

PLYWOOD

A KORERO Report

UP in the air in a plywood plane. Down in the ground in a plywood coffin. Across the sea in a plywood ship, eating from a plywood table, your luggage in a plywood suitcase, your beer from a plywood cask, washing in a plywood bathtub, rescued in a plywood lifeboat. Plywood railway carriages, bus bodies, tram-cars. Stairways, furniture, ceilings, floors, pictures; boxes, barrels, chests, reels, baskets, trays—all plywood. It's a handy sort of product.

But in New Zealand it's not as handy, as widely used, as this list of goods might suggest. Not yet. It's made in New Zealand, has been for some time, but only since the war has production been on anything like a big scale. Now there are three companies very busy in the business; the war increased the demand for the product, and it is for the fighting of the war that millions of square feet of the material have been used. One day, though, production will be switched from a military to a civilian basis, and then the list in the first paragraph will probably be as incomplete for New Zealand as it is now for several countries overseas.

Plywood—timber in its latest, most scientific, most economical form—is one of the strongest and most adaptable of materials made by man; it has the natural strength of wood and does away with most of its weaknesses. To make the product, thin layers of wood are glued to each other with the grain of each layer running at right angles to the grain of the next layer.

An examination of the present-day plywood board shows little more than a development of the veneered panel which has been made by craftsmen through the ages. In Egypt of the fifteenth century B.C. veneering was known and highly regarded. Excavations have brought to light furniture built on the plywood principle that has stood the test of centuries; how the wood of those mummy coffins and royal tombs was sawn or cut, how the glue has managed to stick tight



for thousands of years is a mystery that will always confound the modern craftsman.

Through the ages plywood-built furniture has been made. It was fashionable with the Romans. It was fashionable in the eighteenth century—Thomas Chippendale, Thomas Sheraton, and Jean Henry Riesener were three of the world-famous craftsmen to make furniture which has given ample proof of the lasting qualities of this product. But the purpose of their use of the product was chiefly decorative. Few of the old veneer workers realized that thin sheets of wood glued together with the grain at right angles had advantages other than beauty, not the least of which is strength.

In 1884 a small factory built for the manufacture of plywood chair seats was probably the first commercial venture. However, large sheets of plywood did not become available until about 1890 when the rotary-cutter was invented. It was then apparent that by using these sheets and applying this idea of cross-grained construction, material of exceptional size and strength could be built up. Three-ply tea chests were the first result. Commercial three-ply wood on a large scale followed soon afterwards.

The manufacture and use of plywood is a war baby. But not of this war. In the Great War material had to be found for aeroplane manufacture. Plywood was the strongest available for its weight;