

canopy that nightly unveils its glory to our admiring eyes. He is now very near the twins, Castor and Pollux, between them and Procyon on the South, while Orion and Sirius precede him.

SATURN is brighter than he has been for fifteen years. He is near the point where his rings will be most widely open, and astronomers are making the most of their opportunity. He may be seen about half-way between the Pleiades and Aldebaran.

VENUS is easily recognized by her conspicuous brilliancy in the Western sky, where she reigns supreme. She is increasing in radiance. On the 29th she sets about 9 o'clock.

THEORY OF DEW.

Prof Levi Stockbridge's 'new theory' of dew seems to stand the test of time. It will be remembered that about four years ago he made a large number of investigations into the temperature of the soil and air, finding in almost every instance that the soil was warmer than the air at nightfall. The moisture constantly being driven off by the soil is condensed at night by the cooler air, and so forms dew. This is contrary to the old ideas that dew "falls" from the air, or is the moisture of the air condensed by the "cold damp earth," about which the poet sings. The agricultural editor of the New York Times recently attacked this new theory of dew, and was most effectually answered by the professor's son, Mr. H. E. Stockbridge, who is now studying in Germany. There he has made a series of experiments in different climates and at varying elevations, which confirm the Stockbridge theory of dew in the most emphatic manner. The theory is now accepted by the leading scientists and agriculturists of Europe.—*New England Homestead.*

Botanical Department.

Conducted by Prof. A. H. McKAY.

AMONG THE CRYPTOGAMS.

NO. III.

GENERAL CHARACTER OF LICHENS.

"Not alone in trees and flowers
The spirit bright of beauty dwells;
And not alone in lofty towers
The mighty hand of God is seen:
But more triumphant still in things men
count as mean."

This is true of all the lower orders of vegetation, as well as of the Lichens of which we are now going to speak more generally. We selected the *Usnea* and the *Sticta*—*Sticta pulmonaria*—the "Tree Lungwort," because of their abundance on the trees of our woods, which are the only fields accessible for botanical exploration during the present weather. We thus gave a chance for the commencement of easy practical work to our young scientific amateurs. After some little time we shall return to point out some other interesting specimens. If our young people, who unfortunately cannot take a walk to the woods at present, will only look at the logs piled up near the house for firewood, they will find many of them covered with the most beautiful lichens. The *sticta* will be noticed on the hardwood logs, with some mosses, but more generally other lichens. Some of these spread in circular patches of lovely gray and white and black, the edges being scalloped, wavy, or star shaped. Others have a wide range of configuration, sometimes strikingly original and suggestive, and at other times quite commonplace. They are sometimes loosely attached, and their curling margins rise up from the bark on which they grow; at other times we find species spread out quite flat and attached like a crust. And these crusts are sometimes exactly like stains, yet