

Saws used :—

Log-edger : Tapered saws, centre 6G, rim 13G.

Log-splitter, tapered saw, centre 6G, rim 13G.

Recutter : tapered saw, centre 10G, rim 13G.

No water was used on the saws and all sawdust was removed by fan and blower system.

In conjunction with this mill was a planing department and box-factory, progressive-type kilns.

Slabs (free of bark) were sold at 35 kroner =  $35 \times 1s. 4d. = 46s. 8d.$  per fathom = 2.4 cubic metres.

Other plants visited in Norway were of a very small type consisting of either

One small flat-top bench with fence ; or

Two small flat-top benches on a common base, and about 2 ft. apart, working to a double-ended saw spindle, one saw to each bench.

Other plants consisted of small flat-top with fence, followed by a 13G circular resaw working on the round-and-round principle, and producing 10,000 ft. to 12,000 ft. per day with eight to ten men.

It will be noted that of the three mills detailed in Norway :—

(a) *Nosted Bruk* was cutting out the square of the small end with no wane, and chipping the balance.

(b) *Berger Langmoen* was cutting out to wane edge on the principal machines, and was recovering from slabs in a separate box-shook department, effecting complete utilization and at the same time using any balance for chips.

(c) *Skidsmo Og Egsberg Bruk* was cutting out to wane edge on the principal machines, and resawing slabs on the two resaws, to effect maximum utilization down to  $3 \times \frac{1}{2}$ , and then selling balance for chips.

Each of these mills had efficient resawing and planing units, and by far the greater part of sale were made in the form of dressed timber and box-shooks.

At the first two mills production was air-seasoned, and at the third mill it was kiln-dried in progressive-type kilns.

When seasoned, the timber was brought in and passed over resawing units, of which the following would be typical :—

Timber handled, say,  $6 \times 3$ .

This would be unloaded on to trim chains, and square ended and docked. Two saws : 2 men.

From this it was elevated to a belt, automatically put on edge and proceeded to first resaw.

A divider behind the resaw dropped the 1 in. piece off on to a further belt running parallel, and the  $6 \times 2$  proceeded to the second saw.

The two pieces dropped off on either side and were traversed to the outfeed belt. From this they were side traversed to planer.

Behind the planer were two outfeed belts on to which the dressed timber was graded. An attempt to sketch this is contained on the following page.

It was claimed by the operators of these mills that they recovered a greater percentage of the logs than did the frame mills sawing to 1 in. stock, and that they did it cheaper and with less capital outlay.

They claimed that the handling costs and drying costs on the 2 in.,  $2\frac{1}{2}$  in., and 3 in. timber was cheaper than 1 in. stock with less waste and shrinkage. They claimed also that with fine-gauge resaws a 3 in. flitch could be reduced to three 1 in. boards for planing and still finish the required thickness from the planer, thus effecting a saving in over-all recovery.