

before the enormous demand from these cities, and also from America, which will probably follow suit. Mr. Seddon, it is true, correctly states the immediate beneficial effect of export to the New Zealand sawmillers; but how long would the advantage continue?

Unless a better system of regulating the allotment of timber areas to sawmillers were adopted, new mills would be started by the score on the least increase in prices, and, without Government supervision and direction, the bushes would be rushed by speculators, and the evils of the present cut-throat tactics would be perpetuated and intensified. The Government must go further than merely encouraging an export trade. It must conserve and maintain the means to meet such a trade by restricting the number of mills in each district, and by insisting that no timber is cut before being properly matured. The right to cut timber should be let by tender, and provision should be made for regular and continuous supply by allotting to each mill such areas of forest-lands as would enable the owner, by cutting out in rotation blocks, to keep it going steadily for a given number of years, say for the lifetime of a rimu, white-pine, or kauri, as the case may be. The timber should be cut not under a specified diameter, at, say, 2ft. from the ground. When these and other precautionary measures, which have already been indicated, have been adopted, and not before, it will be time enough to develop extensive exportation of timber.

It is no use blinking the fact that the New Zealand forests are not now in a position to meet the demands of an extensive and continuous export trade. How long would it take to cut out the Pelorus Valley? Mr. Brownlee says thirty years. How long would it take to regenerate the same forest? I say from fifty to eighty years. The Westland sawmillers, again, give thirty to forty years, with present demand, as the period within which supplies in their districts will be exhausted; while in Southland, especially in places accessible by rail, the outlook is gloomy in the extreme. If therefore, a large export trade were established, it would mean that with such output over and above the local demand the forests would be exhausted probably in half the time quoted above. Of course, I do not wish it to be inferred that there is no natural regeneration in progress. In the virgin native bush such regeneration is always going on, but the growth is *very slow*. On such areas as have been operated upon by sawmillers, the process of regeneration is practically stopped by the removal of overhead cover or shade, by the cutting of undersized timber, and by fire. Under these circumstances, it is idle to expect in New Zealand, as we can do in Australia, a rapid recuperation of the forests. In Australia the trees reach maturity in from thirty-five to forty years. In New Zealand they must take twice as long, in my opinion.

It is a trite saying that "a little knowledge is a dangerous thing," and the danger was exemplified in the discussion by the Conference of the question of seasoning, the two or three gentlemen who expressed views in favour of seasoning coming in for rather rough handling; while the Conference, in its wisdom, decided that the question of summer or winter cutting is sheer nonsense and humbug. Yet, seeing that seasoning, and the proper preparation of timber for the market, is the rule in all great timber-producing centres of the world, and that many millions of pounds have been spent in perfecting apparatus and materials used in these processes, the millers and timber merchants of these nations must be considered (if the Conference is right) no less than fools to have spent so much time, intellect, and money, in seeing that timber is only cut when the sap is quiescent and is properly seasoned before being placed on the market. This construction, at all events, was put upon the decision of the Conference with reference to this important subject by a few of the practical men present. Now, if the systems of seasoning and cutting in proper season are wrong or unnecessary, then local mills can afford to go on cutting sappy 6 in., 8 in., or 10 in. diameter trees, as is done, I am informed, in Seaward Bush, near Invercargill, and in other places, with impunity. The opinion of cabinetmakers with regard to such timber would be valuable, or the opinion of householders who find their houses tumbling about their ears. This easy, slipshod sort of philosophy may go down with the local buyer; but try the export trade in London, and the keen, sharp timber-buyer—the man who "spots" a fault with his eyes shut. These are the men who rule with an iron hand the destinies of the huge cargoes of timber which pour into London docks by shiploads. Let New Zealand send a few cargoes of sappy, badly-cut timber, and note the result. The competition with other countries is so keen that unless timber is put into the London markets in an absolutely first-class condition it stands no show whatever—careless cutting on the bench or unevenness of the gauge is a serious drawback to the timber, and makes all the difference in its classification price.

The sawmiller of New Zealand, with all his knowledge of bush craft and machinery best adapted to his requirements, would do well to note the teachings of science—let him even remember that those teachings are practically the result of hundreds of years of observation, and therefore not the opinion of a single expert. The time is not far distant when the seasoning of timber and the cutting of mature trees only will have to be faced by the miller, and the sooner he looks around and faces the inevitable the better able will he be to withstand the shock of such innovation when it comes. The question as to how this shall be brought about is one for future consideration. The numerous methods in use are far from being perfect, and many have proved harmful. In Tasmania the mill boards are placed on end, with spaces to let the wind pass through; these boards dry rapidly, as the sap has a natural tendency to run down the wood channels in the tissue, and, so to speak, drain naturally. In New Zealand the practice is to place the boards flat. The sap has thus a tendency, where boards are close together, to ferment and cause discolouration. In Victoria the Rieser process has been tried at Wandong. This is a process by which the sap is driven out of the wood by steam-pipes—i.e., dry-air; but this process causes brittle ends, and consequent loss of strength. Creosoting seems to be the favourite method in the United Kingdom with soft woods. The experiences of Australasia in the matter of seasoning are few, and as yet uncertain.

In connection with the bad milling commented upon by Mr. Napp, it is to be hoped that his words of warning did not fall upon inattentive ears. This carelessness at the bench is common all over the colonies, and the manner in which the local timber is placed in the timber-yards of the