

Nature's Diary.

By A. B. Klugh, M. A.



Twig of soft maple coated with ice.

A large part of Ontario has recently passed through the worst ice-storm which it has ever experienced, a storm which will leave its marks for many years. The district from Belleville east to Cornwall was particularly hard hit. All through the night of March 26th rain fell and froze as it fell. The coating of ice thus formed was extremely thick, as may be seen from the drawing of a twig of soft maple. This twig, with its coating of ice, weighed twenty-one grammes, and after the ice had melted and the surface of the twig dried it weighed one gramme. A little branch twenty-seven inches long when coated with ice weighed two hundred and eighty-three grammes, and after the ice had melted weighed but fourteen grammes. Thus it will be seen that the coating of ice increased the weight of both the twig and the branch over twenty times. This gives us some idea of the tremendous weight which was thrown upon the branches of the trees. The effect of this strain was not long in manifesting itself, as all through the night and during the morning of March 27th huge limbs and branches were crashing down. In Kingston we experienced the full effect of this ice-storm. Many trees were split in two, others were completely stripped of limbs and are now mere stubs, and very few trees escaped without some injury. The streets were blocked with fallen limbs, and these in falling brought down the electric light and telephone wires, which, in places, lay in tangled heaps on the streets.

The effect of this greatly increased load upon different species of trees was very marked. The soft maples suffered most, the elms next, the basswoods next, the birches very little and the conifers (pines, spruces, firs and cedars) not at all. This difference is well shown by our two illustrations, one of an elm in the city park completely split in two; the other of a group of white spruces on the grounds of Queen's University with their branches all bent down but uninjured. This difference is due to the different angle at which the branches of the deciduous trees (maples, elms, poplars, etc.) and the branches of the conifers leave the trunk. The branches of the former come off at an acute angle and under increased strain break off, the branches of the latter are at right angles with the trunk and simply bend under the load. Soft maple branches make a very acute angle and the wood is brittle, hence the damage to these trees.

I should be glad to hear from readers of "Nature's Diary" as to how the various species of trees in their localities stood the strain of this ice-storm.

This storm has done a terrible amount of damage to shade and fruit trees, and many are beyond help. But all those not entirely ruined should be treated at once, by sawing off the broken limbs and painting the cut surface with a thick coat of paint.

This winter's migration of the Canada jay was evidently widespread. Having seen the request for notes on this species in a recent "Nature's Diary", two readers of "The Farmer's Advocate" have written me on the subject.

M. W. Shepherd, B. A., of Prescott County, Ontario, says: "The Canada jay first came under my observation this winter on December 16th. During January, February and March they have frequently been in the orchard and about the door. I have often thrown pieces of bread a few feet from me and without fear the bird would softly sail to where the bread had fallen, then picking it up would fly to a nearby apple tree. Then after eating a portion of it would fly away to the woods, carrying along 'the uneaten portion in its bill.'"

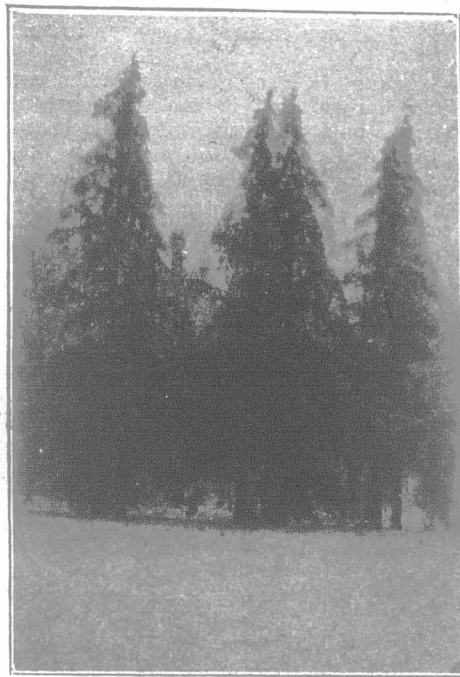
H. L. Copeland, of Peel County, says: "I saw the Canada jay in our orchard about February 20th. They stayed only three days. I think they took shelter in our row of spruce trees. I saw only one pair. They did not seem to keep very near each other, but always kept up a 'ca-ca-ca' call from one to the other."

Mr. Sheppard also reports pine siskens and American crossbills as having been observed by him this winter, thus adding two more species of northern birds to our "open-winter" list.

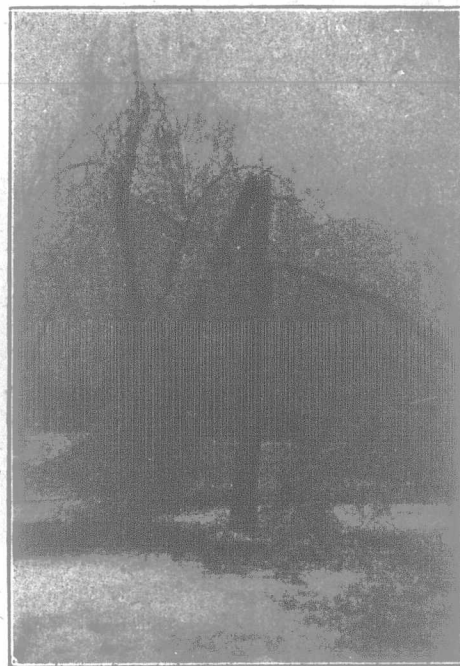
Valuable for All Classes.

