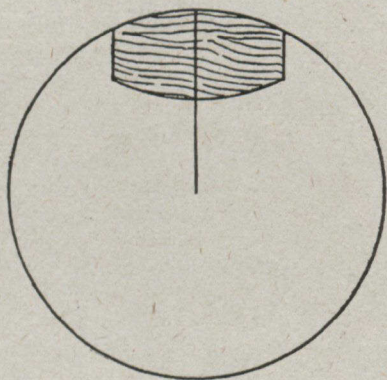


dry place, they will still season. The old-time coopers found that the heads shrank on the outside to some extent, and consequently, if they were left open in the centre, a fairly tight head was the result when they came to use them.

In these days, when heading is all supposed to be kiln-dried, and should be kiln-dried, it should be jointed with a perfectly straight joint.

To get a good joint on heading with a wheel jointer, it should always be jointed with the grain, otherwise a small joint will not be made. Where a saw jointer is used, the best saw-joint is undoubtedly made with a large saw, dropped on the centre of the board. Some coopers prefer a saw-joint, others a wheel joint, but it makes no difference, so far as a perfect head is concerned, provided the board, when being jointed, is kept perfectly flat and at right angles to the wheel or the saw, and all wane taken off.



The principal faults in heading joints are; Leaving wane on the edges of the centres or inside of the cants; jointing against the grain, causing the heading to tear, and not jointing the wane off defective timber.

There is generally a good deal more trouble caused to the jointing of the heading after it has left the factory than at the factory on account of the heading being stored in unsuitable places, and if kiln-dried heading is stored in a place where it is exposed to damp it will swell and shrink according to the weather, and the joint is bound to go off.

Provided manufacturers will see that the heading is jointed on the square, perfectly straight, and the coopers take care of the heading, after they receive it, when shipped direct from the factory, there is no reason why a perfect joint should not be on the heading at all times.

COOPERAGE STOCK MARKET.

Toronto, June 24, 1908.

The weather through the month has been very favorable for seasoning cooperage stock, and the mills are now beginning to catch up on their orders, and coopers are getting better supplied with cooperage stock than they have been for some time.

The weather has been favorable to the crops; the danger to the apple crop is now practically over, and every indication is that there will be a good, fair apple crop throughout the whole of Canada where apples are raised.

The wheat crop, both in Ontario and in the West, promises to be the best harvest for years, which is especially true in the case of Ontario, the wheat throughout the whole district promising the best crop for years, so that if nothing unforeseen happens between now and our harvests there will

be more Ontario wheat on the market than there has been for a long time.

The demand for apple barrel stock is now exceptionally good for this season of the year. Most of the small coopers throughout the country feel safe in ordering at least one car of apple barrel stock for prompt shipment, and larger manufacturers buying, both for prompt and future delivery.

The general trade throughout the country is also very good. While there is not as much cooperage stock being used for flour at the present time as usual, this is no doubt caused by the great fluctuations in the wheat market, but as soon as the market settles down there will be a big run of flour in wood.

The sugar trade is using more barrels this year than it has done for two or three years past, and indications are that more sugar will go into wood this year than for some time.

Prices show an upward tendency, especially hoops and heading. There are not a great number of mills in Canada who have the proper equipment to kiln dry heading, and, as there is not only a heavy local consumption, but also a large export demand for Canadian heading, the mills with kilns are running to their full capacity and marketing their products at remunerative prices.

In all probability there will be an advance on prices on all lines by the 1st of July, as most mills are now pretty well cut out of logs put in during the winter, and will have to truck, which, of course, makes the logs cost considerably more. We, therefore, look for a considerable advance in all kinds of cooperage stock about the 1st of July.

J. S. Emerson, of Vancouver, has disposed of a half interest in his lumber business for about \$250,000 to P. D. Roe and Robert Abernethy. The property includes the Emerson cedar mill at Port Moody, the four tugs, "Erin," "Shamrock," "Evergreen," and "Afton," and the logging business scattered at various points along the coast between Vancouver and Broughton Island. It is the intention of Messrs. Emerson, Roe & Abernethy to be immediately incorporated as the Emerson Lumber Co., Limited. Incidental to the large sale was the disposal of the McRae mill at North Vancouver by Mr. Emerson. The purchaser was D. W. Grant, with whom are associated several others. The new owners have taken over the plant and will proceed to erect a small shingle mill. The new concern will be incorporated immediately as the North Vancouver Lumber Co., Limited.

Some one has written: "A little drop of oil, a little bit of care, saves a lot of toil, avoids a lot of wear," which, although it barely escapes being a platitude, is nevertheless worth remembering, especially with machines designed in the old way. The modern method of designing machinery, however, should be that of making each bearing self-lubricating so far as possible. The idea that all machines must necessarily require a lot of personal attention in the matter of oiling every bearing is nonsensical. There is no more reason why each bearing on high grade machinery, at least, should require personal attention than that a footbridge should be built without railings. Let the machine tend to its own lubrication, and we make it much more efficient and durable. The constant need of attention to lubrication becomes a drudgery and is a waste of useful effort, which might better be employed in increasing the output.—Machinery.