from Wave Lengths To Frequencies Proposed

**J**UST as in the case of our radios, where wave lengths have been abandoned for kilocycles or frequencies, it is now proposed that the same change be made in optical work—for light is also a wave similar to the radio waves but of much shorter wave length, or, what is the same thing, of much higher frequency.

For many years those dealing with



*MARES' TAILS*

*A hooked line suggests the shape of the wispy mares' tails or cirrus clouds such as these.*

