in short time aeroplane factories were using it. The development of the plywood industry kept pace with that of the aeroplane. It is questionable if plywood could have been the sound product it is to-day but for the intense research work in the early days of the last war.

Serious difficulties arose that in spite of the merits of the material could not be overcome. Plane construction required that flat pressed plywood be steamed to "compound curvature." A tendency for the material to return to its original pressed condition at the time could not be overcome satisfactorily. With changes in temperature or humidity the plane was liable to alter shape or to wrinkle. An aeroplane that changed shape would not do. Manufacturers turned to aluminium. For fifteen years little was heard of plywood planes. Now they have zoomed and soared into the news again.

New Zealand has three factories. A *Korero* representative went to look at one in Auckland. It can produce 1,000,000 square feet of plywood a month, it has more orders than it can possibly fill. This factory was noisy, steaming hot, at times the smell was rather strong, but there was much to see, all of it interesting.

Cut 'em up, cook 'em up, slice 'em up, dry 'em up, stick 'em up. That's the recipe. But there's more to it than that.

Giant tree-trunks wriggle along a creeper-track from the railway siding to be sliced into the required lengths by a saw which rips through the huge girths. It's as easy as a bread knife cutting through a loaf—and the sawdust makes a lot of crumbs. Rimu and matai trunks from National Park and Rotorua are used mostly; they have been found suitable and they are the most readily available.

Cooking the logs comes next. To soften the wood for the cutter the pieces of tree are swung with a huge winch into pots to be left in water (of 150 degrees temperature) for anything between twelve and twenty hours, depending on the size.

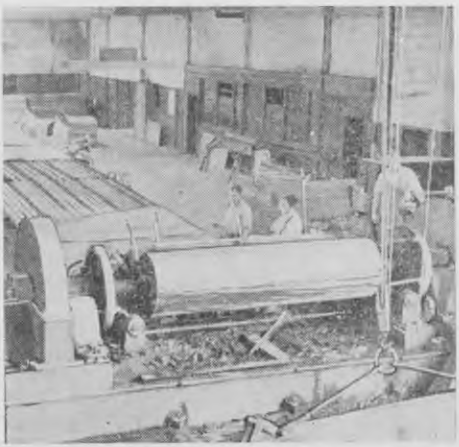
Hot and steaming, cooked to a turn, the logs are now swung over to the rotary cutter; they call it a lathe and it works on the same principle. After the bark has been removed, the log roughly rounded, it is fitted between two shafts in the way a block of wood or metal is fitted into a lathe. A push of a button, the log starts to turn, faster and faster; slowly it edges across the 8 ft. knife, razor-sharp.

It's strange to watch, the lack of effort is hard to understand. A wide ribbon of wood peels through the knife from the turning log along a flat tray. This ribbon is as wide as the log is long, about $\frac{1}{8}$ in. thick; it comes through continuously. With this operation there are none of the flying chips or sawdust usual with woodcutting; for all the effort there is the knife might be cutting cheese. A comparison is the unwinding of a roll of carpet over a smooth floor.

The whole process is as easy as rolling off a log.

The moisture content of the wood is high, sap froths and bubbles from under the cutting knife. The next process is the drying. Large ovens do the job. The long sheets, clipped to the required lengths on the cutter, are stacked singly on trays which move slowly through one of two giant ovens. The time of drying varies from twenty-five minutes to forty-five minutes in a temperature of between 225 degrees and 280 degrees.

One thousand dive bombers all diving and bombing could not cause more noise, more disturbance, more clenching of teeth and blocking of ears than the machine that trims and glues the edges of the smaller sheets. It rips its way through a large compressed stack with



The rotary cutter.