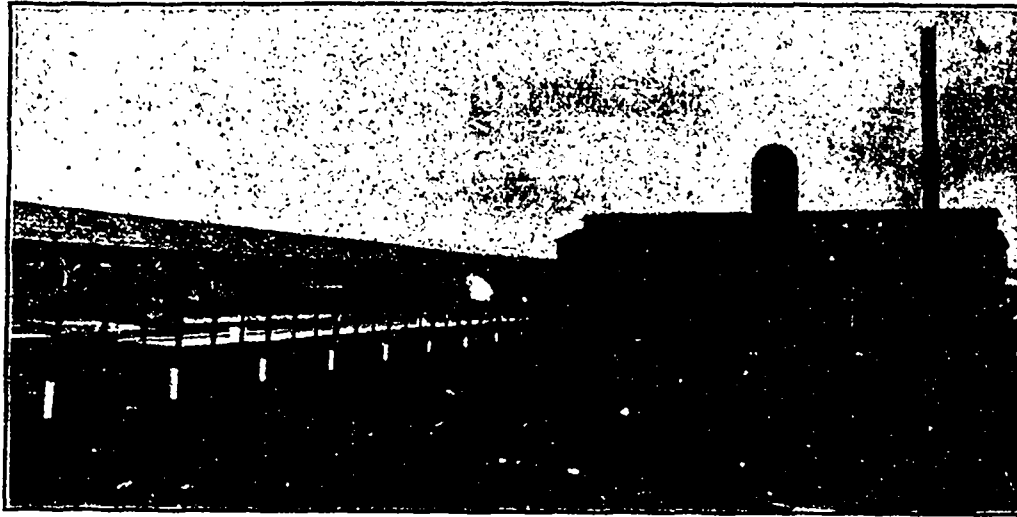


after every step in the process from tree to car, but generally the men who concentrate their attention on some one step in the process make the most rapid strides in that one line. They are specialists in a way, and it is to the specialists in different lines that we naturally look for new ideas, so to get at the ideal all along the line there is probably no better way than

log wagon instead of a heavy engine that is quite a load in itself. It would at least be interesting to know if any experiments have been tried along this line, for from a theoretical standpoint it looks like there are some possibilities in it, and maybe if we get started to talking and thinking about it something will be developed.

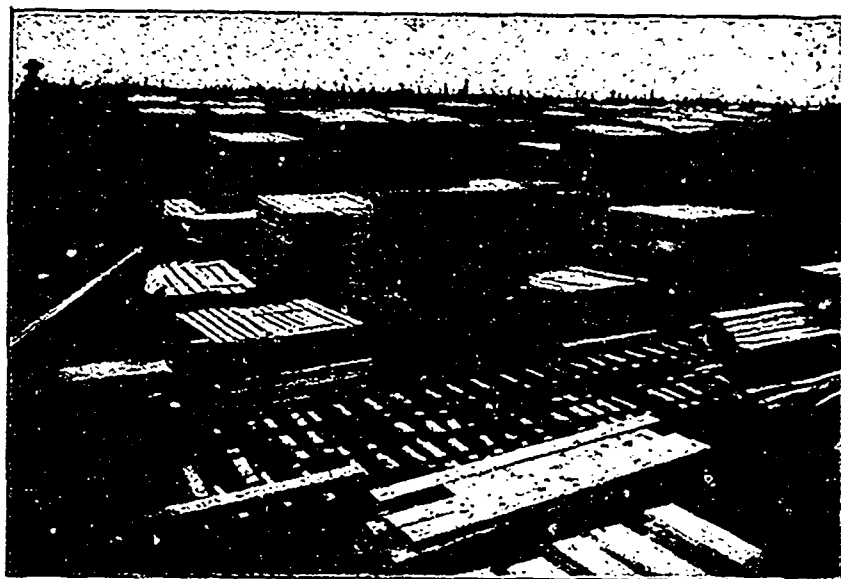


VIEW OF MILL AND SORTING SHED, RAINY RIVER LUMBER COMPANY, RAINY RIVER, ONT.

to garner ideas from the leading specialists in the different steps and combine them.

