

No. 50

A Science Service Feature

July 9

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,
discusses:

PUBLICATION OF THE ARTICLES
CONTAINED IS STRICTLY PROHIBITED

WHEN SCALPS ARE WET

The American Indians had a gruesome proverb: "When the locks turn damp in the scalp house, surely it will rain." It was a well-founded proverb, for the humid condition causing damp locks, also favored rain. It is an interesting fact that the most serviceable instrument used in meteorological science for the measuring of humidity, the hygrometer, makes use of the human hair as the fundamental factor in its mechanism, so susceptible is it to the presence or absence of moisture.

Before being used in a hygrometer children's hair is treated so as to rid it of its natural oil. Then a bundle is made up and fastened at one or both ends, and held moderately tight by a weight or spring to which is attached an indicator. When the air becomes moist the hair elongates; when the air becomes dry the hair shortens. The changes in length correspond almost exactly to the percentage changes in relative humidity without respect to the temperature. So, too, does moist air twist tighter the natural curl, while artificially curled hair straightens out.

(Tomorrow: Finding Thunderstorm's Course)

All rights reserved by Science Service

Science Service,
1115 Conn. Ave.,
Washington, D.C.