

encourage Canadian lumber to come in, instead of shutting it out. The Government, national or State, should preserve forests at the head of important streams like the Mississippi, the Hudson, Connecticut, Merrimac, Penobscot, Kennebec and Androscoggin, for instance, allowing the large lumber to be cut at stated periods, but leaving the smaller growth to cover ground and grow up. The forest lands in the possession of the Government, where such conditions do not exist, should be surveyed and sold at auction, because private proprietors will at least protect their property from waste. Where practicable, these timber lands might be sold with restrictions. The Timber Culture Act, which was an honest attempt to encourage the of forests on the naturally treeless plains, has yielded no fruit, and might as well be repealed.

A wise measure would be the establishment of a Commission of Forestry, made up of men who know something on the subject—of whom the number is so limited that selection would not be difficult—to consider the whole question and report what should be done. If at the head of such commission we could have such a man as Prof. Sargent of the Arnold Arboretum, assisted by the intelligent arboriculturist, Mr. Charles A. Dann, editor of the Sun, and others whose studies have been in this direction, we should be sure of a report of great value, and so ably presented that even the average Congressman might be stirred to action for the preservation of our forests. — *Boston Herald*

READY MADE HOUSES.

The manufacture of ready-made houses is a business which has attained considerable prominence eastern and Canadian points. Few people unacquainted with the facts have an intelligent idea of this business, and the following concerning the Kennebec Framing Company, of Bangor, Maine, from a local journal, may be interesting.

Dwelling houses are made like boots and shoes—in any quantity or of any size or style, and for any market in the wide world. Not long since this firm received a shingle order for fifty houses for Cape May, to be delivered speedily and in complete finish. These houses were not to be sheds, nor shanties, but regularly ordered dwellings, and they were made accordingly, and so delivered, and contain hundreds of occupants at this moment. An order will be received for a \$50,000 hotel, or an ornate French roof cottage for a country estate, and these are as easily and expeditiously furnished as an ordinary boarding house for a country village or a barn for a ranch in Kansas or Colorado. It is not to be supposed that only a coarse, rough frame is thus sent out, to be trimmed into shape on the spot where it is delivered. On the contrary the house is complete when it leaves the factory, and as ready to go together as a musket when it leaves the armory in Springfield: all the parts being found, even to the knobs for the doors, and the screens and shades for the doors and windows, according to specifications. Great trains of freight cars stand waiting about, and are freighted almost daily here. The refuse trimmings and edge cutting of the lumber are carted off to a neighboring pulp mill, and there speedily turned into material for paper, or other product. Machinery for almost every conceivable use in connection with wood is at hand, and house materials, of any kind, or size, or shape, seem to drop out like meal from a hopper. In a recent instance, where a large building was furnished for a southern order, the parts were thus made, and when put together in the city where the building is now standing, its length was found to vary not the eighth of an inch from the original specifications, although its length on the front numbered hundreds of feet. Every inch of this building, from the sill to last shingle, was sent ready prepared from the factory, and "set up," as readily and almost as quickly as a nail cask. — *Wood-Worker.*

CARE OF SAWS.

Ewing D. Craddock, in a letter to the Cincinnati *Arizan*, says:—The saw is one of the most essential and sensitive tools used. A saw to do the work requires it should be kept in a condition to do work. First, the saw

should be well balanced on the mandrel, and hang true, presenting a straight face on the log side; hang the saw plumb up and down; second, keep your saw well pointed, so that every tooth will do the same amount of work that is required of it, these are the first elements of a successful mechanic; these, too should always be closely observed, third, is the shape of the teeth, to which, as a rule, but little attention is paid by the majority of sawyers. Every man has his own ideas about putting his saw in order, therefore, all cannot be right. My idea is this. A saw tooth should come in contact with the kerf that is to be removed at an angle of 45 degrees. This will produce a thin cutting edge, and will be found to produce the desired result, cutting with the least power, and to economize power is a matter of interest to all. It makes the lightest running saw. As to swaging the teeth, or spring them, I sometimes run one, then the other, but the spring tooth is, by far, the lightest running and cuts smoother lumber. The full swage, with plenty of power, will do as good work as any. The objections I have to the full swaged tooth is that it takes more power to drive it; consequently there is more strain on the plate of your saw; besides it cuts more kerf than the spring tooth, making your saw more liable to buckle. All sawyers know the wider the kerf the more power it takes to drive the saw, and the less feed can be carried; but a spring-tooth will cut a quarter less than full swaged, and, as a matter of course, makes the lightest running saw. Still, each tooth cuts the same distance into the timber, and, therefore, I recommend the spring-tooth. I always spring the teeth at the extreme points, to prevent them from losing their set, for the nearer the point a tooth is set the longer it will retain its set; and file the under sides of each tooth a little beveling, say 12 or 15 degrees, and the back straight, and you will find this kind of dress will give satisfaction in all kinds of timber. In this country, most all the sawyers run the chisel-tooth, or, as some call it the full swage, no set, and meet with good success. The reason of this is that a full swaged tooth is easier used than a spring-tooth. Yet a spring-tooth does not require half the work to keep it up that a full swaged one does, and will make great saving in files and emery wheels.

The "Tribune" On Forestry Laws

Speaking of the rapid destruction of forests, the *New York Tribune* says: The usual practice appears to have been to cut down all the trees on a section, except the young shoots, and leave the bush and branches to dry, and most likely catch fire the next year. And thus what the axe may have left, the fire consumes, so that it really looks as though every precaution had been taken to destroy our forests as rapidly as possible. It is the custom of the Americans to speak rather patronizingly of the Canadians, but in this matter they are wiser than we. There is a law in the Province of Quebec which forbids the cutting of pine trees unless they are 12 inches or over in diameter at the butt, and the same timber dues are charged upon the small logs as upon the large ones, which has had the salutary effect of discouraging the cutting of small trees."

Our North-West Forest.

The *Winnipeg Times* of Nov. 17, says.—Mr. Robert Gunn, Crown Timber Inspector, has examined the Riding Mountain country, and says that it contains a plentiful supply of spruce, poplar and jack pine, which will be amply sufficient for the wants of Northwestern Manitoba for many years hence. He leaves on Monday to inspect the Duck Mountain country north of Birtle and Shoal Lake.

W. E. EDWARDS paid \$37,000 at Ottawa for three timber limits, containing 100 square miles, situated near the headwaters of Lake Id. Quinze, near the boundary line between the provinces of Ontario and Quebec, on the Upper Ottawa.

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