

prevention campaigns in a far more satisfactory manner, having more detailed forecasts regularly each day.

A discussion of thunderstorms, the major cause of fires on the National Forest lands of the district, and their local forecasting ensued, with comments by Dean Blake, E. H. Wells and Malcom Rigby, the latter pointing out the value of the Rossby Diagram, using Spokane airplane observations, in forecasting these conditions for eastern Washington. Studies by Mr. Wm. Morris and Robert Allen Ward,¹ of the Pacific Northwest Forest Experiment Station, were discussed briefly. These have added

YELLOW APPEARANCE OF DISTANT SNOW FIELDS

By W. E. KNOWLES MIDDLETON, Meteorological Office, Toronto

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"*Luft-Farben*," by A. Heim, published at Zurich in 1912, is a delightful little book almost unknown on this side of the Atlantic. Dr. Heim, a geologist by profession, was a very careful observer of atmospheric colours, and a competent painter besides; he illustrated his book with a number of charming water-colours, of which the most noteworthy form a series, showing the same mountain scene by day and at various stages of the twilight.

Dr. Heim observed that in the clear Alpine air, while distant woods appeared intensely blue, distant snow fields looked yellow. He gave the correct explanation of the phenomenon, namely that the air scattered out of the line of sight more of the short wavelength part of the white light from the snow field.

In private correspondence, Dr. H. Tschierske has pointed out that this is in apparent conflict with some recent theoretical results published by the writer¹. Investigating the apparent

much to our knowledge of the behavior of thunderstorms and the forecasting of them in the Northwest.

Fire-danger instruments developed by the Pacific Northwest Forest Experiment Station were explained by Mr. Morris. Improvements in design of the anemometer consist of a new type bearing and gear which are inclosed instead of exposed as in the original model, thus making the instrument more accurate and durable. —*Author's abstract, Nov. 24, 1936.*

¹Cf: *Annual Fire-Weather Reports For State of Oregon; Reports of Pacific Northwest For Exper. Sta.; and Mo. Wea. Rev.*, Oct., 1934, pp. 366-72, June, 1935, pp. 183-184.

colour of a white object standing vertically under a cloudy sky, it was shown that the sum of the light coming from the object and the light scattered into the observer's eyes by the air between him and the object produced a blue colour, the blue, however, being extremely pale.

The assumption of a cloudy sky was made only for the purpose of obtaining numerical results. It is obvious that if the white object is in sunshine, the proportion of light coming from it will be much larger; and a rough calculation shows that a pale yellow or orange may well result.

The writer would very much like to hear from members of the American Meteorological Society who live in mountainous regions and have observed this phenomenon, especially if it has been observed near mid-day. When the sun is low, of course, yellowish and reddish colours are the rule rather than the exception, and need not be considered here. Especially welcome would be observations on the change of colour when the sky, which has been quite clear, rapidly becomes covered with clouds.

¹Middleton, W. E. K., "On the colours of distant objects and the visual range of coloured objects," *Trans. Roy. Soc. Canada*, Sec. III, Vol. 29, pp. 127-154, 1936.