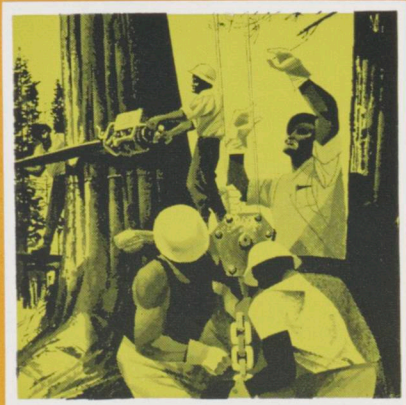


Spring 1966

arrowhead





Cover Illustration:

An artist's impression of logging to highlight the main article of this issue — on the timber industry (pages 11-18). Some artistic licence has been allowed — for instance, our experts comment that the saw-cut should have been much nearer to ground level, but we feel the sketch does convey the atmosphere of our bush and the men who work it.

**Arrowhead
House Magazine
of the
Fletcher Organisation**
produced by the
Public Relations
and
Advertising Division
of
Fletcher Group Services
Private Bag, Auckland
and printed by
Whitcombe and Tombs Ltd.



progress report :

**MARSDEN
POWER STATION**



CONSIDERABLE progress has been made with the building of the £13 million oil-fired power station at Marsden Point, Whangarei. The contract for the 240 mw station was let in the autumn of last year to a new Zealand consortium, Fletcher-Downer-Wilkins & Davies, and the photographs on these pages show the stage of development by the winter of 1966. The first units of the station are due to be ready for service by next winter and the whole job completed by the end of 1967.

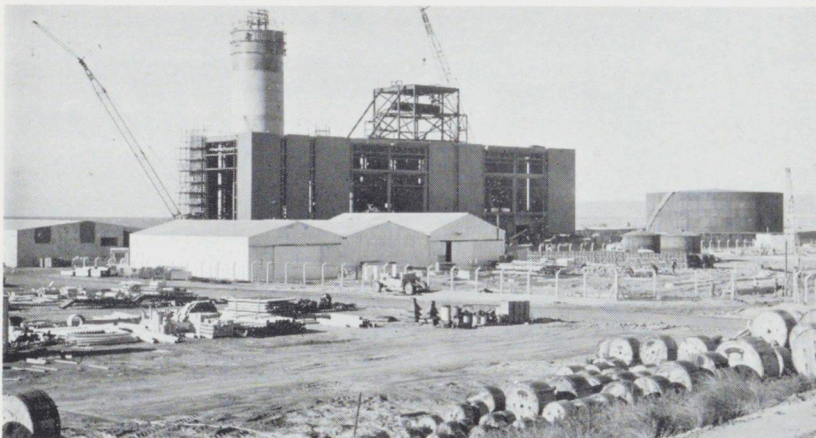
Bechtel Pacific Corporation are the Managers of the contract and Construction Manager for the joint venture is J. G. Smith, Manager of the Civil Engineering Division of Fletcher Construction.

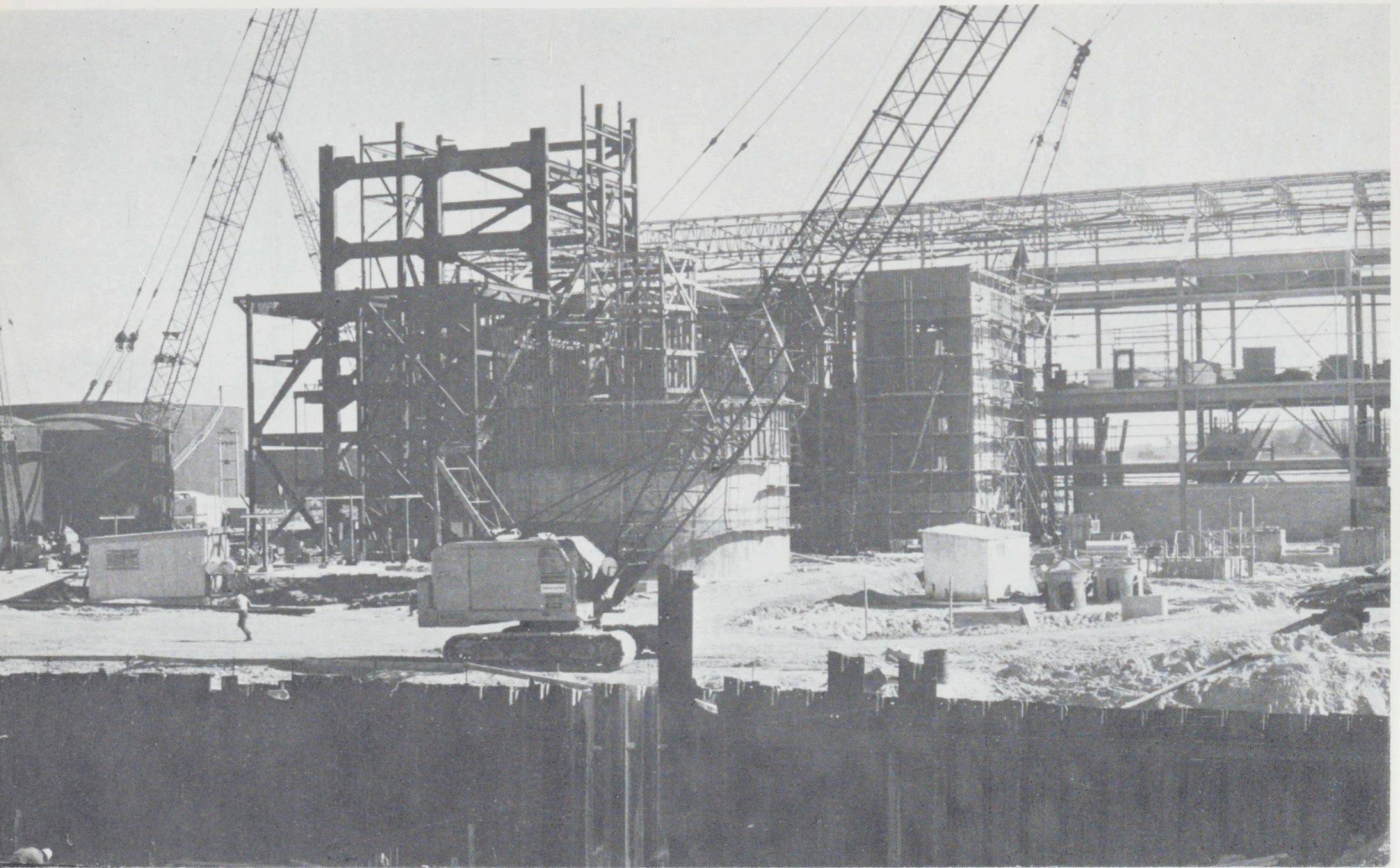
The plant consists of two oil-fired steam generators and two 120 mw non-reheat steam turbinéd generators.

The site area covers 50 acres and plant is so arranged that two similar units could be added later.

Sea water will be used in the condenser circulating cooling water system. Four 4.2 million gallon oil storage tanks will be provided to supply two months' fuel storage for each boiler.

Top Left: The storage tanks of the Marsden Point Refinery built by Bechtel Fletcher Wimpey are visible in the background. **Above:** The steam drum for No. 1 boiler in position 129ft. up. **Left:** A general view.

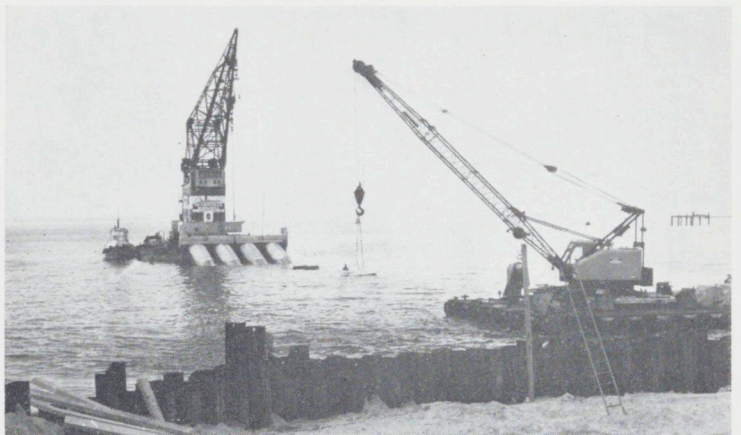




progress report

Above: A General view showing sheet piling and the intake structure. **Left:** The bottom section of the condenser being unloaded at Marsden Point wharf. This unit weighed 56 tons.

Bottom: Rafts laying pipes for the cold water re-circulating system. **Right:** A general view showing progress on the chimney and intake structure.







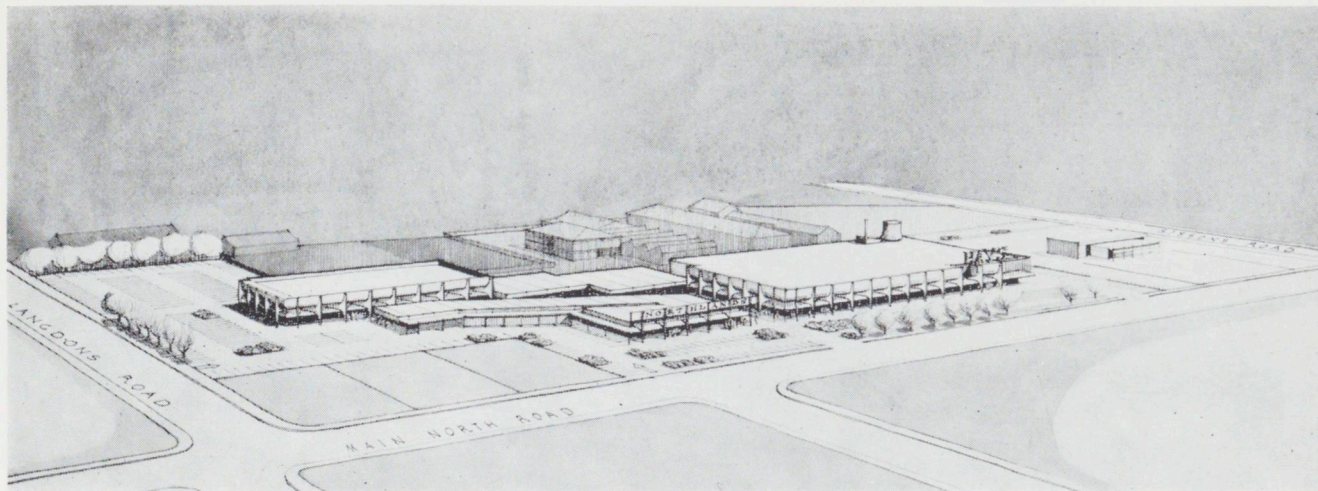
FLEXBOARD

FLEXIBLE BUILDING PANEL

FLETCHER Industries' Durock Division in Christchurch has recently introduced Flexboard, a flexible building panel which can be handled, worked and fixed without breakage. Flexboard is ideal for interior linings and ceilings, base panelling, gable ends and soffits, and many other interior and exterior applications. The flexibility of the board, which is capable of taking curves up to 3ft. 6in. radius if required, possesses obvious advantages for the builder. The board is easily worked with conventional building tools and can be drilled or nailed at the edge of the sheet without chipping. For interior applications Flexboard can be stopped with ordinary plaster and the smooth surface of the board requires no additional treatment prior to painting or papering. An added advantage is a high degree of fire-resistance.

