

## CROWN FORESTS.

The following letter appears in the Toronto Mail:

Sir,—I venture to submit the following suggestions for legislation regarding our Crown forests and their preservation:—

1. All timbered lands to be properly explored by competent parties, and the quantity of each kind of timber, and the soil as to its fitness for agricultural purposes, reported upon, giving an estimate quantity of each description of timber, and where the soil is not fit for agricultural purposes at least thirty per cent. of the standing value of the timber should be charged as an upset price as a bonus. Before selling give public notice long enough before the day of sale for parties wishing to purchase to examine the limits offered for sale, so as to have competition at the time of sale; then charge another thirty, five or forty per cent. of the standing value of the timber as dues to be collected when the timber is put in market by the lumbermen. This would leave the remaining thirty-five or forty per cent. of the standing value of the timber to cover interest on the bonus paid, the annual ground rent to be charged, and timber that might be taken out of the license by actual settlers.

2. No timbered lands to be given to actual settlers unless the locality were fit for settlement, and that the lot sold or located, say 160 acres, should have a sufficient quantity of cultivatable land on it for a farmer to support himself and family by farming. Whenever sales or locations are made, no renewal of license to be given to the licensee-holder, providing the purchaser or locatee is in actual possession of the lot, and making improvements thereon, and gives the local agent such information as may be required at least thirty days before the day fixed for the renewal of said license, the timber to still remain the property of the Government, and be liable to future timber regulations, the same as it would be if it were only under license, and be liable to Crown dues the same as the timber that is under license. The remaining sixty or sixty-five per cent. of the timber's standing value would be an inducement to the settlers to save the timber from destruction, and the bonus paid by the lumbermen would give him an interest in the standing timber.

In case of fire breaking out and damaging the standing timber on settlers' land, the owner must not cut, nor permit any other party to cut, any timber not damaged by fire before all the timber damaged by fire has been cut, and the land on which the timber damaged by fire stood is in proper course of being cleaned up for chopping, under penalty of losing all claim to the timber on his land; and the limit-holder should be compelled to cut all the timber damaged on his limit before he cuts any timber that has not been damaged by fire, under penalty of losing his license on the limit; and in case the land is fit for farming purposes where the timber has been killed or seriously damaged by fire, compel the limit holder to clear the land and put it under crop, and give him all the authority to the land so cleared and put under crop that an actual settler would have.

Have all kinds of lumber held in bond the same as liquor is held by the distiller, collecting the dues on sawed lumber at the mill, and on other lumber as circumstances might direct while in the hands of the owner or limit-holder, any invasion on the part of the owner or limit-holder to act as a forfeiture.

All timber licenses should expire before the first day of June, and be renewed on or before the first day of August in each year.

By such a system the limit-holder and the settler will each have an interest in the standing timber, and therefore be likely to guard against fires, the revenue will not be materially interfered with by the settlers, and the Government will be saved the enormous expense that the Ontario Government is put to in keeping forest rangers in the lumber shanties to prevent fraud, by not giving correct returns of lumber cut, or by cutting timber on Crown lands and passing it as having been cut on patented lands.

It would also do away with the evil caused by the lumbermen having authority to cut timber for years after the settler is making improve-

ments and living on the land, by the lumbermen coming year after year and felling timber at the settler's door, and frequently leaving the tops of trees on his cleared land for the settler to clear up. Such things have come under my notice, and I am fully satisfied that in retaliation fire has been kindled in a dry time that burnt the lumberman's shanty, and destroyed thousands of acres of valuable timber.

Yours, &c.,

P. W. FREEMAN.

Loughboro', March 26th, 1883.

## INSTRUCTIONS FOR CULLERS.

The Hon. John Costigan, Minister of Inland Revenue, submits some new regulations for the government of the Supervisor of Cullers, in respect of the culling, measuring and counting off of lumber and timber. Under them, the Supervisor is required to keep in the office, a book to be called the "Culler's Notice Book," to which book every culler shall at all official hours have access.

Each square timber culler shall, when instructions to measure any raft or transact any other duties in his capacity as culler, give notice of any expense for travelling or assistance he anticipates incurring in the transaction of such official business.

It shall be the duty of the Cashier to see that such notice book is placed before the Supervisor once on each working day, and the Supervisor shall initial each such entry and place opposite to it such remarks as he may see fit to make—indicating that such anticipated expenditure is either "approved," "considered unnecessary and disallowed," or, if in his opinion too high, "partially disallowed."

The actual disbursement thereafter made with the consent of the Supervisor thus obtained may be defrayed from time to time out of the contingencies of the Cullers' Office.

Provided that such payments shall in no case exceed one hundred and fifty dollars to any one culler during any fiscal year.

## DEAL CULLERS.

After the 1st of January, 1883, the fees for "counting off" shall be collected by the Supervisor and deposited to the credit of the Hon. the Receiver-General, separately from fees for "culling or measuring."

The Supervisor shall cause the words "Counting fees" to be written across the face of each deposit receipt transmitted to the Department on account of such revenue aforesaid.

The practice of paying to each culler the sum accruing from such counting off ostensibly done by him—as heretofore followed—shall be discontinued, and instead thereof the Department of Inland Revenue is authorized to distribute from time to time the fees so received for counting off in equal shares to each of the deal cullers in the employ of the Supervisor.

