

pod consists of two valves containing seeds. An apple, in the eye of the botanist, is like a pea-pod. The pod consists of two valves, the apple contains five double valves in which the seed is found.

When a tree is well fed there is a large production of starch and sugar more than the seeds can use ; these materials go to the production of the fleshy part of the fruit, which is large in proportion to the amount of these substances supplied.

Speaking of the production of new varieties of fruit from seed, the speaker thought more experiments should be made in this direction. If one variety better than any now known were to be obtained, the trouble would be amply repaid even though 100 new varieties proved worthless. In one respect agriculture could scarcely be said to be advancing. The grains now produced could not be said to be superior, if they were indeed equal, to those produced in ancient times. It seems to require the ablest effort of the agriculturist to keep to what we have attained.

The Professor then spoke of the diseases which affect the life and health of plants. The most destructive organisms are found among the fungi. Vine mildew for instance is simply a fungus. In illustration of the nature of fungi the speaker referred to the spunk found on decaying birch trees, which begins by minute threads running through the tissue of the tree living on it, and causing the woody matter to grow thin and to decay. As the growth of this fungus proceeds, seeds (spores) are formed which appear on the outside of the tree. All plant diseases caused by fungi (piltze) proceed in the same manner growing from spores or seeds. These are of two classes distinguished as growing and resting spores, the former grow at once, the latter rest in the soil or elsewhere perhaps for years. The potato rot is a disease caused by a fungus, so is the black spot that is ruining the once popular Bishop Pippin apple. The only remedy seems to be to destroy all such fungi whenever practicable.

In concluding PROFESSOR LAWSON again expressed his pleasure at meeting with the Association ; hoped to meet with them in the future, and would be glad to come and talk to them, if possible, at any time the Association considered it desirable.

Questions on various subjects connected with fruit growing were asked by various members and answered by PROF. LAWSON. In answer to one asked by Secretary STARR, he stated that the agency