

cambium, we shall soon see the growth of a vegetable tumour or excrescence caused by the checking and accumulation of the ingredients which would otherwise go to form the parts of the trees, as above stated. That these facts exist there is no doubt, but the wherefore is not so apparent; the cause may be said to be partly chemical, and partly mechanical; but after all we must fall back upon the first principles and mystery, of life as no other satisfactory explanation can be given for the phenomenon.

What we may learn from the foregoing is that we must be careful that young trees in our charge should not be wounded or bruised at the time the sap is ascending, lest the vital fluid should be wasted, and that after its elaboration has been completed we may prune them with confidence that the healing process will be immediate and perfect because the ingredients are on hand, and the conditions proper to effect it.

The word cambium is derived from the Latin verb *cambio* to exchange and is very appropriate because, as has been stated, the moisture extracted from the earth for the sustenance of the tree becomes sap, then cambium, then cellular tissue, and finally the bulk of the whole with its organs of reproduction.

Thus, exchange, assimilation, and growth are gradually and surely progressing. As the season will soon be upon us when this process will commence another annual round, its study should be interesting, and although there is a mystery in all the works of Nature which we cannot fully explain, we can but exclaim with Addison:

“The hand that made them is Divine.”

GEO. MOORE.

REPLENISHING THE FOREST.

The *Philadelphia Ledger* calls attention to the result the great forest fires in Colorado may have upon the necessity for tree planting to replace those destroyed; because it is feared that the loss of the timber may interfere with the water supply. But it appears to me that there is another reason why young trees should be planted as the old ones disappear, not only by fire, but by the woodmen's axe. There are vast districts of mountainous land which are unsuitable for agricultural purposes, but are admirably adapted for the growth of forest trees; from these mountain-

sides the timber is being removed and they are left barren or covered with useless scrub or almost useless wood. Although the woodlands of Canada are vast in extent they are not inexhaustible, and the question arises: have the present generation a right to deforest the land by wholesale, without making provision to recoup it for those who are to succeed them? In an ancient corporation in England, Sutton Coldfield, in Warwickshire, there is a large domain which belongs to the Burgesses, given to the town in the reign of King John; at the time the donation was made, the land was covered with timber, of which the *wardens* (officers appointed to conduct the business of the estate) were allowed to cut a certain quantity annually with the proviso, that for every thousand feet of timber sold, a certain number of young trees should be planted (there were some wise men in King John's day). The consequence of this plan is that during the centuries which have passed, the woodlands have not been depleted but have been, and are now, a continual source of revenue to the place. Had some of our ancestors here planted some young trees where they cut away they old ones, they would now have been, or soon would be, bringing in revenue to the present and rising generation, and it is for these that a man should work and scheme, not merely for himself alone in his little span of life.

A COMBINED POULTRY AND ANIMAL SHOW.

The exhibit of the Ontario Poultry Association held at the Pavillon, in the Horticultural Gardens, Toronto, last week, attracted widespread interest and attention. Both the American Poultry Association and the Toronto Poultry, Pigeon and Pet-Stock Association met at the same time, making the most complete poultry and pet animal show ever held in Canada. The management took unusual care in their arrangements for the live stock, and officially appointed the well-known firm Pickhardt-Renfrew Co., Limited, of Stouffville, Ont., to disinfect the huge building with their Persiatic Hen House Spray and Poultry Powder. This official recognition of the high qualities of this sterling preparation is an endorsement not to be lightly overlooked by farmers and fanciers. It acts both as a disinfectant and insecticide destroying vermin and purifying the atmosphere of disease germ and gases, consequent upon the close confinement of fowls or animals. Can be purchased at all dealers.