The new product which is available in a wide range of sheet sizes in both $\frac{3}{8}$ in. and $\frac{1}{2}$ in. thicknesses was initially launched on the South Island market where it has met with a good response.

NORTHLANDS



FLETCHER Trust have another big shopping centre project now under way. This time the centre, which approaches Pakuranga in size, is in Papanui, Christchurch. The centre will have the largest suburban departmental store in New Zealand, covering 50,000 sq. ft., and in addition will have more than 30 specialty shops with a total floor area of over 40,000 sq. ft. The main shop will be a departmental store and supermarket to be operated by Hays Limited. There will be free car parking for more than 600 vehicles and a large garage on the site, which covers $8\frac{1}{2}$ acres.

The centre will be in the hub of north-western Christchurch's existing and residential areas and shoppers from most north and western suburbs will be able to drive in and out of the centre without going through main road traffic. It will be possible to enter the centre by way of three roads — Langdons Road, Main North Road, and Sissons Road. Architects for the centre are Warren and Mahoney who were the winners of the Christchurch Town Hall and Civic Centre design contest. The centre is expected to cost approximately £1 million and demolition of the existing buildings on the site began at the end of August.

Hays Limited will open in November, 1967. The other section of the centre will either open at the same time or

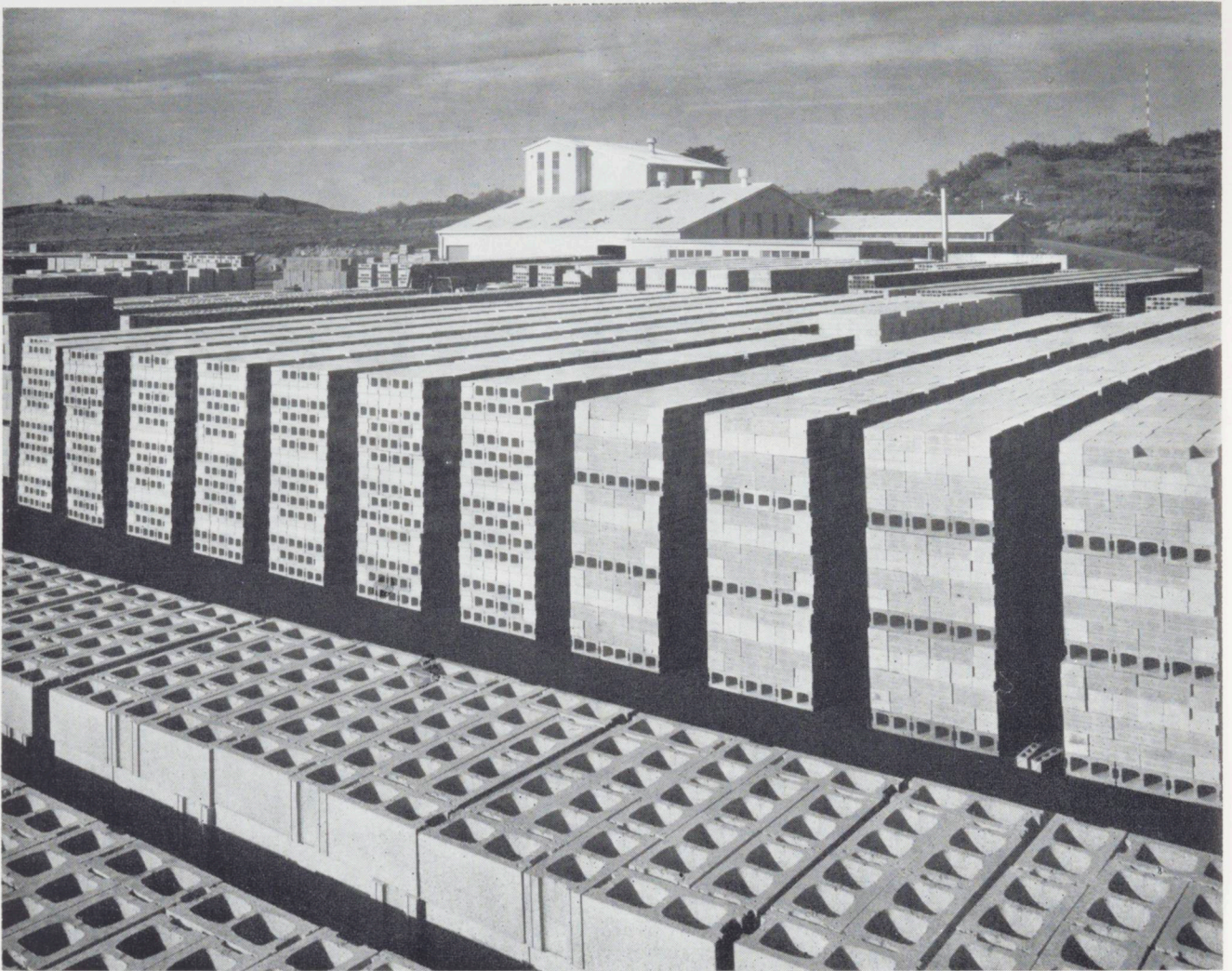
shortly thereafter. The centre will be known as Northlands Shopping Centre.

Northlands is the fourth shopping centre to be developed by Fletcher Trust. The company's major development in this field was the Pakuranga Town Centre which cost over £1 million, has 46 shops, and parking for 1,000 cars. The whole centre was officially opened in September, 1965 with a prior opening of the large supermarket which is one of the major shops in the centre.

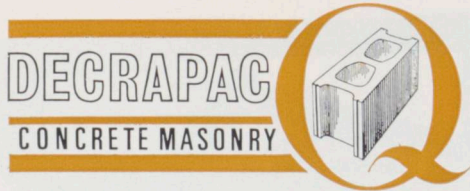
February of last year saw the opening of one of the smaller shopping centres developed by Fletcher Trust. This was the Southdown "wholesale-retail" block consisting of 4 shops and a cafeteria. In October of this year another shopping centre at Nelson, consisting of a large supermarket and eight smaller shops together with parking for 126 cars, will be officially opened. There is also a first floor office area in this project, the approximate cost of which is £200,000. Architects are Burren & Kean of Wellington. Fletcher Construction have been responsible for the building of these three centres.

Another shopping centre is planned for Johnsonville, Wellington. This is planned to have 54,500 sq. ft. of shopping space and 111,000 sq. ft. of malls and parking space.

NEW STANDARDS IN CONCRETE MASONRY



Above: The Concrete Consolidated yard at East Tamaki with the new factory in the background, showing blocks stockpiled prior to the launching of the sales drive.



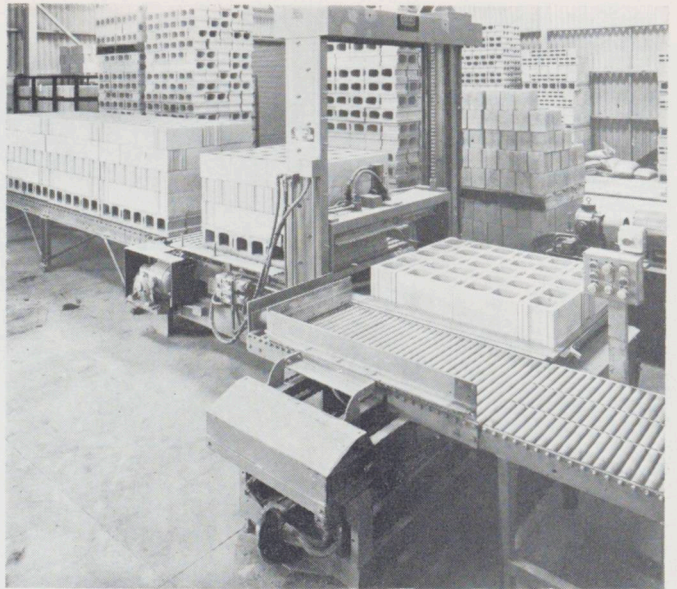
FLETCHER Merchants are now marketing through their own branches and other builders' supply stockists the Decrapac concrete masonry produced by Concrete Consolidated in the new factory at East Tamaki.

Concrete Consolidated originally introduced decorative concrete screen blocks to this market and, in the new plant, although the full range of concrete masonry that was previously available is being made, already new lines to meet new building standards are being supplied and the range will be extended progressively.

Tradesmen are unanimous in their praise of the quality products from this completely automatic plant and specifying authorities welcome the opportunity to design in concrete masonry which meets the exacting standards they expect for builders and their clients.

All this is made possible by the high degree of automation and mechanisation in the East Tamaki plant which is the most modern in the Southern Hemisphere. The latest machinery, careful laboratory control and extensive development work combine to ensure that Decrapac concrete masonry meets the highest standards demanded by the building industry — standards that are necessary for the growth of concrete masonry as a major building material.

Concrete masonry is particularly important to the building industry in New Zealand today because it is produced from local raw materials. Thus Fletcher Merchants, with the addition of Decrapac concrete masonry to their range, are making a further contribution to better building and the more efficient use of materials.



The cubing machine. This machine plays a highly important role in the manufacture of the blocks in that it eliminates handling which would otherwise be necessary. This, in turn, means that chipping of the blocks is reduced to minimum.



Above: Sales Director, R. A. L. McLean, in discussion with Production Director, K. R. Simmonds. **Below:** Boom gear for loading and unloading ensures mechanical handling right to the site.





GANG-NAIL TRUSSES

GREATER flexibility in home design is possible with the introduction to New Zealand of Gang-Nail trusses, of which Fletcher Timber are licensed fabricators. With the use of these trusses no interior partitions are load bearing and may therefore be incorporated anywhere within the structure, simplifying alterations and interior rearrangements. Long floor spans allow uninterrupted basement areas.

