

4. Lloyd's Balance Magnetometer, for the changes in the vertical component.

In addition to the above instruments, the indications of which are read seven times each day, there are also magnetic instruments connected with photographic apparatus for recording continuously the changes in the declination, and the horizontal and vertical components of the magnetic force.

The absolute values of the magnetic elements are determined once in each month, by a series of observations occupying five consecutive days. The observations for the dip are taken in a detached shed, and those for declination and intensity in the two rooms already mentioned as appropriated for those purposes.

Magnetism is one of the sciences whose progress the Observatory is designed to promote; Meteorology is the other.

The meteorological elements recorded are as follows:

1. The temperature of the air.
2. The total atmospheric pressure shown by the barometer.
3. The elastic force of aqueous vapor.
4. The relative humidity.
5. The temperature of the dew point.
6. The direction and velocity of the wind.

For observations of 1, 2, 3, 4, and 6, the ordinary hours are six A. M., eight A. M., two P. M., four P. M., ten P. M., and midnight. At these hours a record is also made of the general appearance of the sky, including the form, distri-