An idea that has had a more or less checkered career in connection with logging operations and still refuses to stay out of the game entirely is the traction engine. A case in point is furnished by A. P. Wylie, a cooperage stock manufacturer of Belle Center, Ohio, who recently bought timber in Tennessee and has equipped a plant down there. He has an 18 horse-power engine that was successfully used up in Ohio for hauling staves to the railroad, pulling a carload of staves at a trip on four wagons. Now he has taken this engine down to his Tennessee plant and proposes to haul logs with it with a confidence of getting good service from it during the summer season, when the roads are comparatively free from mud. And he will likely do just as well as he figures with it, for he knows his business thoroughly in every detail and is well enough acquainted with this engine as a road machine from his past experience with it, to have a pretty well defined idea of what it will do. Then the question is, will the traction engine in its improved state become anything of a factor in southern logging? Its record in the past does not speak so well for it in that territory; it has been used quite extensively and apparently very successfully in the northern woods, its advent dating back quite a number of years, but its career in the south has been rather checkered—so much so, in fact, as to dampen what early enthusiasm it did create. Several mill men tried expensive experiments with it in one form and another, usually terminating in putting the engine under a shed and using it to drive a small mill or some other machinery. But maybe when it gets its second wind and we go at it with a wider knowledge and better engines the outcome will be different, and maybe it won't. It looks like the modern idea in this line should turn to something in the form of an automobile

The railroad for transportation and the mechanical log loader make the best combination to be had where the timber belt is sufficiently heavy to justify the outlay, and it is only a question of modern ideas and appliances in carrying out the details of the work under such conditions, but there are other conditions, and there comes the rub. We have come to the point where available heavy belts of timber are not so plentiful and must now turn quite extensively to the small tracts scattered here and there that do not justify railroad building.



LUMBER YARD OF THE RAINY RIVER LUMBER COMPANY, RAINY RIVER, ONT.

With timber of this class it becomes a question of small mills and the hauling of rough lumber or the larger and more modern mill plants with some improved method of logging, and it will unquestionably be more satisfactory if a method of logging can be developed that will permit the latter. If it can not be done the saw mill men might take up the plan of the oak stave men of having a finishing plant at some central point and portable mills to move here and

there for cutting rough stock for concentration at the planing mill or finishing plant. Some mill men have followed this plan more or less in the past, but we are coming to a point where we will be confronted with this scattered timber problem so generally it is not a matter of mere incident here and there; it is a big problem, covering a wide field, and the question is, which direction shall we take in the effort to solve it; shall we turn to the portable mill or seek improvements in logging methods? If it is logging methods it means mechanics in some form or other.

To leave the log road for a while and get into the mill, there is a seasonable topic for discussion in the matter of house cleaning, the use of those twin implements of cleanliness and safety, the broom and the whitewash brush. Their value as an asset may not show up in figures on your books, but they do not draw heavily on the expense account, and they actually give more returns for the time and money expended than any other appliances about the place. The ghost of spontaneous combustion that begins to haunt the mill man as soon as the hot, dry weather comes along can be laid with the broom and buried with the whitewash brush till his chances for a walk in the night are slim enough to make rest easy at night and insurance rates lower. The real facts in the case of most mysterious fires are that the majority of them originate from sparks falling in the dust about the mill and yard, where fire smolders along unseen until it reaches a point or object to induce flame, and then it gets into action at a lively rate. This fact has been demonstrated time and time again, not only on the point of unobtrusive smoldering in the dust, but also in the matter

of sparks so insignificant as to be unobservable in daylight, frequently starting fires in unexpected nooks and corners about the mill and yard. The first remedy is to use the broom, use it persistently and unsparingly all over the mill. Beams, joists, journal boxes, and, in fact, everything that accumulates dust, no matter how inconvenient to get at, should feel the broom, and then follow with the whitewash brush, or with its modern successor, the spraying machine.