and thence distributed to various Kimberly-Clark mills. The 300 ton mill was built at Terrace Bay for the purpose of converting the pulp logs to bleached sulphate pulp. The bleached pulp is now shipped to U.S. mills of Kimberly-Clark Corporation. Sale of the pulp in this manner will bring \$15 million of much needed United States funds into Canada annually.

## Wood Handling and Preparation

The end of water travel for the LongLac wood which is a uniform mixture of 3 parts spruce and 2 parts jackpine is at Hays Lake alongside and west of the Millsite. Poplar wood partially barked and kept separate is water driver also. The 8' and 16' logs handled by two tugs and assisted by two water propellars are steered to the jackladder where the haul-up chains equipped with spur attachments convey them to the three independently driven slasher saws. Here the wood is cut into 4ft.

lengths then the sawn logs roll over into chutes onto a 3,300 ft. endless rubber belt conveyor which transfers either to yard storage or into the woodroom.

Wood in excess of mill requirements is conveyed on another endless belt 2,950 ft. in length to a double arm stacker thence to either of 5 blockpiles, the sixth being reserved for poplar. This belt conveyor incorporates an unusual feature in that it not only conveys wood to the woodyard, but is also designed to carry reclaimed wood on its under side.

The wood is reclaimed with a Caterpillar bulldozer, Lorain crane with orange peel grapple assisted by a rake and 2 drum winch, and two portable reclaim conveyors.

The 4 ft. logs for current consumption are fed through three 12 ft. diameter by 45 ft. long barking drums, the supply to each drum being automatically or manually controlled by deflectors on a time-cycle bases. The bark is pressed to reduce the moisture content and is conveyed to the boiler house to be utilized

## as an auxiliary fuel.

Rossed wood from the drums, (wood from which bark has been removed) discharges onto sorting belts and is either diverted to yard storage or is fed by means of a variable speed chain conveyor to a 10 knife chipper driven by a 350 HP motor. Conveniently located near the chipper spout is a steam driven log splitter to handle oversize logs.

Chips from the chipper surge bin are then screened or diverted directly to chip storage, ample for 300 cords or approximately 12 hours of mill operation at existing operational rate. When the chips are screened, the chipper, dust is conveyed along with the bark for fuel and the oversize chips, after passage through a chip crusher, are returned to the screening system.

The chip bin walls are heated with warm air from the lime kiln building in order to prevent freezing and consequent "Hang-ups" in the bins. The chips are removed from the base of the bins by means of remote controlled variable speed travelling twin-screw feeders onto conveyors, over a weightometer, thence to a horizontal shuttle conveyor over the digesters.

Digesters Brown Stock Washing and Screening

The chips of a definite preset amount are weighed into individual digesters of which there are six-42 ft. high, 11 ft. in diameter, unlined with a capacity of 3720 cu. ft. Each digester produces 10 1/3 tons of brown stock per cook.

Primarily caustic soda, the cooking solution (consisting of witte and black liquors measured independently in calibrated tanks and thoroughly blended to