SUGGESTIONS FROM MAINE.

It was given out fifteen or twenty years ago that the lumber producing capacity of the state of Maine was nearly exhausted, and the time was fixed, by those learned in forest lore, when the last mill would be shut down, the occupa tion of the Maine lumberman would be gone, and the prestige of that political division of the republic known as the Pine Tree State would linger over it only as a memory. In truth a part of this prophecy has come to pass, for a large proportion of the pine of Maine has been exhausted, and spruce is now the great depen dence of the manufacturers. Yet a good deal of pine is still cut in that state, and the supply is likely to be prolonged by a system of economy that is the genius of eastern industry, and is but little appreciated or practised in the West. Thus economy is habitual in all lumbering operations in Maine, and portains to the cutting of spruce, hemlock, and other timbers, as well as to pine. Its peculiarity is that the largest timber is cut first, while the smaller is left, and carefully preserved to grow for a future supply. In this way the timber lands of Maine have been repeatedly cut over, to a large extent, at least. Yet a stranger passing through these same torests would scarcely recognize the fact that they had supplied the eastern cities for years with millions of feet of lumber, for the growth of trees still thickly covers the land. It is only by observing the stumps that are here and there scattered amidst the standing timber that one would begin to realize that these silent and sombre woods once echoed with the ringing sound of the axe, the crash of falling trees, and the shouts of loud-voiced teamsters. So well have the economy of man and the forces of nature done their work, that the forests of Mame still maintain their primeval appearance, and promise to supply the sturdy woodsman with employment for an indefinite period to come. As a leading land owner recently put it to the writer, with a latitude of faith, "With the present system continuously practised, the timber supply in Maine will last to all otermty.'

The advantages derived from this system of forest preservation are worthy of consideration in localities where a more careless method is pursued. One advantage is that timber becomes a source of repeated revenue, as crop after crop is taken from it. First the larger growth of pine is assorted out; then the larger growth of spruce, perhaps; then the hemiock can be cut. In a few years this process can be repeated, the growth of the timber constantly creating a supply of larger trees. This development of supply is peculiarly conserved and stimulated by itself. In other words, none of the land being wholly denuded of forest, the humidity and wealth of the soil is preserved, and fires do not sweep over the country, as in Michigan and Wiscousin, destroying the timber, root, trunk and branch. It is indeed stated that a devastating fire is impossible in the state of Maine, and certain it is that we have no knowledge of such wide-sweeping conflagrations as have devoured the forest wealth of Canada, Michigan and Wisconsin. Here is a practical example of that kind of forest proservation that the advocates of forestry laws would see generally adopted and enforced.

In Maine the individuals directly associated with the lumber and timber interests are grouped in three classes :- The owners of the lands : the operators, or those who get out and sell the logs, and the manufacturers. Of course these classes often intermingle their interests. The land owners, however, form the most distinct class, and are the autocrats of the situation, as the landlords usually are. They are men of cupital, and are a long-headed community. They are the possessors of the foundation of the number interest, and are content to bide their time. They value their lands for the timber they will produce, and intend to make the most of .t, as the system which they pursue, already indicated, abundantly shows. They found out, years since, that the farmer does not seek a actioniest on their timber tract, but profers mstead, to emigrate to the West. The soil. though rich, is not abundant, a large portion of the surface being occupied by rocks. It is thought too, and probably with truth, that the prohibition legislation of Maine has acted as a tory reflection, in fact, after the cost of product. The men who are at work scarcely realize the from the same port.

deterrent to many foreign emigrants who would otherwise settle in the state. Certain it is that the hardy Scandinavians or Germans could make themselves comfortable homes in the Pine Tree State as quickly as anywhere else, and secure the benefits of nearness to profitable markets, as well as greater nearness to the Fatherland. A heavy land owner of Bangor, who was himself a temperance man, and not opposed to anti-liquor legislation, admitted to the writer that he had no doubt but that the "Maine law had prevented many foreigners from settling in that state. He even said that, under the circumstances, he never expected to see the forest lands of Maine cleared and zettled. for this projudice against the sumptuary law of the state had got abroad, and it would be nearly impossible to destroy it; and the rugged lands of Maine must be settled by foreigners if at all. No doubt this fact of the unmarketableness of the wild lands of Maine has prompted the owners of it to make the most possible of its timber resources.