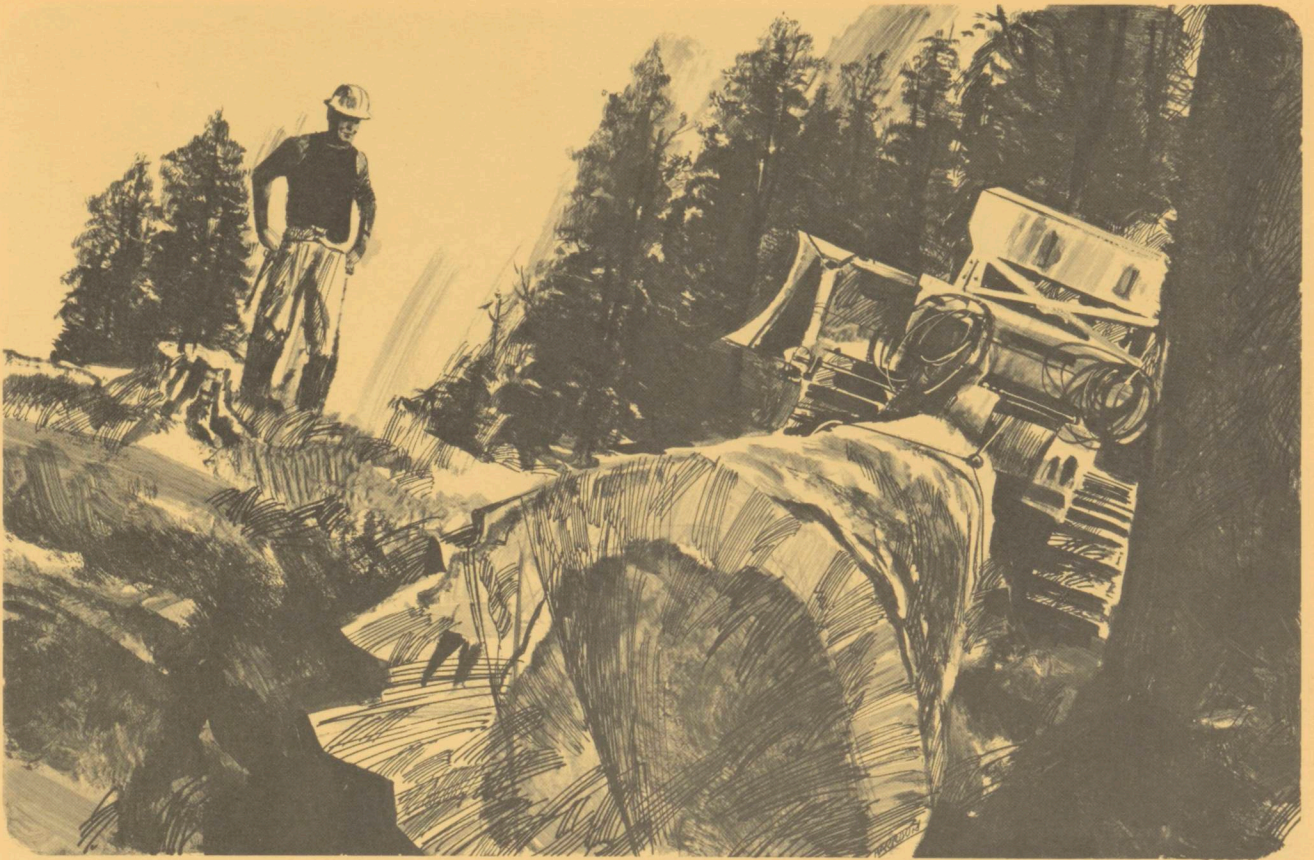
The term Gang-Nail is the registered trade name for a series of toothed plate metal connectors used in the production of prefabricated timber construction members such as roof trusses, girder trusses, wall frame sections and joists. All members produced by the Gang-Nail method are fabricated with precision equipment and jigs of the highest accuracy. Gang-Nails are pressed into the timber members by hydraulic equipment to correct pre-determined pressures, thus ensuring perfect joints. All units are designed according to established engineering principals using conservative allowable stresses for both timber and the Gang-Nails themselves.

The principal advantages of the Gang-Nail system other than the increased flexibility of interior layout are reductions in total building cost, reduced labour content and framing time, greater strength and accuracy and a

saving in timber. The fact that the building is more quickly covered in reduces interruption due to wet weather and allows flooring to be laid under cover and prior to the erection of interior partitions.

The illustrations on this page show: *Above* — Gang-Nail truss fabrication at Fletcher Timber's Processing Division at Ngongotaha. At the rear of the set out table is the press. Gang-Nails are pressed in from both sides simultaneously. The illustration *below* shows a load of type A trusses with built-in soffit brackets. The fifteen members on the truck are a complete house lot.





THE TIMBER INDUSTRY

WORLD demand for wood in its various forms is growing rapidly. Even in countries where consumption per head is falling, total demand is increasing because of population growth. According to a survey by the United Nations Food and Agricultural Organisation (FAO) the world will need nearly 50 per cent more wood and wood products in 1975 than it did in 1961.

This trend is of vital importance for New Zealand. Firstly, because New Zealand, for its population size, uses a tremendous volume of wood and wood products; secondly, because in our need to increase exports the forest industries present great opportunities for development.

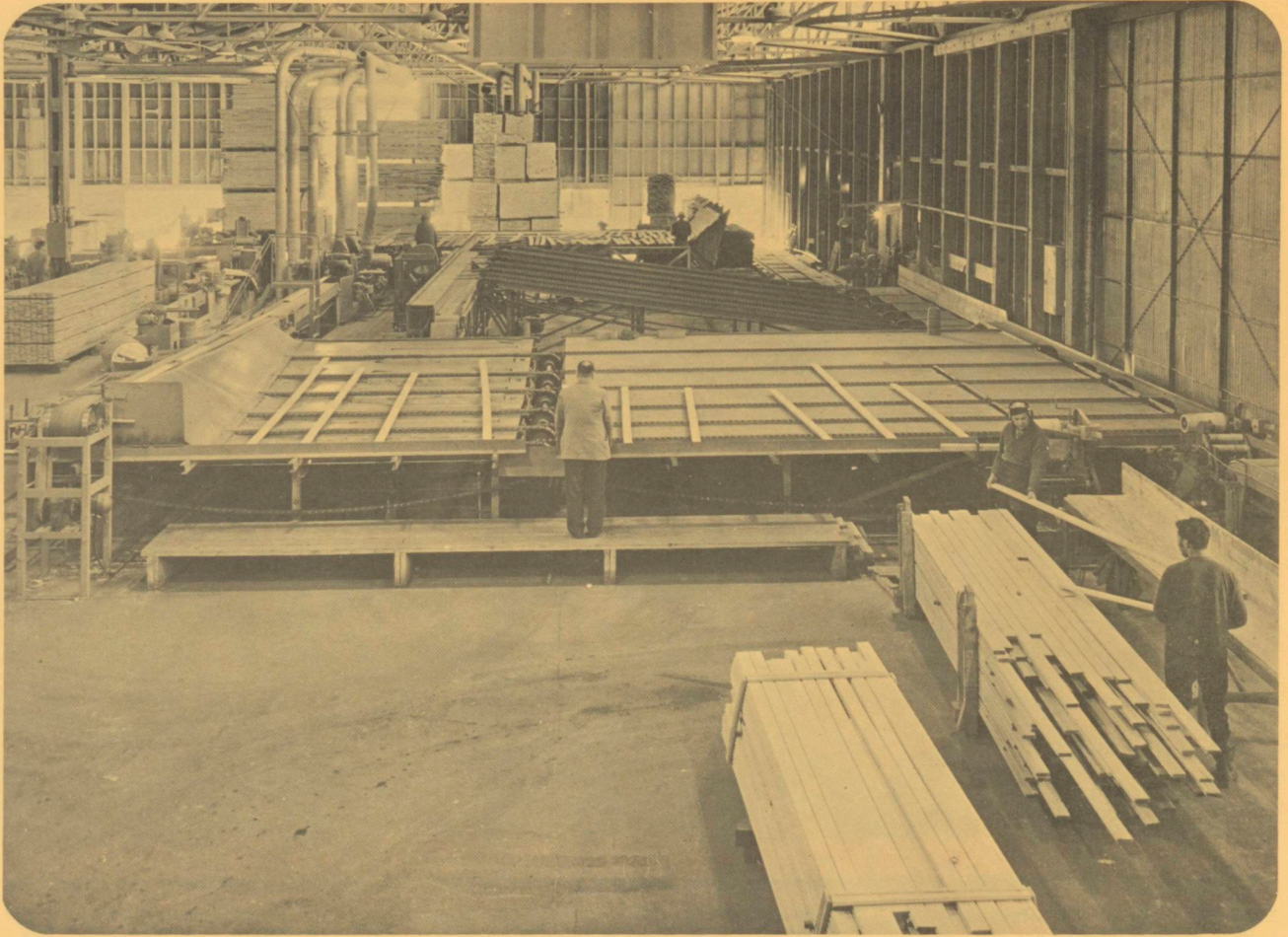
The FAO study points out that even the large resources of Canada and the U.S.S.R. are not limitless and it suggests that other countries may come into prominence as timber suppliers by developing man-made forests. Here New Zealand has a tremendous advantage in that it can grow coniferous timber at five to ten times the rate possible in the Northern Hemisphere.

On the other hand, local demand is high and growing. We are the world's largest consumers per head of sawn timber; our total plywood consumption has doubled in the last 15 years; the demand for particle board has grown considerably and we are currently using about 90 lbs. per head each year of products based on pulp and paper.

To meet the local demand and at the same time to compete successfully on world markets, New Zealand must increase both the efficient utilisation of existing resources and increase plantings at a rate, it is officially estimated, in excess of 25,000 acres a year.

How and where do Fletchers fit into the New Zealand timber story?

Fletchers own or have cutting rights to large areas of forest; they are loggers, millers and processors of timber, and they are timber merchants; they manufacture plywood and particle board and other wood products; they have substantial investments in two pulp and paper companies — Tasman Pulp and Paper and N.Z. Paper Mills.



NGONGOTAHA PROCESSING PLANT

FLETCHER Timber's central processing plant at Ngongotaha, near Rotorua, processes native and radiata timbers from the company's mills at Edgecumbe, Ruatahuna, Tatara-a-kina, Taupo, Turangi, and Wiltstown. A small mill at the Ngongotaha plant mills timber from small pockets remaining in the Rotorua area.

