

vations upon a simple but uniform plan, noting all the signs afforded by nature. The blights which affect vegetation, such as the mildew and smut of wheat; the fungus, which attacks the vine; the fly, which destroys the hop and the turnip, may all be dependent upon atmospheric conditions, which attentive observations may detect.

It will now be necessary to say a few words about

#### METEOROLOGICAL INSTRUMENTS, AND HOW TO USE THEM.

The instruments absolutely required for prognosticating the weather, are few in number, and such as need very little practice to secure accurate and useful information. Meteorological investigators must be cautioned against the so-called "cheap" instruments paraded in the shops, as utterly useless and likely to disgust them with the science. It is certain that no one need be without good, reliable instruments on account of the cost. The best instrument-makers in England seem all anxious to meet the views of those who wish to devote a portion of their time to the development of meteorology; and one of them, Mr. Pastorelli, of Piccadilly, London, has designed a complete set of instruments at a very moderate cost, the barometer having been examined by Mr. Glaisher, of the Greenwich Observatory, the well-known meteorological authority, and certified to read correctly to  $\cdot 01$  or  $\cdot 02$  with the standard, and the remainder of the instruments verified at the Observatory of Greenwich.

A set of the out-of-door instruments, fixed on a neat stand, would form an ornament to any lawn or grass plot near the house, and one of our daughters or sons might undertake the daily inspection of the instruments and keep the register of the weather. Fathers of families have thus the means of introducing into their homes a new feature of interest, and even of utility; for there would thus be in every family a reliable weather-prophet, whose timely advice might prevent exposure to many a drenching, and to the damage and health of garments. Excursions would not, if the Barometer and Hygrometer were consulted, be undertaken in the utter uncertainty as to the weather that is likely to attend them. Besides, it is no small satisfaction to be able to know when we are likely to need umbrellas, and when we may leave the encumbrance at home although the sky be overcast and cloudy. This degree of certainty is within the reach of all of us, with the aid of the requisite instruments.

In all public schools such a set of instruments should form part