The general practice is for the owners of the land to sell permits to the operators to lumber on their property. It is usually owned by townships, and the boundary lines of these local divisions mark the disposal of limits. The choice of townships, both as to ownership and the granting of permits, is of course determined by their nearness to streams or lakes suitable for getting logs to the mills. The Maine lumberman is quite particular about this, and looks with disfavor upon lands that a Michigan or Wisconsin operator would think quite accessible -by means of a logging railroad if by no other. Some of the remoter sections in the northern part of Maine are regarded as of little value by both owners and operators, and they do not even make an effort to stretch their imaginations to the time when the demand for lumber and the building of railroads will make these far away districts available. It would seem that here the "Downeaster" is less sagacious than his Western compeer; for the latter is already ranging the mountains of Montana for timber prospects, or hunting pine half way from Lake Superior to Hudson Bay.

In selling permits to operators to cut timber it would seem at first blush as if they conforred upon the purchaser an unlimited privilege to cut and slash according to his own free will, to the most reckless destruction of timber, a result directly opposed to the preserving policy that has been heretoforo indicated. But here profit steps in as a conservative element. The opera tors, in order to realize as much as possible on an operation, must cut all the largest timber, discarding the smaller growth. Though the perimit grants them the privilege of cutting as much as they wish within certain specified boundaries, it does not require them to cut more than they desire; in fact, there is no amount stipulated. Economy, then, dictates that the operation shall be a profitable one, and to secure this result the larger trees only are selected, while the smaller ones are left to grow. This system causes a constant competition to secure eligible locations for logging, and deters men from going back into the remoter districts, as they would be more apt to do than if the operators owned the land. Spruce stumpage near streams, or where two logging streams join, sells at \$1 and \$4.50 per thousand, while that which is farther away from the water will bring but \$2.50, more or less.

The mill men of Maine have got into the habit of competing with each other so sharply m the purchase of their log stock that they have narrowed the margins of their business down to a mere thread of selvage, and this mainly de pends on the ups and downs of freight rates, This limited margin is said to be a folly on the part of the manufacturers; for if they would combine together for a regulation of prices they could secure them as well as not. Probably the unil men themselves would tel. a different story. It is said that often, late in the season, when freight rates become so high as to sweep away all their margins, the manufacturers let their cargoes go to sea without insurance, alloging as an excuse that the margins were all gone anyway, and if the lumber goes to the bottom, or up in smoke, they will have saved their insurauce money in either event, a not very consolation has been annihilated, which might have danger, they are so carried away by the excitebeen saved by insurance.

The hemlock of Maine is one of the principal sources of timber wealth in that state. There is a belt of this kind of timber, forty miles in width, and running entirely across the state, from New Brunswick to New Hampshire. The principal profit from homlock is derived from the bark, which is worth at the tanneries \$6.50 a cord. The heaviost of these latter are situated along the European, & North American railway, which, in the eastern part of the state, traverses the hemlock belt. They are located with especial reference to the bark supply, and will exist as long, and no longer, as that supply lasts. Since the building of the European & North American Railway, and the rising of the tanning industry along the line, there has been a great scramble for hemlock lands, the leather companies securing all that was possible. At first it was thought that hemlock was only valuable for its bark, but Ithe constantly increasing consumption of lumber has given value to hemlock timber, also, though it is not enormous. For several year- after the bark industry arose, the stumpage of hemlock sold for \$1.25, the bark being worth \$1. while twentyfive cents was skimped out of the log. Latterly that figure has been considerably raised, and the prospect is that the value of hemlock will continue to increase.

Of late years a special feature of the lumber industry has aprung up in Maine, which consists of sawing second growth timber into box boards. This manufacture is mostly carried on in the winter season, by small mills, when the large ones are shut down. The demand for box boards is very brisk from the manufacturing towns in Massachusetts, Rhode Island and Connecticut, and the narrow stuff which is sawed out of small, second growth timber, is sufficient for the purpose, and at the same time can be afforded at a reasonable figure. This special demand has stimulated a special effort to supply it, and the sawing of box boards has become quite distinct from the general lumber manufacture. The logs are sawed up without being squared or slabbed, and the lumber brings in Boston from \$14 to \$16 per thousand. -Northwestern Lumberman.

A LUMBERMAN'S LIFE.