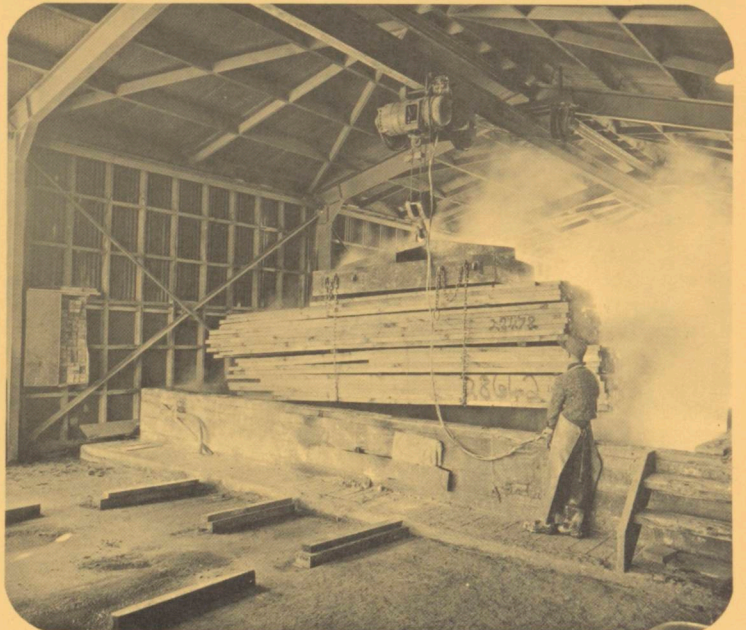
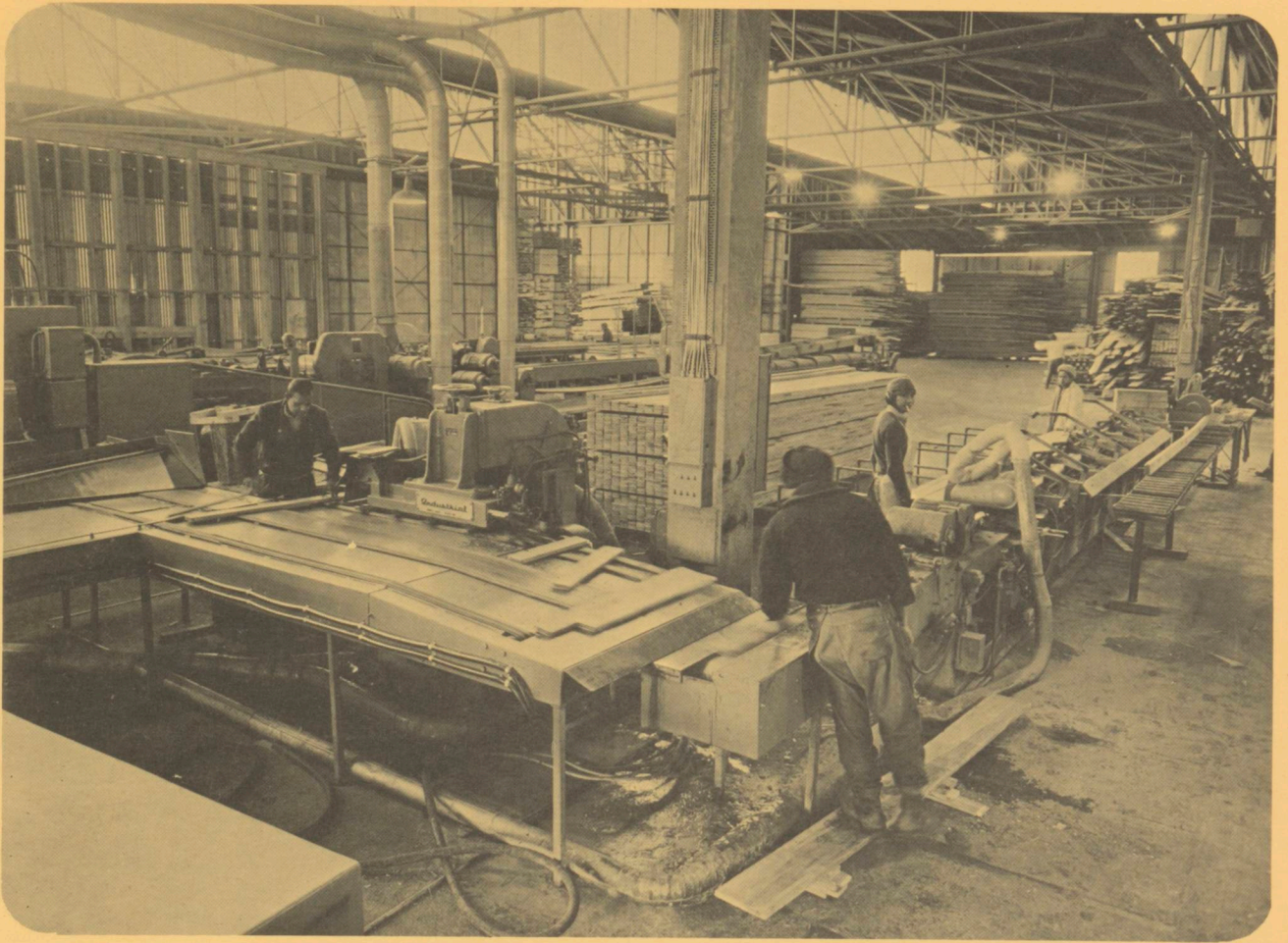
The plant covers an area of more than 18 acres and buildings, totalling 82,000 sq. ft., house pressure and diffusion treatment plants, boiler installation, dry kilns, planer, precut, gauging and gangnail truss mills, a wood preparation section and a mosaic parquetry factory.

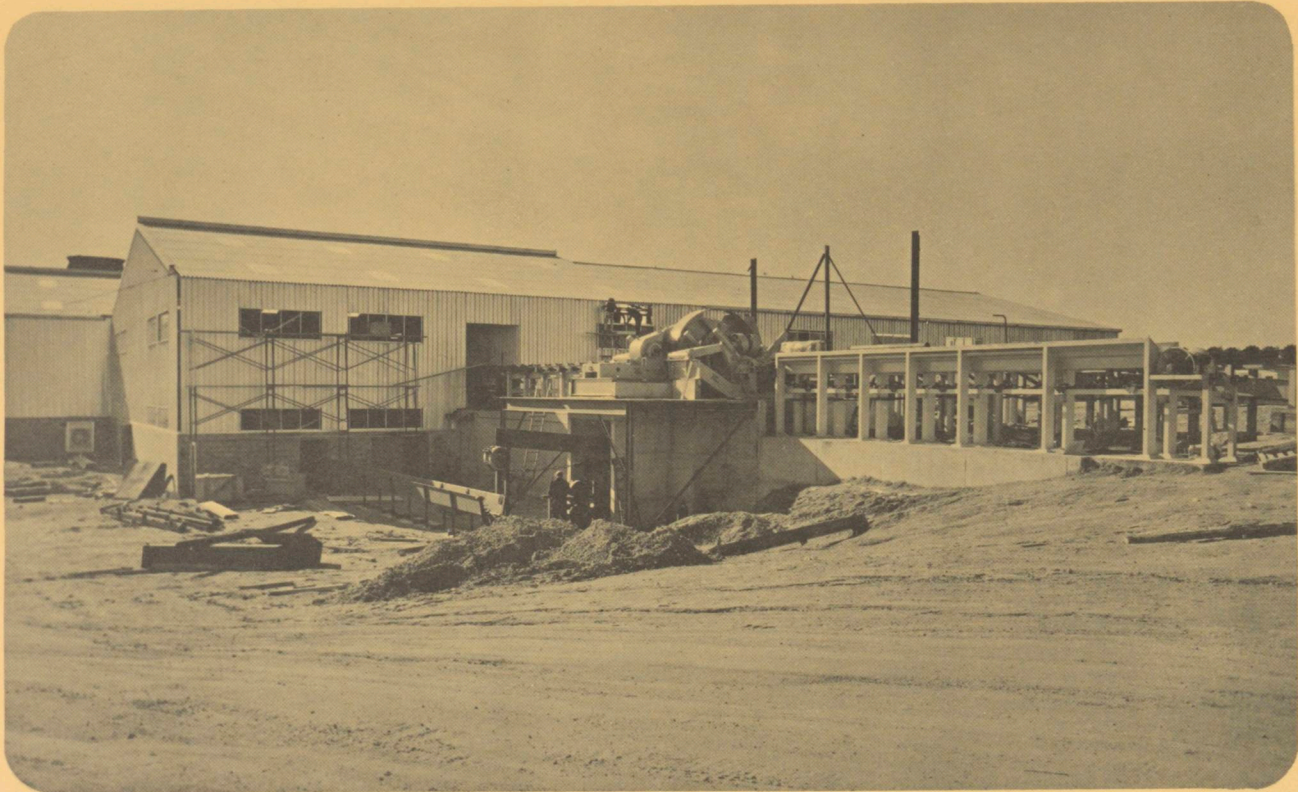
The plant has an output of 21 million board feet of treated timber per annum, plus 28 million board feet of gauged and dressed stock and 11 million lineal feet of mouldings of various profiles. Over 2,200 H.P. is connected and 140 men are employed in this section of the processing division.

The latest plant is utilized and includes a Tri-State fingerjointing machine for the recovery of indigenous shorts and exotic clears, a Stetson-Ross model 6-10-A1 matcher with a feed speed of up to 350 f.p.m., 6 Moore dry kilns and a new type of predrier of 40,000 board feet capacity designed by the company's engineer, H. G. Bellamy.

Further facilities are planned to produce sections by glue lamination and when fully developed this plant will produce a very wide range of timber products to service the building industry.

Above — Looking down on the out-feed end of the Stetson Ross planer. Facing page top — The Tri-State finger-jointing machine. Bottom left — The Governor General, during a recent visit to the plant. Bottom right — The boron treatment plant.





TAUPO EXOTIC SAWMILL

THIS modern bandsaw mill is now operating and is capable of producing 19 million board feet on a single shift. At a later stage this mill will operate on a double-shift and will produce 38 million board feet.

The overall mill design was carried out by Fletcher Timber with A. N. Carter as Design Engineer and D. McPherson, of Auckland (formerly New Zealand Forest Service), was engaged as a consultant to assist the project.

The detailed design of the equipment and of the building was carried out by Fletcher Group Services and the mill was constructed by Fletcher Construction with J. Hall as the Project Manager, and H. van Roon as Foreman.