I am sure we could not get along without "The Farmer's Advocate"—even the youngsters look regularly for it, and if we happen to miss a week, as sometimes we do, they are all asking daddy where is "The Farmer's Advocate." Now I am not a farmer but a contractor, but I get

much valuable information about my line of business in your paper. I think it is a valuable paper for all classes as well as the farmers. Dufferin Co., Ont. Wm. Hy. STEWART.



The only effect upon the spruces was to bend down their branches.



Effect of load of ice upon an elm tree in City Park, Kingston.

HORSES.

New York city is gradually replacing horse-drawn fire apparatus with motor apparatus, and no more horses will be purchased for the department.

Recent market reports in some papers have stated that the price of horses was lower this year than in recent years. Try to buy the right kind and see how much lower you can get them. The good things still range very high in price.

A brood mare raising a colt each year is one of the best investments on a farm. Just now, when buyers are plentiful, many will be tempted to part with their mares at the offer of what appear to be large prices. Before selling, value the colt, and see if it, provided it lives, will not pay pretty big interest on the sale price. It generally will.

To Prevent Calking in Stable.

In our issue of March 26th, page 445, a question was answered re horse injuring foot. This horse calked herself standing in stable. Another correspondent, Wm. Louttit, of Wellington Co., Ont., writes that he has a mare which did the same thing. To prevent the injury he had her shod behind with shoes with a toe calk placed on the inside of each shoe at the heel. This was placed about one-half inch from the heel of the shoe and the rear corner was rounded off dull, the remainder of the calk being sharpened. This mare is shod in this fashion summer and winter, and gives no trouble now.

Horse-Shoeing — Good and Bad.

Every horse owner is, or should be directly interested in horse-shoeing. Owing to the economic conditions of the present day, shoeing is essential if the horse has any work to do on the road or street. Nature never intended that a horse should wear a metal shoe, even though she did make such possible by giving the foot a wall to which such shoes might be nailed with little apparent injury to the parts. The horse on the soft, dewy pastures requires no protection to the hoof, but the one on the hard stone road or the city pavement must have such protection. Shoeing is necessary, and because the shoer is dealing with one of the most important parts of the horse's anatomy, and because the shoeing practice is more or less in opposition to natural conditions, it is imperative for the welfare of the horse that shoeing be done by a competent man.

All horse-shoers are not first-class mechanics, but every man who shoes a horse should be given a fair chance to do good work. The owner of the animal has it within his power to aid the blacksmith in his work, or to make it much more difficult for him to do good work. Shoes should not be left on until they drop off or wear off, and much can be done while the colt is young. Neglect then means, in many cases, defects and unsoundness later on. Keep the colt's feet trimmed. If they show a tendency to grow more on one side than on the other, trim that side down, level up the foot and keep it level. This will give the smith a better chance when the colt is old enough to be shod.

Several correspondents have recently expressed opinions through "The Farmer's Advocate" upon the shoeing question. In this issue there is a very good letter from a blacksmith upon the subject of shoeing. The topic is always a live one, and to carry the discussion further we interviewed a prominent local (London) horse-shoer, and obtained some very valuable hints which should be beneficial to all readers who have anything whatever to do with horse-shoeing.

This shoer likes a foot of medium size, neither too steep nor too flat, one whose angle approaches as nearly as possible 45 to 55 degrees. This he calls an ideal foot to which to fasten a shoe. Asked what are the different forms of defective hoofs and how can each be remedied by shoeing, he replied: "This question contains all the horse-shoeing art from A to Z, and embodies conditions inherited or produced by disease."

WHEN SHOULD A HORSE BE SHOD.

No doubt many horses need shoeing much oftener than it is done. This smith recommends that city horses should be shod about once a month, while farm horses (kept shod) should have their shoes reset every six weeks or two months. Many city horses will not carry shoes longer than two weeks until they are completely worn out and must be changed. In such cases endeavor to use old holes as much as possible. City horses' feet do not require as much paring as farm horses' feet do, as the concussion on hard pavements and the wear from gravel or broken stone roads seem to prevent the growth of wall and sole, and while the farm horse, in almost every case, has an abundance of hoof material some of which must be pared away, at all times the shoer should endeavor to leave rather much than too little hoof. Care should be taken not to pare away the hoof too much, as is sometimes done.

SHOEING TO REMEDY DEFECTIVE ACTION.

In attempting to remedy such faults in action as interfering, forging, stumbling, etc., the first thing for the smith to do is to endeavor to get the foot as near as possible to what might be termed a "model" foot, viz., superfluous hoof must be dressed away, making the foot as near the proper angle as possible. Each side of the foot must be made of, as nearly as possible, equal width, thus levelling the foot up properly, causing it, when leaving the ground, to be directed straight to the next place of resting. If the foot leaves the ground perfectly straight and level, it will, in most cases, do what is required, although the muscular contraction or muscular action may divert the course of the foot in a different direction entirely to what we might expect. The shoer, in most cases, will be greatly assisted by seeing the animal driven before attempting to correct any of these imperfections. There is no hard and fast rule by which any of these can be obviated. The side-and also the toe-weighted shoe assists greatly on fast horses as do also the heel-or toe-spurred shoe, as the case requires, although the weights or spurs merely assist in compelling the horse to travel much nearer straight and level than the common shoe could do.

CLINCHING NAILS.

Most people are very particular that the shoer clinch the nails well. Where horses are working