The Philadelphia Times says :- The post of danger in the duties of a lumberman is on the jams, and there the most skilful men are sent. Pitfalls will open in the midst of a solid mass of timber, and then close in a moment, after having dragged a man down beyond all help; a log will move a few inches slowly and unnoticed. and then with a movement like an arrow strike a man, crushing the life out of him in an instant, On overy side dangers are lurking, and he is fortunate that passes a spring without injury. There is something attractive in the looks of a log jam, and if the fascination that danger has were taken from it, still he would rather work there than on the shore. The long, narrow sea of white timber, cracking and writhing with the current, the water roaring and foaming as it escapes from its prison under the logs, and the logs themselves moulded into fantastic shapes by the terrible pressure behind them, all have an attraction for men who are impressed by strength or pictulesqueness.

Floods are made by large floating dams, and will raise the water several feet, lifting the jam up into the air as if it were a toy boat. If a specially large flood is needed, two and some times three are used at a time, the flood gates of the lower dam being opened just as the water from the dam above reaches it. In this way an immense "splash" is obtained that only the most refractory jams can successfully combat.

There are few grander sights to be seen any where than the moving of a large log jain. The grand strength with which they move, tearing out the largest trees and forcing everything before them, and the serce motion of the logs, like the crazy shuttles of some giant machine, and the perfection of force compel enthusiasm from the most phlegmatic spectator. The wild hurrans of the men or the logs add to the excitement, and the observer is quite sure to find himself running along by the side of the moving mass cheering as if he had won a battle.

ment, and they may be seen lumping from one log to another and cheering as though perfectly safe on solid ground, instead of a dangerous sea of moving logs that are continually rising and falling and dodging this way and that, driven by the flood of water furnished by the floating dams. The skill shown by experienced flusters in riding logs is wonderful, and it seems impossible for human dexterity to reach such perfection. A jam will sometimes form where precipitous, rocks make it impossible for the men to escape on either side, and they must ride the logs for several rods. In such places the water is always swift, sometimes forming rapids, and watching the logs tumbling, jumping and rolling along with a deafening roar, one wonders how men can live among them for an instant. Behind the jam breakers come the sackers with their teams, drawing the logs that jams have forced far out on the banks and rolling in those on the shore. "Bringing up the rear," is the technical term given this work by the lumbermen and it is no more desirable than occupying the same position in the army. It is terribly cold work too, wading in the snow water, ice freezing on the levers and on the clothing wherever exposed Ito the air, and makes the spectators shiver to watch thom. But the hardy lumbermen do not mind it. They expect it, and their strength is equal to the demand.

At mealtime they all come with prodigious appetites for their rations, that are as hot as can be caten. Hot biscuits, potatous, eggs, meat, tea, coffee and everything else, solid and liquid, are smoking like the steam from a locomotive, while generous draughts from the cup that inebriates add their fuel to the general fire. No cold victuals are current in log-floating time, all the chill required is found in the ice water, and something has to be taken to counteract its influences.

The nights are spent in camps, where the roaring fires burn all night, partially to dry the wet clothes that must be put on in the morning. Coming into the room where the clothes are hung, a great cloud of steam is seen that rises to the ceiling, where it condenses, and either falls down in drops or evaporates on the warm boards, and the clothes are all smoking as if engaged in a contest. When the river is reached the life changes. There are few jams to break, less wading, and more riding in boats, and all the work is easier and less dangerous. If the logs stop on a rock that is out in the middle of a river, a boatman carries some men there who may roll them off and get into the boat again without danger and without getting wet. There are logs along the shore to be rolled in, but the water is not as swift as in the runs, and in the deep water a man can stand with comparative safety. Everything is easier, and the day the myer is reached is almost a holiday among the lumbermen.

Talk About Timber.

The Kingston Whig says a gentleman, whose knowledge of the timber trade is well known, stated that the timber trade this year had been better than it had been for some years. He did not think that unchartered vessels lost anything, as they secured fully as high rates as those that had been engaged last winter. The freights paid fairly well, but nothing more than vessels ought to earn; in fact if the profits were less no person could afford to build vessels or keep them in repair. This winter, he thought it would be difficult to obtain charters, as the owners of timber were likely to hold off until the spring. This was owing to the fact that last summer rates fell to lower figures than those for which vessels had been chartered. He thought this holding on would be a wrong policy, as when there was a demand for vessels the captains would be more independent. There will really be a larger amount of timber for moving next year than this. The method of chartering will be the very opposite to that which was adopted last winter. If there be good rates for grain, vessels will prefer to carry it. Grain freights this year were, however, far below the average, and not nearly so good as the year before. A 6c. freight from Toledo and a return cargo of iron ore to Ashtabula or Cleveland would be better than a \$70 freight on timber