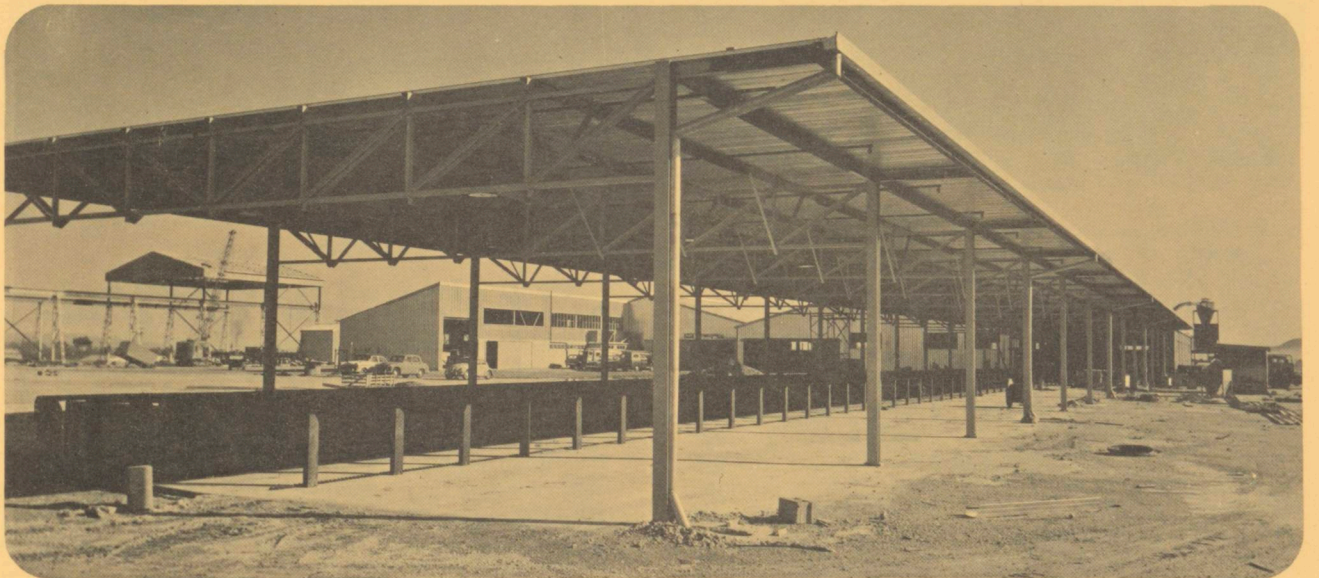
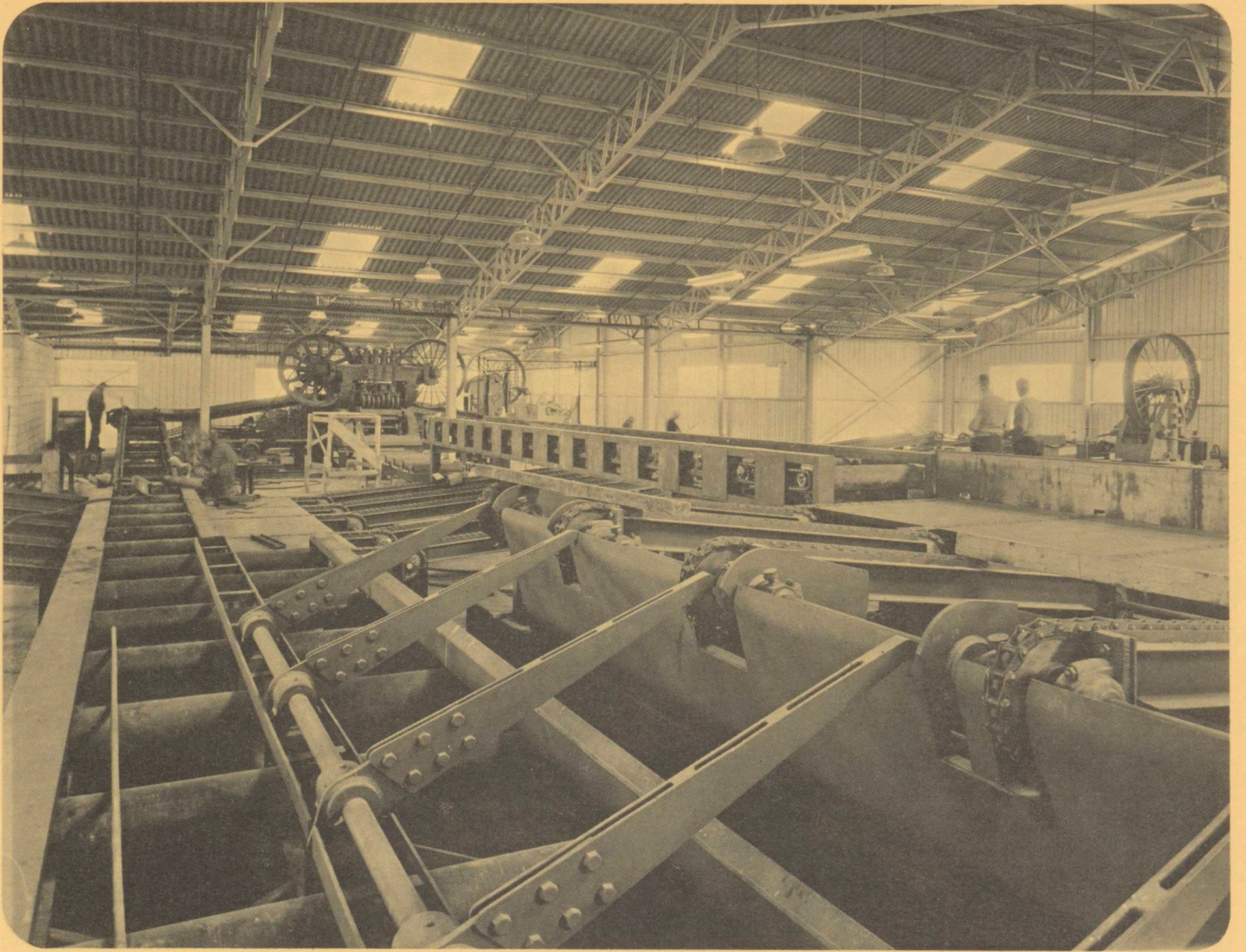
Special features in the design of the mill, which is one of the first sawmills to install a chipper, are the mechanical debarking facilities to allow for the production of clean chips for sale to the pulp mills, and the spacing of the production equipment to enable long lengths of timber to be produced in the normal line of production. The sale of chips will be a major step forward in the complete utilisation of the log, and the incinerator erected near the sawmill will only have sawdust and bark to burn and not large quantities of

timber slabs as in the past.

The equipment in the mill incorporates the latest designs from overseas and items of plant have been purchased from Canada, U.S.A., United Kingdom, Japan and Australia, as well as New Zealand. Once the mill has reached full production, exports to Australia will be developed, this being the first step in a long-term programme of reducing the company's dependence on the New Zealand market.

The mill will employ 50 men in the milling and yarding operations. In addition, at least 20 men will be in the logging operations. Most of the timber sold in New Zealand will be sent to the Auckland market, but before it reaches its destination, it will in the early stages have been processed at Fletcher Timber's Ngongotaha plant.

Above — The main mill building with the de-barker in the foreground. Top right — a general view of the operating floor. Bottom right — A general view with the sorting table in the foreground. In the background are the log gantry (far left) and the workshop and amenities to the left of the main mill building.



The article which follows concerns only Fletchers' logging, milling and processing activities and explains how Fletchers are helping to meet the challenge of changing world conditions.

Although Fletchers did purchase a small bush at Catlins River during World War I, it was not until 1940 that they reached a stage where they could claim to be timber millers. In that year Fletchers bought outright the old Te Puke Sawmills Company from R. H. Phelan and some two or three years later they bought a small block of native bush at Ongaroto near Atiamuri from Scott and McCallum. The Ongaroto purchase followed the establishment of the plywood factory in Auckland and was aimed mainly at supplementing the supply of peeler logs to the factory. The other important demand for timber came from the Residential Construction Company which Fletchers established to build State houses. Furthermore, the joinery factories in Penrose and Wellington needed an uninterrupted supply of clean native timbers for joinery.

The various operations in the timber field were originally under the management of several companies of the Group but were consolidated in 1954 in The Fletcher Timber Company Limited in order to weld the various operations into a rational chain.

At this time construction of the integrated Ngongotaha plant was begun and a large planing and pre-cutting mill and treating plant set up in this central area which drew its supplies from the surrounding bush areas of the Rotorua district. By 1956 Fletcher Timber was producing some 15 million board feet of indigenous timber from six mills — Te Rimu, Ngongotaha, Kinleith, Kopaki, and Ruatahuna in the North Island, and Chaslands in the South Island.

A big step forward in Fletcher Timber activities took place in July, 1961, when Fletchers acquired the whole of the New Zealand assets of The Kauri Timber Company Limited — a £1.5 million purchase. This deal brought to Fletchers two sawmills at Edgcombe, operated by Kauri Sawmills Limited, and in the South Island a majority interest in the mills of Butler Bros. and Stuart & Chapman, and it also gave Fletchers a majority interest in the old-established Waikato company of Ellis and Burnand.

In addition to the sawmills acquired in this purchase, a number of merchandising operations were also bought into the Group. Concurrently, Fletchers had already established their own builders' hardware company which operated from a number of outlets in both areas. With the Kauri acquisition it became obvious that there would have to be more rationalisation of the various interests, and late in 1963 Fletcher Merchants was established in the North Island to carry out the retailing of timber and hardware and Fletcher Timber became solely loggers, millers, processors and wholesalers of timber both to Fletcher Merchants and to other timber merchants. Similarly, in the South Island, Butler Bros. became the merchandising com-

pany and Stuart & Chapman the milling company. In the South Island, however, Stuart & Chapman sell their entire output within the Group.

In 1961 Fletcher Timber joined with the Commonwealth Development Corporation of the United Kingdom and the Fiji forest owners in establishing The Pacific Lumber Company Limited to work the forests near Nadi in Fiji. At the same time Fletchers acquired a substantial interest in a mill on Kadavu Island, south of Suva.

This then, in brief, is the story of Fletchers in timber.

What are the aims and objects of Fletchers' timber companies? First, to ensure a smooth flow of logs or sawn timber to the other companies in the Group. Particularly important is the supply of peeler logs for the plywood factories operated by Fletcher Industries in Auckland, Christchurch and Greymouth.

As New Zealand's indigenous forest resources lessen, from depletion and from conservation, it becomes increasingly difficult to maintain supplies of peelers and of clean sawn timber lines for joinery and other purposes, and this is a reason for Fletchers going into Fiji and exploring other Pacific Islands forests for timbers which are becoming increasingly in short supply in New Zealand.

Equally it is important to husband resources, and by the most efficient logging and milling operations ensure the greatest utilisation of our timber resources.

So that long-term planning can be carried out and large investment can prove economical, Fletchers have acquired their own forests, and elsewhere have sought long-term cutting rights, so that the maximum control over operations can be secured.

In the North Island, where available indigenous timber resources are dwindling rapidly, Fletchers have bought a large exotic forest and have established a new mill to process the timber. In the South Island the Company, in order to achieve maximum utilisation of indigenous timber, have modernised sawmills and established a processing plant.

Just how great these investments in plant alone are can be gauged from these two latest developments, illustrated on these pages.

The new Taupo mill designed to mill the timber from the company's 25,000 acre exotic forest at Tauhara, near Taupo, represents an outlay of some £500,000. Processing of the timber milled here will be carried out at Ngongotaha.

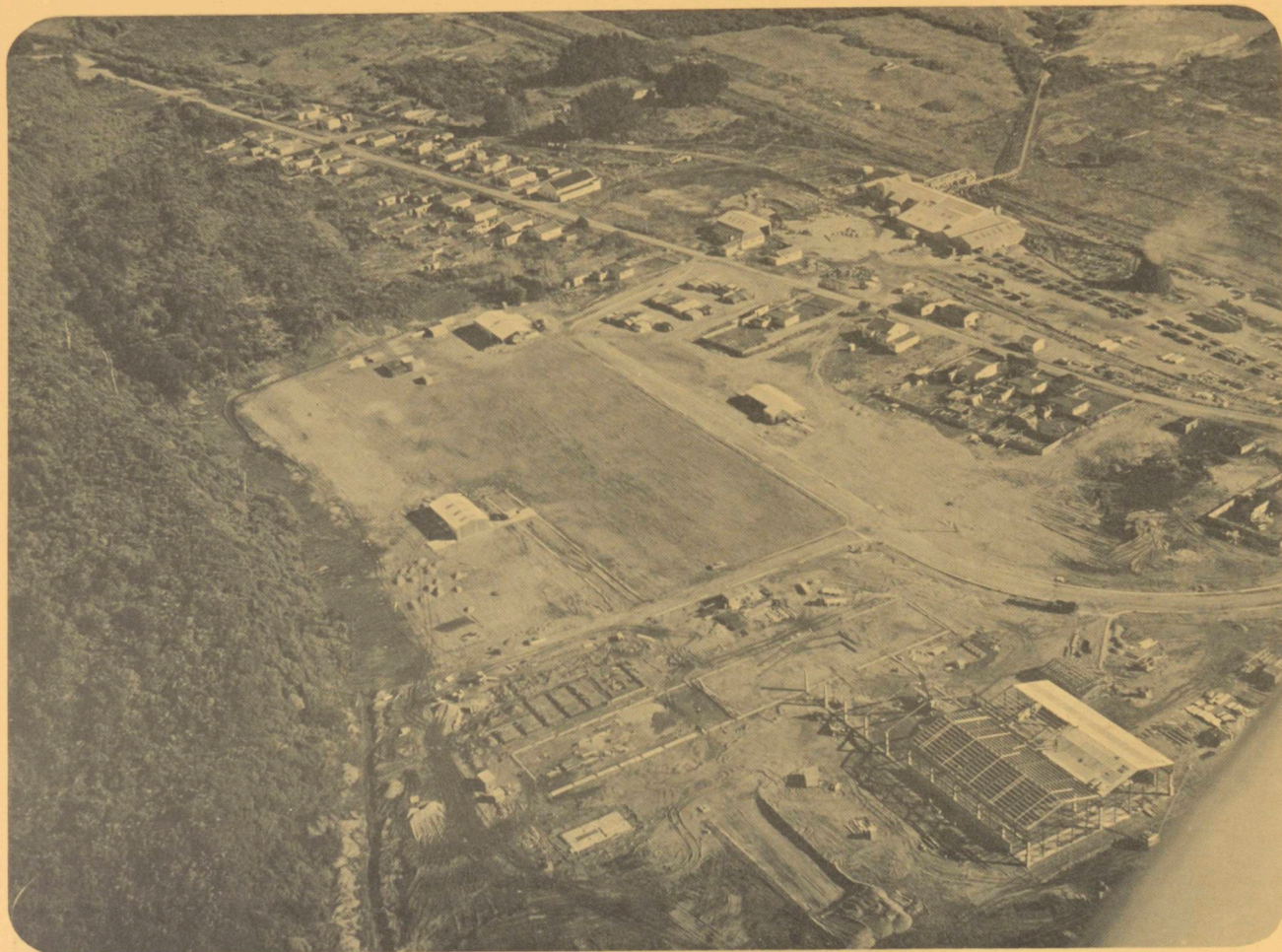
The fully integrated processing plant at Ruatapu in the South Island will call for an investment also of some £500,000. In addition £100,000 is being spent on modernising the sawmills at Ruatapu and Ross. These can now claim to be equal to the best indigenous timber mills in the country.



