

larger logs. In the case of a company operating its own camps this should be done in any case. In the case of the logs being cut for export to the United States, these ends of trees are not considered of any value.

The next step in the cost of raw material is the handling and driving of these logs to the pulp mills, and this is a point I wish to emphasize very particularly. The cost of pulp is determined largely by the quantity produced, as the fixed charges of a pulp manufacturing concern are almost the same whether a larger or smaller quantity of pulp is manufactured. It, therefore, is apparent that a large pulp mill has an advantage over a smaller one, and this refers more particularly to the cost of handling and driving the logs to the mill. As you are all no doubt aware, it costs very little more to drive a larger quantity of logs than a smaller quantity, and therefore if a pulp manufacturer has a large quantity of logs to handle, it pays him to make permanent improvements on his streams, lakes and rivers, so as to lessen the cost of driving operations as well as ensure the safety of the logs.

The cost of manufacturing pulp is determined largely by the cost of the raw material, viz. : pulp wood, and it is natural therefore for a pulp manufacturer to endeavor to obtain his supply of raw material at the very lowest possible cost. In doing this, however, it seems to me that in the past, at least, it has been done at the expense of his prime asset, viz. : his pulp wood limits, and he will find that each year his cost will grow greater ; whereas by systematically getting a proportion of expensive wood each year with the cheap wood, and eliminating all sources of wastefulness in the cutting of logs, and by making improvements so as to lessen the expense of driving operations, he will in the long run make more money and be better off than the manufacturer who simply looks one year ahead.

The raw material, or pulp wood logs, having arrived at the booms in front of the mills, their conversion into pulp is an entirely different business from the logging operations. I do not intend to go into the details of manufac-