

of the slightest description. When the heavens are totally obscured, radiation is stopped altogether, and consequently no dew is deposited; also if wind prevails no dew is found. The reason of this is, that the cold stratum in contact with the ground is constantly being replaced and driven away by others of a higher temperature.

As may be imagined, the moister the air is, the more abundant will be the dews; thus in arid deserts, notwithstanding the intensity of nocturnal radiation, there is no precipitation of moisture. Therefore, nights that give a large amount of dew in our climate may be taken as an indication of approaching wet, since they show that the atmosphere is abundantly supplied with aqueous vapour. In frosty weather the dew becomes frozen, and the name white frost is applied to such an appearance. The products of the kitchen are frequently killed when this takes place, and it becomes advisable to protect plants as much as possible against such a calamity, by covering them with straw or other light material, so as to oppose the process of radiation, and prevent excessive cooling. Trees offer a very good protection to vegetables in this manner. The ancient alchemists ascribed very peculiar properties to dew, and used to collect it carefully, believing that it came direct from the stars, and contained gold! Gold it does indirectly give, by the benefit that is conferred by it upon vegetation. On analyzing the water so obtained, it is found to be of great purity, but containing a little more carbonic acid than ordinary rain-water.

Honey-white or *miller* are terms sometimes applied to certain cases in which sugary secretions are found with the dew upon the leaves of plants; but these foreign substances have been shown to be due to certain insects which, at times, are found with it, and not, as was for a long time believed, to any property which descended with the dew. After dew has rested on the plant, it becomes charged with organic juices, and decomposition taking place produces a kind of sugary substance. This, and the foregoing remark, explains the cause of the occasional peculiarities that we have mentioned.

Dews are much more abundant in the open country than they are in cities. The reason of this is, that in the latter situation the houses conceal a portion of the sky, and, consequently, objects do not present so much radiating surface to the heavens. Dr. Wells demonstrated this by experiment on a piece of wool. He took two pieces, of the same size and quantity, and exposed them in the open air all night; but the one he enclosed in a cylinder, open at the top. On examining these locks of wool, the next morning, the one that had the cylinder round it was found to have much less dew deposited upon it than that which was quite free. The reason of this was that the cylinder prevented the wool placed in it from subtending an equally large portion of the sky.

The quantity of dew deposited each night is sometimes measured. The most simple and

accurate way to do this is to adopt the plan pursued by Dr. Wells, viz., to expose to the open air spherical masses of wool, of similar dimensions, whose weights are accurately known, and then to weigh them again when covered with dew. The difference in the weight before and after exposure will then be the weight of the water that the wool has acquired during the night, in the shape of dew.

It was believed by the ancient philosophers that dew was only deposited in the evening and in the morning; but modern investigation has proved this to be a fallacy, and has shown that it is deposited equally throughout the entire night.

Agricultural Intelligence.

MEETING OF THE BOARD OF AGRICULTURE.

The Board met at the Agricultural Hall, Toronto, on Wednesday, Feb. 4th, 1863, at 2 p.m.

Present:—Messrs. E. W. Thomson, D. Christie, R. L. Denison, G. Alexander, Wm. Ferguson, A. A. Burnham, Professor Zuckland, Dr. Beatty, President of the Board of Arts.

It was moved by Hon. Mr. Christie, seconded by Hon. Mr. Alexander, That E. W. Thomson, Esq., be President of the Board for the ensuing year,—Carried.

Moved by Mr. Burnham, seconded by Mr. Denison, That Hon. Mr. Christie be Vice-President for the ensuing year,—Carried.

The following communications were then submitted by the Secretary:—

From Mr. Prince, Chief of Police, Toronto, presenting a bill for the payment of \$20 for the services of Constables in keeping the peace on the grounds during the exhibition of last autumn, and also for the payment of \$60 for meals furnished to such men on the grounds.

From the office of the Canada Company, acknowledging the receipt of samples of different kinds of prize grain from the late exhibition for the purpose of sending to their offices in England.

From the South Grenville, East Brant County, and Onondaga Township Agricultural Societies, all in reference to the proportions in which the Government Grant should be divided between County and Township Societies, a misunderstanding having arisen on this subject in the above two Counties, in each of which there is only one Township Society. The Secretary stated that he had replied non-officially to each of these societies, pointing out the provision of the statute that three-fifths of the public grant is subject to division among the Township Societies in each County, in proportion to the amount of their subscriptions deposited with the County Society, provided that no township society should be entitled to receive out of the Government grant more than three times the