to the tree. But let a change come; let the atmosphere bestir itself, and the spoliation of sap, already commenced, is immeditely arrested, and health is secured to the tree. When even the spoliation of sap has not so far advanced as to have become an active poison to the trees, the poison may concentrate in smaller or larger amounts, which would account for the occurring of dead spots, smaller or larger, locating themselves here and there about the trees. This reasoning might be extended to account for the gradual destruction of many trees after first being affected, and why some sections are so subject to it; while others are seldom if ever visted by it; but I will not pursue if further at present, only adding another theory to its prevention to the numerous ones gone before, and not as my own, but as that of another. It is, that plenty of charcoal mixed in the soil about the roots of fruit trees, has a very great influence to counteract the tendency of blight, or to prevent it. — *Germantown Telegraph.*

Fir Trees and Rainfall.

The influence of the presence or absence of luxuriantly leafy woods and forests on the rainfall of a country has long been recognised. We now read in Biedermann's Centralblatt of some experiments that have been undertaken to to ascertain to what extent the same effect may be produced by firs and pines. Two observations were established for purposes of comparison the one over a clump of pinus sylvestris some 40 feet high, and the other over a bare sandy plain 300 metres (328 yards) distant from the wood, and at the same height above the level of the ground. Twelve months' observations showed that of the total rainfall within that period, 10 per cent. more fell over the trees than over the bare sand 300 metres distant from them. This result is regarded as all the more surprising since experiments of a precisely similar nature in the case of oak and beech woods had given an excess of 5 per cent. only in favor of the wooded site of observation. Further, the mean state of saturation of the air over the wood was found to be 10 per cent. higher than of that over the bare expanse of sand, the former holding much more water in suspension than the latter. The ground, too, under the trees retained far more water than the exposed earth, the evaporation from the surface, thanks to its shade of trees and moss, being only one-sixth of that outside their friendly shelter. All these points forcibly suggest the utility of planting pine forests in sandy and chalky plains, which must otherwise remain unproductive for want of water.

In times of heavy rainfall, such as we have recently experienced, their value can scarcely be over estimated, absorbing, as they do, much water, and retarding the escape of more, which, but for such checks must inevitably have assumed the form of devasting inundations.

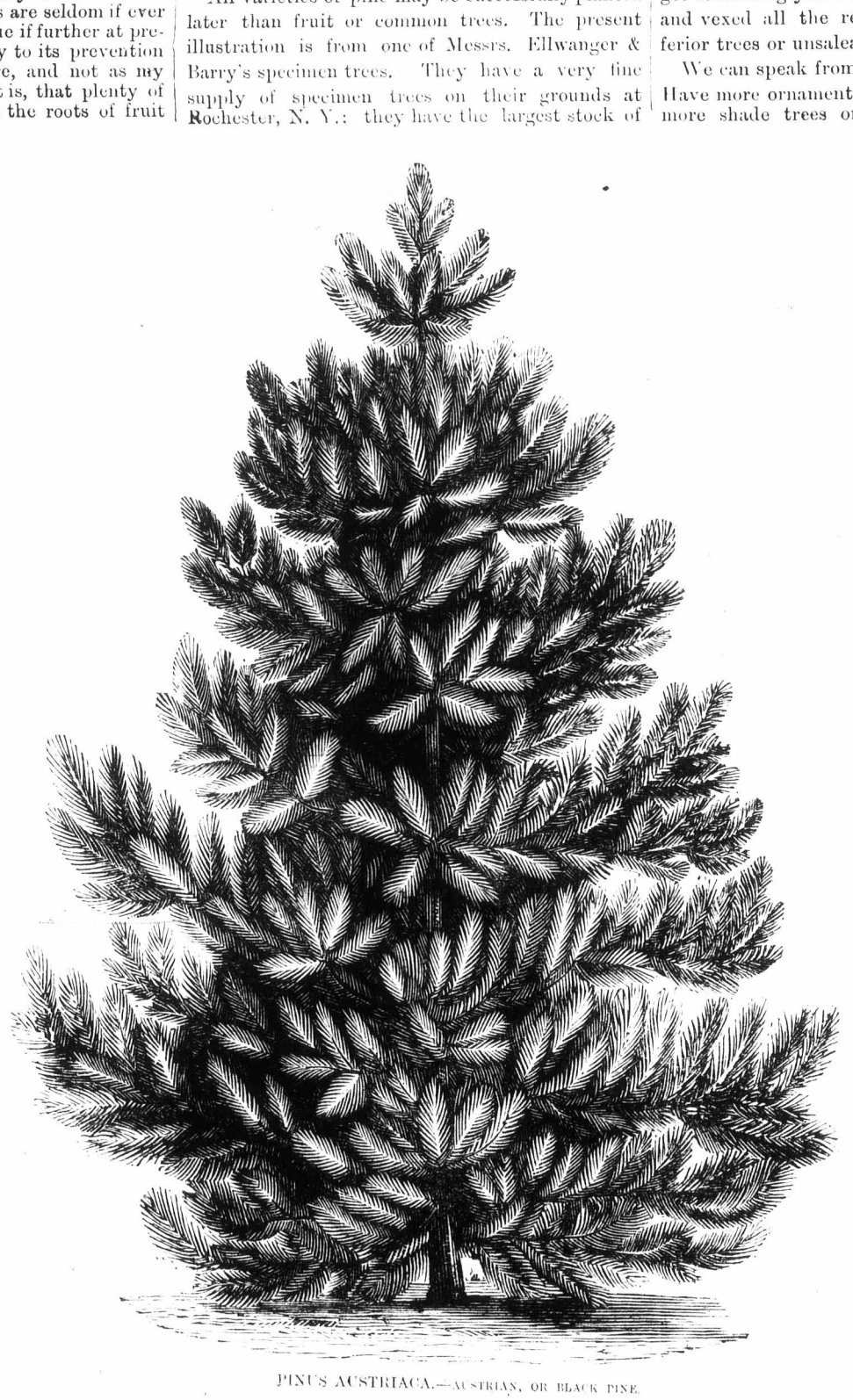
We quote the above from the *Farmer*, published in London, England. The facts deserve the consideration of all farmers and others interested in our national prosperity.