*A view of the freehold bush in the Arahura Valley, Westland.
Current logging operations are visible in the middle left of
the photograph.*

In the past, cutting licenses were applied on a year-to-year basis, with at best a three-year term, but after the Government Economic Survey of the West Coast it was decided that millers, who were prepared to install machinery, such as bandsaws, to conserve timber, and to process 80% of their output on the West Coast, would be eligible for a long-term-sale which would ensure an initial license for twenty years. Stuart & Chapman applied for, and will be granted, a long-term license.

To obtain the greatest possible amount of sawn timber from the logs available a bandsaw head-rig was installed at the Ross mill, and a band re-saw at the Ruatapu mill. These units proved highly satisfactory and alterations are now being extended with a bandsaw head-rig at Ruatapu, and a bandsaw re-saw at Ross. When these additions are completed the two mills will be almost identical. After investigation it was also decided to erect a processing unit at Ruatapu with a capacity of 10 million board feet per annum.

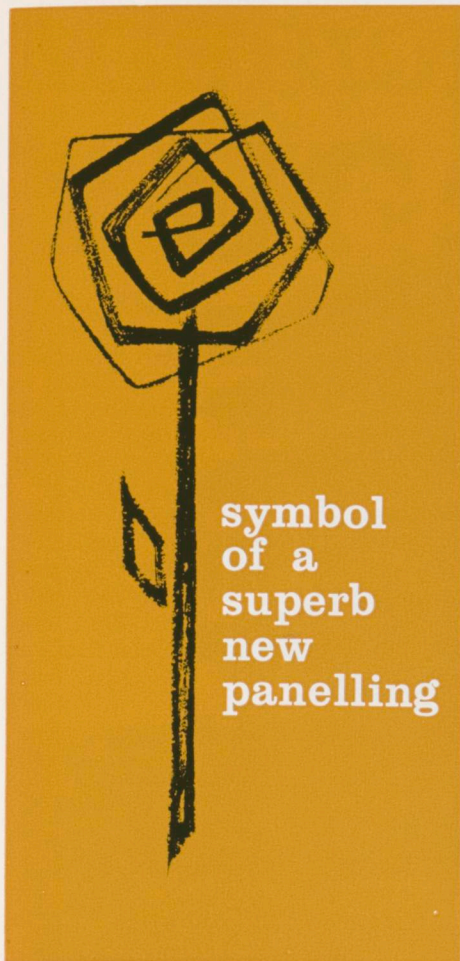


RUATAPU PROCESSING PLANT

FLETCHER Construction are building a timber processing plant at Ruatapu, eight miles from Hokitika. The layout of the plant and the selection of the equipment to be used, has been done by L. M. Gillions (General Manager) and W. H. Noble (Processing Manager) of Stuart & Chapman. This plant is being constructed near the Ruatapu sawmill and is so located that the outputs of Stuart & Chapman's two main sawmills, Ross and Ruatapu, can be delivered to the plant at the minimum cost. The facilities provided in the processing plant will allow for boron treating of green timber, kiln drying, planer gauging, dressing and moulding manufacture. The plant will be capable of processing 80% of the sawn timber produced by the sawmill and on a one shift basis will have a capacity of 10 million board feet. This is in accord with Government policy to encourage maximum processing of West Coast resources on the Coast itself.

This whole unit will occupy an area of 24 acres and when it is in operation will process the timber in such a way that it can be delivered with a minimum of handling by the purchaser.

Above — An aerial view of the Ruatapu plant. The sawmill is to the right of the picture with the processing plant under construction on the left. The partially roofed building in the foreground will be the storage and despatch area. The completed building, middle left, is the filleting section and between these two are the foundations for the kilns, rough-sawn storage and production centre. In the far corner of the cleared area is the boron treatment plant which is already in production.



On the table is a golden yellow rose being used in publicity for Gold Label. The stylised version of the rose in the panel on the left is incorporated in advertising.

THE building industry has an insatiable demand for new materials and Fletcher Industries are helping to see that it gets them.

Experimentation is going on all the time and a constant watch is kept on developments overseas. Many of the experiments die in the laboratories or factories and many of the bright ideas just never make the market-place. But many do.

Last issue we made mention of New Durolite. In this issue we report the marketing of Flexboard, a new product of the Durock factory in Christchurch, and Gold Label, a new prefinished Plyco plywood panelling from Fletcher Industries' Auckland factory.

This is the third of the decorative plywoods to be introduced in the last two years — apart from developments in slice-cut panellings. First was Panel-Line, an interior three-ply panelling with the face grooved to give an effect of random planks. The grooves were factory-painted but the face of the board otherwise had to be finished by the user. This panelling was very reasonably

priced and has found a ready market for domestic applications and use in shops, motels, and restaurants. It was followed last year by Ranch Pattern. This is a five-ply grooved to give a regular plank effect. It has considerable strength as well as beauty, and because it is an exterior ply is used for external applications as well as interior panellings. Some recent applications were shown in the last issue of Arrowhead.

Gold Label, latest, loveliest, and not least expensive of our panellings, is purely an interior panelling, quarter-inch in 8ft. x 3ft. sheets. The face has a shallow pre-painted vee groove to give a random plank effect and the whole sheet is prefinished with low-gloss B.A.L.M. Armourset which highlights the timber without discolouration. The face veneers are of Mangeao or Tawa and have been specially selected for grain figuring and colour. The surface is highly resistant to abrasion, alcohol, moisture and heat.

Gold Label is designed to meet the need of architects and their clients who want the best of natural wood interior panellings.



Southland's largest



A CRITICAL shortage of accommodation for Government departments in Southland was relieved by the opening of the Menzies Building in Invercargill. Eight departments are housed in the new building which was built by Fletcher Construction.

The seven storey structure is Southland's largest office block, with a gross floor area of 73,600 square feet and a net office floor area, excluding passageways and stairways, of 45,000 square feet. Height to the top of the aerial on the roof is 148 feet, making it the highest point in Invercargill.

The building is of curtain wall construction with a central core of reinforced concrete.

The naming of the block as the Menzies Building honours the first superintendent of the province of Southland, Dr J. A. R. Menzies.

Architects were the Ministry of Works. District Architect was W. A. Garth, Resident Architect J. H. Barnes, and Clerk of Works J. Holt.

Fletcher Construction's Contract Supervisor was J. Mulholland, and Foreman D. Proud.

MISSION TO YUGOSLAVIA

TWO senior executives of Fletcher Group Services — K. G. Fraser (Managing Director) and L. E. Heron (Industrial Relations Director) recently visited Yugoslavia to recruit labour, particularly for construction work on the Marsden Power Station. In this article George Fraser tells why Yugoslavia was chosen for the assignment and gives his impression of the country.

The Republic of Yugoslavia is an amalgam of six separate socialist republics with a total population of 19 million. Terrain and climate are almost as varied as those of New Zealand.

We saw most of the main cities and drove through over 1,000 miles of countryside to visit factories, meet public officials at their offices and their homes, and, incidentally, stay at or see some of the finest hotels in the world.

Ours was a business visit to recruit tradesmen not available in New Zealand and though most of our contacts were officials or quasi-officials, we met and spoke to many private individuals either in bent English or distinctly broken Serbo-Croatian — the national language.

The first obvious question that arises is why should there be a surplus of labour in what to the Westerner is a “communist” or “socialist” country?

It is easily answered in general terms. Yugoslavia, in common with many other parts of Eastern Europe, is going through the throes of a New Economic Policy in an endeavour to introduce more competition into the economy and to achieve a balance or a surplus in its overseas funds position. This has meant that some factories have closed down and others have reduced their operations, thus releasing labour.

The export of labour has two functions: first it resolves a temporary problem of unemployment and secondly the “export” of labour in itself generates the earning of hard currency. This factor is much more applicable to Yugoslavs working in Austria, Germany, Sweden and Italy, though, even in New Zealand, the average worker tends to make some regular remittance back home.

Moving into the fields of observation — what does a socialist economy look like close-up to the Western eyes?

It is physically a beautiful country with magnificent buildings both new and old, but having said that, let that aspect be taken for granted and look at mundane things.

Communications

Yugoslavia operates her own overseas airline, flying mainly French Caravelles, serving both the Eastern and Western world. Internally Caravelles are also used but, as in New Zealand ten years ago, the old DC3 and DC4



Dubrovnik. This photograph and the other two illustrating this article are of towns on the Adriatic, from which many of the Yugoslav immigrants have come.

are still the main work-horses.

Main airports are good. Terminals, with one exception, Zagreb, which is being rebuilt, are up to modern standards — comfortable and well designed.

Before the war Yugoslavia relied largely on its rail-road system, as internal roads were poor, if not primitive. Today, major highways link most of the main cities and, for example, it is possible to travel on a four-lane highway from Belgrade to Skopje (about 400 miles) without going through a single city or township. Off the main roads the donkey and wagon are the main means of transport.

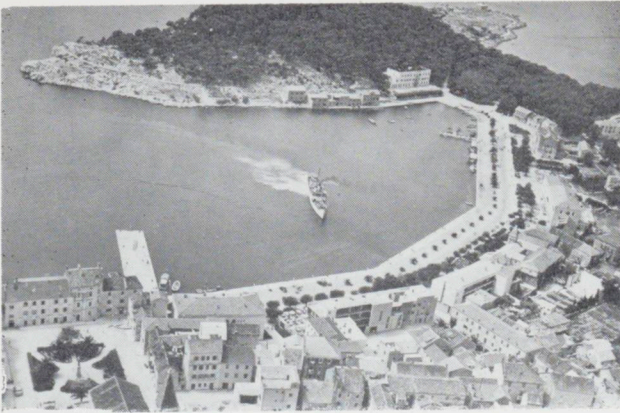
The railway networks appears to be about as extensive as that of New Zealand but the gauge is wider and we saw some huge loads and long strings of carriages.

