

nual Report of the U. S. Geological Survey, references are made to Millen, Green's Cut, Waycross and Doctortown as being localities where the Lafayette might be seen. The beds at the localities mentioned can undoubtedly be correlated with the Altamaha.

OTTO VEATCH

GEOLOGICAL SURVEY OF GEORGIA

CURRENT NOTES ON METEOROLOGY AND CLIMATOLOGY

LIGHTNING VAGARIES

IN the *Quarterly Journal of the Royal Meteorological Society* for October, 1907, there is an account, given by Professor A. Herschel, of a remarkable excavation made by lightning in peat earth in a moorland district of Northumberland. A large hole, four or five feet in diameter, was found on a flat part of the moor, radiating from which there were six or seven furrows, and pieces of turf were thrown in various directions. The largest turf, about three feet in diameter and one foot thick, was lying 26 yards away, and other pieces were lying around within 20 yards of the hole. On excavating the hole it was found that a number of small holes radiated to various depths. Col. J. E. Capper gives an account of a captive balloon being struck by lightning.

CLOUD CLASSIFICATION

PROFESSOR WILLIS I. MILHAM, of Williams College, has published a useful pamphlet on *Cloud Classification*, intended for the use of his students in meteorology, as a guide in their practical work on cloud classification and origin (8vo, pp. 9). This pamphlet considers very briefly (1) the early history, (2) the international system, (3) the causes of clouds and (4) the thirteen cloud forms. The discrepancy between the usual ten forms of the International Classification and the thirteen here referred to comes from the fact that Professor Milham counts fracto-stratus, fracto-cumulus and fracto-nimbus each as one form. Together with the description of the individual types, reference is made to the methods of formation.

METEOROLOGICAL FORMULÆ AND TABLES

PROFESSOR PAUL SCHREIBER, director of the Meteorological Service of Saxony, publishes a series of "Formeln und Tabellen" as a *Vorarbeit* to his Annual Report for 1903 (Dresden, 1907, fol.). These formulæ and tables deal chiefly with the thermodynamics of the atmosphere, and are designed for practical use in meteorology. The formulæ are given at the beginning. A discussion on their use follows, and a series of diagrams at the end illustrates the various physical conditions and processes concerned.

A "STEP" ANEMOMETER

AT a recent meeting of the Royal Meteorological Society (*Quart. Journ. Roy. Met. Soc.*, October, 1907) Mr. Walter Child exhibited and described his "step" anemometer, which he has designed to obviate the "sheltering error." This instrument is a Robinson anemometer, with the cups so placed on the spindle that the arms are in different horizontal planes. Thus one cup does not shelter another, and the system comes to rest more rapidly when the wind drops.

R. DEC. WARD

THE MEETING OF THE INTERNATIONAL SEISMOLOGICAL ASSOCIATION

THE first general assembly of the International Seismological Association since its formal inauguration in 1905, and the second meeting of its permanent commission, were held at the Hague from September 21-26, last.

Twenty-two states are now members of the association, England, Austria and Canada having joined since last year. Although France has not formally joined, preliminary steps have been taken for this purpose and it is hoped that she will soon be a regular member. Chile, the Congo, Norway, Portugal and Roumania are the only countries, members of the association, which were not represented at the meeting. There were about fifty persons present either as delegates or as invited guests, and this included a majority of the leading seismologists of the world. Professor van der Stok and his assistants made all the arrange-