

A HOME-MADE OBSERVATORY

When Morton High School in Cicero offered its first course in meteorology, I enrolled as a student of the subject and during that course of study received the fundamental basis upon which I intend to build my understanding of this science.

In an attempt to study the functions of the atmosphere, I decided to establish an observatory. However, the price of meteorological instruments was beyond my means. I resorted, therefore, to home-made instruments.

My first acquisition was a mercurial barometer which my brother skillfully constructed. The barometer is mounted within a glass case. Its readings are very nearly the same as those at the weather stations in Chicago.

Next I made a kiosk, which is a trifle larger than an airways shelter. My instrument shelter now houses a sling psychrometer, which I made from two Fahrenheit mercurial thermometers, and a Six's type maximum-minimum thermometer. These thermometers are the only meteorological instruments which I have purchased.

An eight-inch rain gauge, identical

TWO GOOD BOOKS ON WEATHER

Sound books on meteorology, the science of weather, are deplorably scarce, and that statement applies both to textbooks and to books addressed to the general reader. Moreover, of works that can be recommended the great majority are by European authors and are not particularly well adapted to the requirements of North Americans. Hence, it is worth while to mention two brief treatises, written on this side of the Atlantic, that are excellent introductions to a knowledge of this science, though they were not intended as such and very few students of meteorology would ever think of consulting them.

One of these is published by the United States Weather Bureau (but sold by the Superintendent of Documents, in Washington, at 25 cents a copy) as Circular M, "Instructions to

to that manufactured by Henry J. Green, was constructed in the metal shop of the Morton High School.

For determining wind direction and velocity, I use a home-made wind vane and an anemometer. The wind vane has contacts for eight directions, which are electrically indicated on a panel inside the house. I compute the velocity of the wind from an indicator connected with the anemometer.

From these instruments I enter observations on a form similar to 1083 of the Weather Bureau.

Besides, between June 22nd and September 19th, 1932, I made daily trips to the Airport Observatory in Chicago, a distance of approximately five and one-half miles from our home. There I secured map signals of weather reports over the United States, Canada, and Alaska, from which I drew weather maps and planned my own forecasts.

This work is of immense interest to me, but I now limit myself to observations of the weather only, as I have college study to attend to.—*George D. Lukes.*

Marine Meteorological Observers." Though a certain part of it is mainly of interest to sailors, it contains much information of more general interest about weather instruments, clouds, optical phenomena of the atmosphere, etc., some useful tables, a bibliography, and, last but not least, a fairly comprehensive glossary of meteorological terms (a large proportion of which are loosely or erroneously defined in general dictionaries).

The other work is a bigger one, issued by the Meteorological Office in Toronto (but printed in Ottawa), entitled "Instructions to Observers in the Meteorological Service of Canada." It combines a good elementary treatise on weather phenomena with much detailed information about weather instruments and their use.—*C. F. Talman, in Why the Weather? (S. S.)*