Good modern buses serve inter-city and the smaller townships, and hundreds of heavy trucks and trailers beat up and down the main arterial routes on journeys as extensive, for instance, as from Greece to Germany.

Consumer Goods

Typical crowds in main centres, such as Belgrade, are well dressed. The “Shrimp” has not reached there yet,

YUGOSLAVIA



Makarska

but the women look smart and plenty of young men and women are dressed in modern styles. In the poorer areas, such as Macedonia, there is a noticeable fall in general standards and a bigger mingling of peasant and city dweller.

Shops are full, and a wide range of food, clothing and domestic appliances are freely available. T.V. sets (about 20" screen) sell for about £60, refrigerators for about £30. T.V. aerials are to be seen everywhere and in Skopje in the heart of Macedonia we watched a direct tele-cast from London of the England - Yugoslavia soccer match. Technical quality is high.

Although official statistics show the proportion of car ownership to be low, there are hundreds of Yugoslav-built, tiny, privately-owned Fiats on the road and Yugoslavs can (and do) travel without visas to Italy, Austria, Hungary and Bulgaria.

Wage Rates

It is very difficult to assess real living standards in terms of wage rates, but from what we could gather, £10 a week was a very good salary and £3 to £4 was about the minimum, but before judging the value in New Zealand terms, it should be made clear that these figures are usually absolutely net. Taxes are paid by the employing organisation, medical and educational services are absolutely free, and rents are minimal. Many married women work and supplement the family income.

Education

It seemed that almost everybody went to school for eight years and from there either to a university or for three years to what is known as an Industrial School specialising in some aspect of industry. Schools in some of the places we visited were on a two-shift basis. All education is, of course, absolutely free. Training within industry is well in advance of New Zealand, although the skills taught tend to be more specialised. Alongside a

new steel works near Skopje was a large training school for the future maintenance staff of the mill, where people between the ages of about 18 to 24 were being given what would appear to be a thorough training in all aspects of engineering. Training units are quite common inside major factories.

Medical Services

We had close contact with doctors and a hospital. In the latter we found the service excellent, and independent evidence confirmed that, though in a small town, it was well equipped. Medical facilities at the airport also were good, and a doctor and ambulance were constantly available.

Buildings

While there are plenty of sub-standard dwellings to be seen, the most striking sight in all the cities and towns we visited was the number of high-rise apartments in green settings. From some angles they covered the whole range of one's vision.

In Skopje it was tragic to see the quake-shaken, post-war flats no longer occupied, but new ones were going up in their places. The rate of construction seemed good, although interior finishes are not always up to what New Zealand architects and clients would demand.

The main tourist hotel in Skopje was destroyed in the 'quake,' and a ten-storey, air-conditioned replacement at which we stayed was reputed to have been built in eight months.

More recent architecture seemed to have avoided the Victorian severity of that further East, and many modern, elegant buildings, mainly flats and Government offices, could be seen.

Hotels, as in New Zealand, varied from the rather ornate pre-war to the ultra-modern, designed for the tourist trade, particularly on the Adriatic coast.

Town planning in practice and principle — wide boulevards and open space — left most Western countries well behind.

Tourism

Tourism we found already a big and growing industry and the identification plates of adjacent countries can be seen on many cars and buses — Germany, Switzerland, Belgium, France — Germany predominating while we were there.

Foreign cigarettes, beers and liquor were easily available at prices which varied according to the currency. Hard currency would buy U.K. cigarettes for 2/- for 20 (5/3 in U.K.) — in dinars (3,500 old dinars to the £) the price would be doubled.

Accommodation and meals were relatively cheap but varied according to the popularity of the season. Biggest emphasis was on the Adriatic coast where some hotels surpassed international standards in design and comfort.

Politics

No sensible traveller talks politics, and, to the outsider, it would not appear to be a major topic with the locals.

T.V. and newspapers appeared to be strongly Government orientated with the exception of sport, mainly soccer, which is an obsession like Rugby here. Photographs of General Tito appeared in all public buildings and most shops, but were discreetly absent in tourist hotels.

We were in Belgrade for May Day but the celebrations had been cancelled for reasons of economy. Nevertheless, the city was festooned with flags and slogans, mainly referring to international solidarity and peace rather than promoting the cult of the individual. May Day was a Sunday and, as in New Zealand, such holidays are "Mondayised" — in fact, both Monday and Tuesday were public holidays.

The Economy

We got the impression that, like most communist-socialist economies, Yugoslavia was originally obsessed with the establishment of industry, irrespective of its merits.

Over the years, as consumer demand grew internally and imports increased Yugoslavia got into debt and balance of payment problems. She has, for instance, become an importer of food.

In the development of their exports the Yugoslavs realised that internal prices and possible inefficiencies made them non-competitive; hence the bold and courageous move to overcome this situation by exposing many industries to overseas competition, closing or cutting down operations, and creating temporary unemployment.

One felt that there was a desire to introduce some of the more acceptable advantages of Western systems — competition and incentives, for instance — though Yugoslavia appeared to lag behind on the latter when compared with what is published about Hungary and Rumania. Nevertheless, factory managements had a far greater control over their surpluses than was previously permitted.

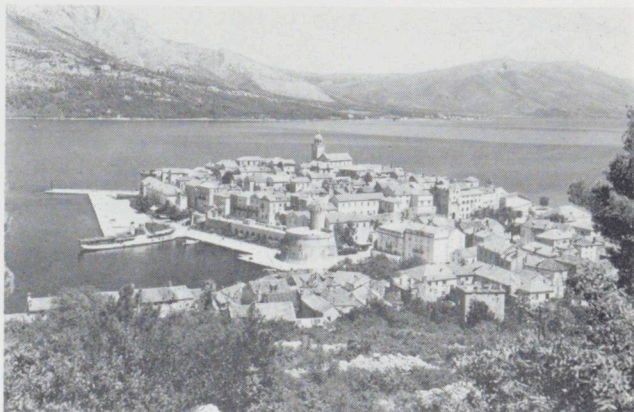
One must be careful not to give the wrong impression on the point of service. Specific service in hotels, for instance, was good, as it was in most big stores and tourist resorts, but, for example, in one excellent tourist hotel in which we stayed, a large "selling" area, constantly manned, had little to attract the would-be purchaser although a wide range of goods, local, traditional and imported, was available in the town. We were convinced we could have increased the sales in the hotel many times over without affecting sales in the town itself.

Service at petrol stations (choice of octanes) was polite and always helpful, but you'd be lucky to get filled up and pay within 10 or even 15 minutes.

These are marketing problems which no doubt will be resolved as the thousands of Yugoslavs who have lived and worked overseas return to their homeland.

Large areas of the countryside appeared extremely productive and even lush, in the spring. Soil was loamy and friable and growth appeared rapid, but there was little evidence of mechanisation — we saw few tractors, no fences; small herds were constantly under personal supervision, and tools were largely wooden and primitive.

YUGOSLAVIA



Korcula

Much of the land is owned by the state, but in every district were private holdings, and on public holidays (for the city worker) we saw thousands of peasants in their fields, sometimes 50 - 60 intensively working small areas right up until dark which was then about 8.30 p.m.

There was no doubt in our minds that agricultural production could be increased enormously, but perhaps political reasons oblige a slow-down in this sector. Already hundreds of thousands of country people have been absorbed in towns and cities, but possibly the unemployment problem would be severely aggravated if mechanical methods were too rapidly introduced.

Superficially their problems might seem to resemble some of ours in New Zealand and, in fact, we met one Yugoslav who was strongly critical of the too-far-too-fast industrialisation.

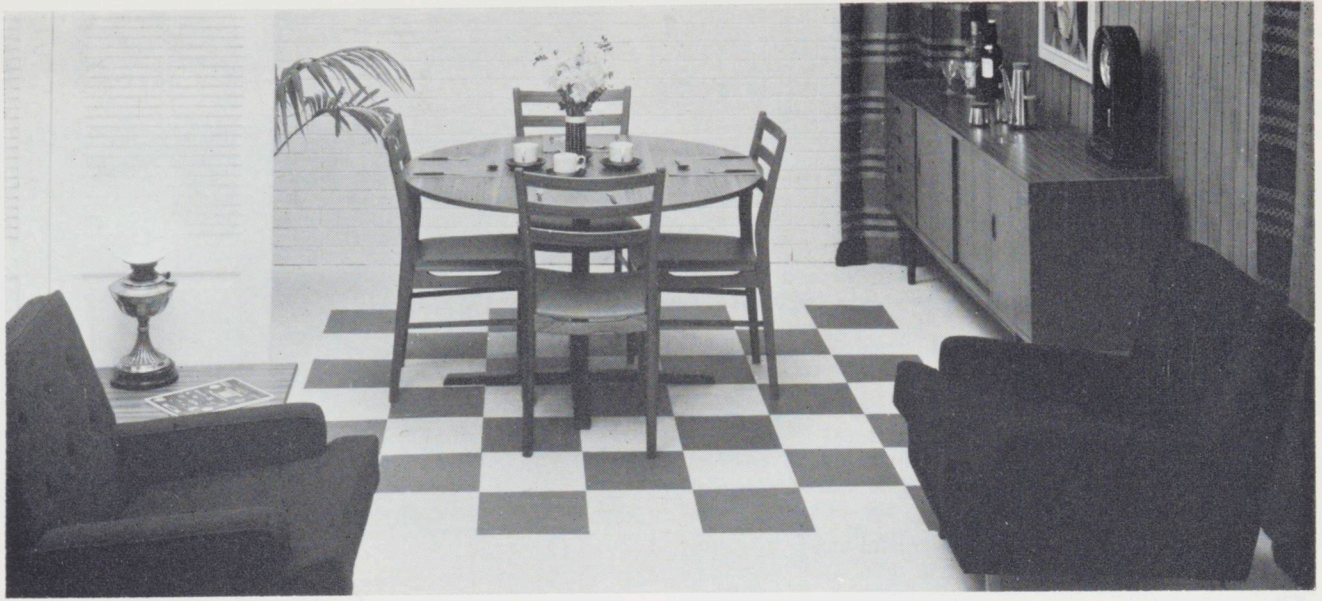
However, there is a major difference — New Zealand is building her industry as an adjunct to a highly efficient and productive primary industry, which is not the case in Yugoslavia. Furthermore, despite all criticism of Government here, it is obvious that much more care has been given in New Zealand to the establishment of new industries than was done in Yugoslavia after the war.

All in all, Yugoslavia gives the impression of vigour and hope, but vigour and hope frustrated by an uncertainty of what is the right course to pursue today.

It is a country of great potentialities, once the burden of dogma is replaced by willingness to experiment with new ideas and recent political changes give hopeful signs.

It may well be correct to say that as Eastern Europe is moving towards self-exposure to competition and incentives, the West is moving towards more centralised planning and control.

Perhaps it will be a happy compromise for both spheres if they are prepared to learn from one another.



