

feet from the ground, and have occupied the same position for some years, being placed free from radiation, and carefully shaded from the sun and rain.

The *Psychrometer*, consists of the dry and wet bulb thermometers, the scales of which are coincident, and have been carefully read together. There is also a Saussures' hygrometer. In winter the wet muslin is supplanted by a thin covering of ice which requires frequent renewal.

For *solar radiation* a maximum Rutherford's thermometer is used, with the bulb kept blackened with Indian ink; the tube is shaded by a piece of glass blackened also with Indian ink, which prevents the index from adhering to either the tube or the mercury, as is often the case when not shaded.

*Terrestrial radiation*, is indicated by a spirit thermometer of Rutherford, which is placed in the focus of a parabolic mirror, 6 inches in diameter and of 100 inches focus.

*Drosometer* or dew measurer.—One is of copper, like a funnel, the inside of which has been exposed to the flame of a lamp and has been coated with lamp black; the other is a shallow tin dish painted black and ten inches in diameter.

*Rain-gage*.—The reservoir is thirteen inches in diameter, and is placed 20 feet above the soil. It is self-registering, and is attached to the anemometer and shews the beginning and ending of the rain and the amount of precipitation in inches on the surface.

The *Snow-gage* presents 200 square inches of surface, and is placed in an open space. The surface of the snow requires to be lightly levelled, before taking the depth, which is recorded in inches. A tin tube, 3 inches in diameter and 10 inches long, is used for obtaining snow for the purpose of reducing the amount to the relative amount of water. The tin tube fits in another vessel of tin of the same diameter, and the snow is easily reduced and measured.

The *Evaporator* exposes a surface of 100 inches; and is carefully shaded from sun and rain. It is made of zinc and a glass scale, graduated in inches and 10ths, is well secured in front of it, a strip of the metal being removed the glass scale supplies its place, so that the amount evaporated can be easily read off. Its place is supplied in winter by a pair of scales, upon one of which is placed a disc of ice, and the amount of evaporation from the surface is estimated by being very accurately weighed.

The *Ozonometers* are Schonbien's and Moffat's. The solution