ORCHARD DRAINS. — Cementing over the joints of the tile with water-lime and sand will prevent clogging from the roots of trees.

Pinus Austriaca—The Austrian Pine.

This is one of the most ornamental of this class of trees that will thrive in Canada. The long, thick, dark-green foliage makes this tree sought after by every one who plants an ornamental ground. The contrast of the rich appearance of the foliage, when growing near the other varieties of pine, is so pleasing that every one who sees them is sure to admire them.

All varieties of pine may be successfully planted later than fruit or common trees. The present illustration is from one of Messrs. Ellwanger & Barry's specimen trees. They have a very fine supply of specimen trees on their grounds at Rochester, N. Y.: they have the largest stock of trees we have seen. When you wish for trees that are not procurable in Canada—and it is a well known fact that there are not near enough trees yet raised in Canada to supply our requirements — the best way to procure your stock, that is, if you want trees that you can depend on, is to send your order direct to the most reliable nurserymen. We know of no better establishments than those of Ellwanger & Barry Rochester, N. Y.: G. Leslie & Sons, Toronto, and Pontey & Taylor, London. There are many large wholesale nurseries in the States that raise for such men as Ellwanger & Barry and for our Canadian trade. There are dealers who have but little responsibility, whose warranty is not worth the paper it is written upon, who are continually roving through our country and taking hundreds of thousands of dollars a year out of the farmers' pockets that they should not have. There is always a lot of cheap surplus stock of some varieties to be worked off in every nursery, and such stock is too often palmed off on farmers. It is far better to pay a fair price and get something you want than to be disappointed and vexed all the rest of your life by having inferior trees or unsaleable fruit.



PINUS AUSTRIACA.—AUSTRIAN, OR BLACK PINE.

We can speak from experience about this plant. Have more ornamental trees about your dwelling, more shade trees on your farm, and more fruit trees, if you can take care of them and of the fruit. Spend one day, before the ground is dry enough to begin your spring work, in planting maple and other trees on your farm. Cut off a good part of the tops; they will grow the better for it.

PRIMROSES. The Primrose likes a shady border. Some of the finest samples we have ever seen of the double varieties were on the foot of 18-inch spaces, so common between wall trees and alleys. Here the white, the lilac, the yellow, and the purple, or champagne, as it was then called, were in all their glory, and we never saw them so fine nor so many of the purple or yellow or primrose double variety before nor since. What is rather unexpected by many is that primroses in such cool quarters flower as early as those in warmer and drier sites. We have also noticed the same thing in regard to the earlier varieties of the common single primrose. The purple and the white are far earlier than the yellow strains, and the former on north and east borders are as early this year as the same sorts on southern and western ones. The purple is, however, considerably earlier in vases raised about four feet from the ground than on the flat, thus giving fresh proof that the coldest stratum of air is found on the surface, or within a few inches of it.

VIOLA PEDATA (Bird's-foot Violet). Perhaps we would be more willing to decorate our borders with some of our native flowers — some, even, which we exterminate from our grounds as common weeds —if we realized how highly prized many of them are in Europe. The Viola Pedata, for instance, is in great demand in England, while in this country its beauty is rarely appreciated. It is one of the finest of our violets, with handsome flowers, an inch across, in color ranging through all the shades of lavender and violet. The leaves are deeply divided, like the foot of a bird, and the plant very dwarf and compact in habit. It is a perennial, and found growing wild in masses in the woods and dry soils of our Northern States. It blossoms about the beginning of June, at which time the flowers may be picked by the bushel if the locality is favorable to their growth. It may, however, be easily cultivated in our flower gardens, if planted in a dry sandy soil, and in the shade.—*The Flower Garden.*