## STAVE CULLERS.

The fees established by tariff for culling staves, &c., shall hereafter be distributed in the following proportions:—

To the Culler . . . 80 per cent.

To the Office . . . 20 per cent.

## GENERAL PROVISION.

Any regulations heretofore in force establishing or enforcing the principle of rotation of cullers are hereby cancelled in respect of any transaction in which the Supervisor shall be notified by both parties thereto that any given culler has been mutually agreed upon between them.

## SPARK ARRESTERS.

A lumber manufacturer who has had 6,000,000 feet of lumber consumed at one fell swoop by means of sparks from a refuse-burner, is anxious for information regarding spark arresters, and writes this paper to that effect. The Lumberman has before canvassed the subject, but takes occasion to again refer to the devices used for the purpose. Now-fangled notions and schemes for subduing sparks, while many have been offered, have generally been discarded in favor of first principles. The more common device is simply a wire screen or bonnet, arranged in some cases with an enlarged arm above the stack, or with a hinged joint on a flat opening at the top, the latter being inclined to clog. To obviate this a wire rope is affixed for open-



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## Lumber Drivers' Calks

*For Use in Stream Driving to insure a safe footing in Slippery Places.*

*25 in ball and 5 in heel are the numbers usually required.*

PRICES for the six different sizes and for Calk Sets and Punches for adjusting Calks, on application to

**T. McAVITY & SONS,**

Dealers in Lumber and Mill Supplies,  
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ing and closing the trap. A patent arrangement was tried, consisting of an inclined shelf placed inside the stack in order to so regulate the upward draft that the cinders, getting out of its control, fell of their own gravity upon the shelf, from whence they were passed by a pipe to the ground. It has not come into general favor. The great secret in conquering sparks lays in the height and diameter of the aperture in the chimney. A tall stack with an aperture not too large to interfere with the draft, yet sufficiently so to stay the velocity of the heat, produces the best results. On the other hand, a small stack built upon the principle of securing an active draft is decidedly the most dangerous, since the velocity of the heated air is sufficiently great to overcome the gravity of the cinders. The stack should have a height and diameter exceeding the actual requirements of the grate surface. The sparks then rise to a height where they are less readily buoyed up, and fall into the ash pit. The heated air when confined to small compass will invariably carry sparks or heavy cinders over the top of the stacks. One way of arranging a screen at the top is in the form of a hollow cylinder without cover, four to six feet high, and with a fine enough mesh to retain the cinders or sparks within the hollow. Where this is attached to a stack of proper height and diameter it is said to work excellently. The free admission of upper air cools the sparks and detracts from the force of the heat draft, so that the sparks are extinguished.—*Northwestern Lumberman.*

## HOW A MILL WAS KEPT RUNNING.

We have obtained the following interesting description of how Mr. Willett's mills at Chambly were kept running through the winter. The water was so low in the Richelieu River, when the winter set in last fall and, owing to the great severity of the winter, it froze completely over and to such thickness that there was only from 10 to 12 inches of water between the ice and the bottom of the river, and consequently backed what water there was on to Mr. Willett's water-wheels burying them in water four or five feet deep, and forcing him to shut down. It stopped the mill completely, and he finally concluded to open a channel, and sent down to the Hamilton Powder Company and obtained some three or four boxes of dualine with flat

fuses, four feet long, and went to work with an electric battery. In three days he had blown open a channel about 1,000 feet long by from 10 to 12 feet, thereby lowering the back water at the wheels by some two and a half to three feet. The mills were started and have since been running with good speed. This dualine is done up in half pound packages, and two or three of them are attached to the flat fuse and then the fuse to the battery and it blows the ice all to pieces, and if there is water enough to carry it off it will make the channel and lower the water. The ice disposed of in this case was from two and a half to four and a half feet thick. Mr. Willett writing to a friend in this city says he believes it would be effective in preventing a flood in Montreal in case of any sudden thaw. If the material were furnished he believes he could blow all the ice out of the St. Lawrence and save the city from a flood.—*Montreal Witness.*

## OTTAWA NOTES.

The *Montreal Review* says:—The staple industry at Ottawa, the lumber trade, is in the meantime quiet. Purchasers are endeavouring to buy at a reduced price, but the owners of timber and sawn lumber are holding on and will only sell at the old figure. What business has been done lately is therefore only in jobbing lots. The outlook for the coming season is regarded as bright. Those who are now daily arriving from the shanties in the woods report that they have experienced one of the best seasons for lumbering operations that has been vouchsafed for a long time. The weather, although a trifle cold, was favorable for the work, and the sleighing throughout was excellent. This, combined with the almost unprecedented length of the winter, enabled the parties engaged to prepare a larger number of logs for the coming drive than they have been able to do in one season for many years past.

A HEARTY RECOMMENDATION.—Jacob A. Empey, of Cannanore, states that he has taken Burdock Blood Bitters with great benefit in a lingering complaint, and adds that he would gladly recommend it to all.

No person can enjoy health while suffering Constipation of the Bowels. Harsh purgatives always do harm. Burdock Blood Bitters is Nature's own Cathartic; it unlocks the secretions, regulates, purifies and strengthens the system.