NEW FORMULA FOR NAIRNFLO

SIX years ago plans were laid for the manufacture in New Zealand of Nairn-Williamson Vinyl flooring and leathercloth. A company, Nairn-Williamson New Zealand Limited, was established as a 50/50 partnership between Nairn-Williamson (Holdings) Limited, of Scotland, and Fletchers, and a factory was established on Fletcher Trust's industrial estate at Southdown.

The factory came into production two years ago but struck more than the usual teething troubles. However, these were consequently resolved and Nairn flooring made in New Zealand — now to an entirely new formula, is again on the market.

This Vinyl flooring is sold under the trade name of "Nairnflor" and is being manufactured in a range of 17 marbled shades as well as plain colours. It is produced both in sheet form and in 12 inch tiles in dimensions of 1.5 mm and 2.0 mm for the regular market and 1.1 mm and 2.5 mm for special orders. The product is a homogeneous one — that is to say the Vinyl and therefore the patternings runs right through the depth of tile and sheet. This flooring is fully flexible, giving obvious advantages in many applications, as well as a resilience which produces a quieter and less tiring surface for walking upon. A hard tile is also produced to meet the requirements of buildings where the flooring is subjected to unusually heavy wear.

Nairnflor, besides having a wide range of colourings, has a smoother surface than competitive products and therefore has an immediate appeal, not only for domestic use but in places such as hospitals and other buildings where cleanliness and hygiene are of the utmost importance. Price-wise also, the Nairn Product has the edge on competitors.

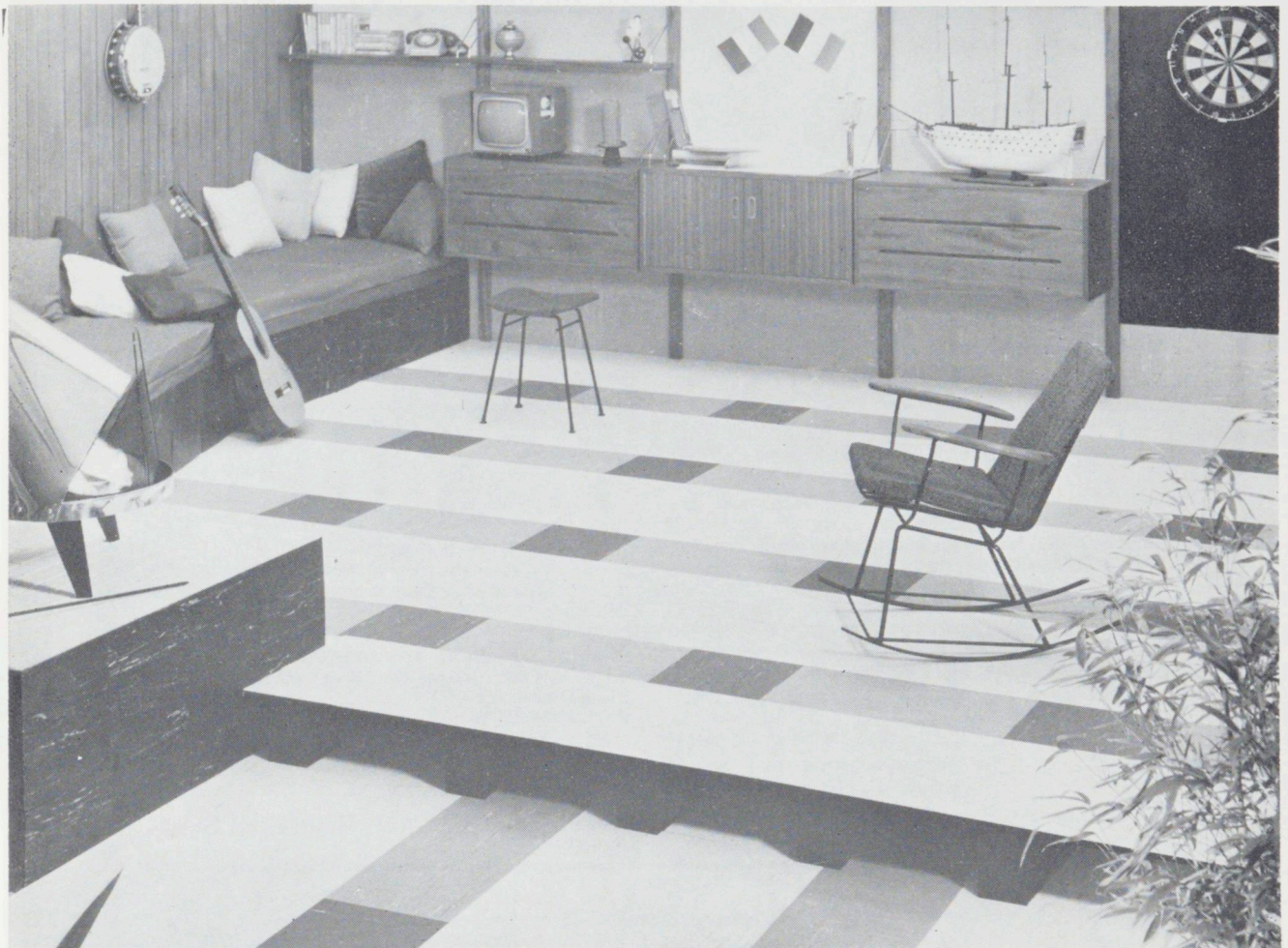
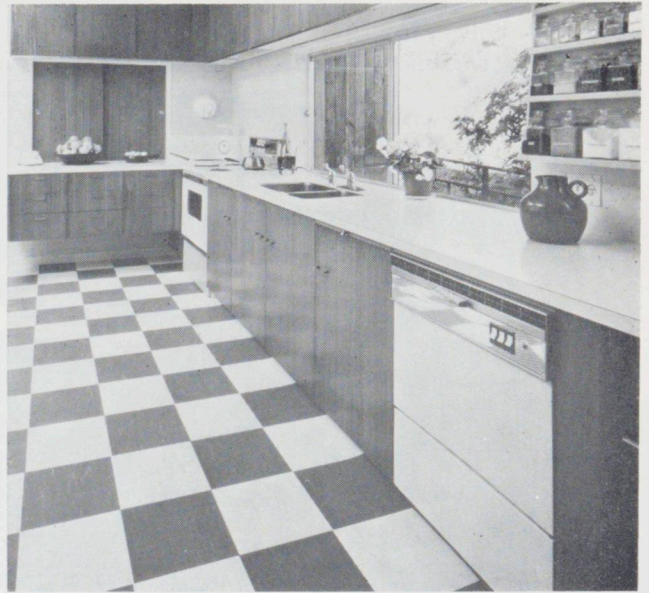
With these advantages it is expected that there will be a ready acceptance by the market once it is realised that this Vinyl flooring is now being made to a completely new formula.

A leathercloth is marketed under the trade name "Lionide" and is finding a welcome market and an ever-growing acceptance for a wide range of uses. It is produced in 50 inch wide rolls in a very big range of colours and patterns. First call on this material has been for upholstery for both furniture and motor vehicles. A more recent development has been its acceptance as a wall covering for areas where there is dampness, such as in bathrooms and kitchens, or where there is unusual wear. It is resistant to staining and can easily be wiped clean.

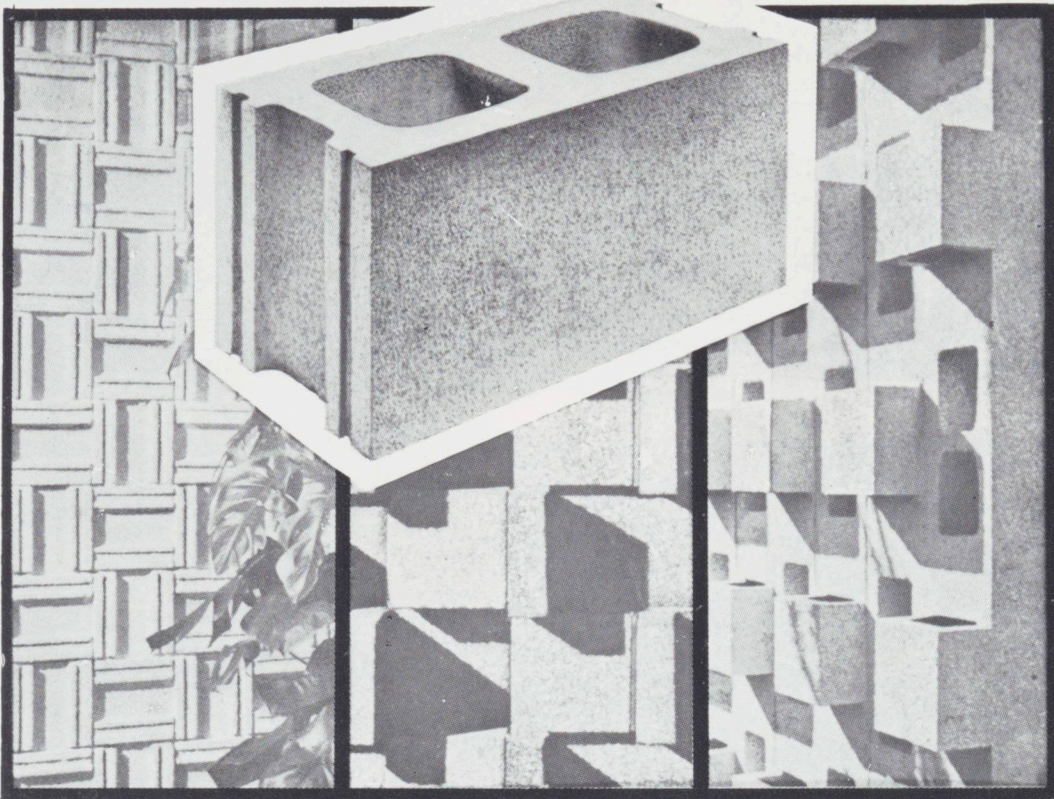
"Lionide" has also been developed for rainwear and other clothing — including the Emma Peel type jacket and slacks and mini-skirts. The fluorescent clothing used by Traffic control is also a "Lionide" product. Another

version of the product is the material from which gloves and bags are made.

At the beginning of this year the parent Nairn company in the United Kingdom decided to withdraw its investment in New Zealand, and in consequence an agreement was reached for Fletchers to buy out their partner's interest in the company, and this was replaced with a technical exchange agreement whereby development in Nairn companies overseas would be made available to the now wholly-owned Fletcher Company. The company name was changed to The Fletcher Plastics Company Limited. Following on the changes in the company's set-up it was decided to make certain changes in the marketing arrangements for Nairnflor and two well-known wholesalers, Ronald Griffiths Limited and Flooring Distributors Limited were appointed master distributors. They have arranged a widespread distribution through flooring retailers throughout the country. To back up the efforts of distributors and retailers a vigorous promotional campaign has been launched.



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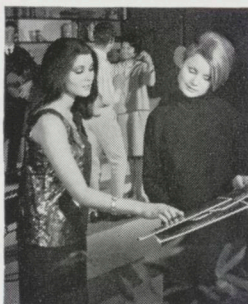


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in this issue

**Marsden Power
Station**

**pages
2-5**

**pages
6, 8
19, 24**

Fletcher Products

**Christchurch Shopping
Centre**

**page
7**

**pages
11-18**

The Timber Industry

**Mission To
Yugoslavia**

**pages
21-23**