about 50 feet by 300 feet in extent, and adjoins the Dominion Observatory. It was started in 1887 on what was then a cultivated field. The trees were planted mostly three feet apart each way, but have been thinned out considerably since, as individuals fell behind in the struggle for light. Those which remain are now over thirty feet in average height, and their tops unite to form a continuous canopy overhead, through which little direct light filters. Natural pruning has kept the trunks comparatively free of large branches, and about five years ago the lower bra, ches were all trimmed off. On the sides of the plantation an untrimmed border of more densely branching Norway Spruce shuts out the light from that quarter and acts as a barrier to the sod. In only one place within, on an area of a few square yards, is there sufficient light to admit of the formation of a sod; otherwise the conditions are uniformly those of a dense pine forest. The floor has a moist covering of several inches of needles, the soil beneath being a light sandy loam with some gravel.

To casual observation, vegetation was almost wanting in this area, plants occurring for the most part as isolated individuals. Nevertheless as the result of four careful examinations in as many months, forty-five species of fern and flowering plants were recorded, as well as several mushrooms and other fungi. Many of these were merely seedlings or immature plants, but twenty-four were found to be flowering, and in most cases producing seed. Specimens of the latter were shown, and a tabulated list of all the plants was distributed. It showed that there were represented twenty-five families and thirty-seven genera, no family having more than three representatives, except the Compositæ, which had twelve. Twenty-two were indigenous, seven were annuals, three winter annuals, five biennials and thirty perennials.

A noteworthy fact about the plants recorded is that almost all are field, not forest plants; and practically none had the appearance of being well established in their present home. This led to the deduction that vegetation had been absent entirely until recently; probably until the trimming up of the trees five years ago admitted more light and circulating air to the floor of the plantation. An older forest society might be expected to contain a larger proportion of indigenous and true forest plants. Assuming it to be true that this flora is of recent development, we may ask, how has it arisen? Plant migration and adaptability to environment are two factors which would operate together in determining its composition. The former, we may suppose, has been continuously at work; but only when the environment became such that it was tolerable for certain of the plants brought into it, could there be any result. In illus-

1911]