

Forests and Floods.

It has been an interesting topic of instruction on arbor days in schools and at forestry conventions that the cutting down of forests has led to a decrease in the rainfall and an increase in the strength and frequency of floods during rainy seasons. Mr. Willis L. Moore, chief of the Weather Bureau, at Washington, now comes forward with the remarkable statement that forests have no effect either upon the amount of rainfall or upon the severity of floods. He seems to reach this conclusion by a variety of statistics based upon facts observed both in the United States and Europe. He thinks that the true cause of floods in main streams and tributaries is the continuance of heavy rain after the ground has everywhere been saturated, or when heavy warm rains come on the top of deep snows; that the cultivated soil outside of forests, when plowed and broken down to a depth of eight inches, acts as a sponge to retain water quite as well as does the ordinary humus of a forest; that our rainfall is dependent on such inexhaustible and permanent sources at the aqueous vapors raised from the vast waters to the south and southeast of our continent and cannot be appreciably affected by the planting or cutting away of forests; and that forests should be preserved for themselves alone or not at all.

Those who are interested should read Mr. Moore's pamphlet, published at the Government Printing Office, Washington. Those who have taught and argued the opposite may protest vehemently against his conclusions but he seems to have the weight of authority in his favor.

The Fruits of Pluck.

In looking over the splendid exhibit of the N. B. Fruit Growers' Association, recently shown at St. John, one was struck with the fine color and apparently good quality of the fruit; and also with the character and intelligence impressed on the faces of the men and women who in the face of many obstacles had worked with brain and hand to reach this quality of perfection. One was also impressed with the generous assistance and encouragement given by instructors and orchardists from Nova Scotia and Ontario in the lectures and talks given before the Association. This hearty co-operation and helpfulness is the prevailing spirit of this age, and it is a good spirit.

Speaking of obstacles to successful fruit growing President C. N. Vroom said that a man who is not prepared to meet some set back had better seriously consider if some other vocation in life would not suit him better, a remark that might be taken to heart by people in other walks of life. Referring to some difficulties of the fruit growers he said:

It would seem sometimes that all the forces of nature, animate and inanimate, were arrayed against us. The frost and the sun combine to take the life from the feeding roots of the tree, to strip the bark from the trunk or to trim back unmercifully the season's growth of wood; the cruel wind takes off branches, destroys the blossoms, or denudes the tree of fruit.

The fungus attacks both tree and fruit, the ground mouse girdles, the rabbit cuts, while legions of insects seem to prefer the apple to any other tree that grows. The borer starts at the ground and riddles the life out of the tree, the bark louse sucks it out higher up, the tent caterpillar, the red hump, the fall web worm, the leaf roller, the green aphid, the blister mite, and the brown tail show their good taste by exhibiting a decided preference for the apple. The codling moth, and the apple maggot are after the fruit and if they leave any junior humanity steps in to fill its pockets and is often supplemented by senior humanity which fills its meal bags.

The fruit grower of today must have pluck, perseverance and determination in an eminent degree.

November Skies.

November is the month to begin the study of the heavens. Low down in the east about half past eight in the evening Orion may be seen just above the horizon. Above may be seen the V-shaped Hyades with the bright red star Betelgeuse, and still farther up the Pleiades, which represent, in classic mythology, the seven daughters of Atlas. Only six can be seen with the naked eye, the seventh, Merope, concealing herself for shame because she married a mortal! Above the Pleiades is Aries or the Ram, the first of the twelve signs of the Zodiac, which the sun enters on the vernal equinox, about the 20th of March. The large yellow planet Saturn, is now in Aries and is brighter than any star of that group. Farther up is Andromeda distinguished easily by its great nebula, visible to the naked eye, one of the most remarkable sights in the heavens in the autumn and winter skies. Directly above and close to the Zenith is the great square of Pegasus, its three brightest stars with the brightest star in Andromeda forming an extensive square. Pegasus was the winged horse in fable, a blow of whose hoof is said to have opened the