



Arrowhead

WINTER 1962



An aerial view of Marsden Point, site of New Zealand's first oil refinery, which is being built by a joint-venture group, Bechtel-Fletcher-Wimpey. It is expected that the main work will begin about October and the refinery be commissioned by February 1, 1964. Intake capacity is 55,000 barrels of crude oil a day, and the refinery should meet practically all New Zealand's motor spirit requirements, as well as producing naphtha, kerosene, bitumen and other by-products.

FLETCHER

Arrowhead

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**FLETCHER HOLDINGS
LIMITED**

GREAT SOUTH ROAD, AUCKLAND. NEW ZEALAND

FRONT COVER: Pacific Lumber's mill in the Nausori Highlands, near Nadi, Fiji. The first shipment of 150,000 board feet of timber from the mill has arrived at Auckland. Marketing in New Zealand will be handled by J. Scott and Company.

LYTTELTON CHRISTCHURCH ROAD TUNNEL IS PIERCED

At 7.10 p.m. on 15 June, a blast signalled the piercing of the Port Hills. It broke the last barrier between the main road tunnel from Christchurch and the 6 ft. x 8 ft. pilot shaft from Lyttelton.

An hour later, the Mayor of Lyttelton, J. B. Collett, walked the pilot shaft from Lyttelton to meet the Mayor of Christchurch, G. Manning, the Chairman of the Road Tunnel Authority, R. A. Whitbrock, and the Chairman of the Heathcote County Council, R. A. Young, who had approached by the main tunnel from the Heathcote side.

Ships in the Lyttelton Harbour sounded their sirens to mark the breakthrough.

The opening at first was only about three feet square, and there was keen competition among the tunnellers to be the first to shake hands through the gap. At the time of the link being made, the main drive of the tunnel was 4,934 ft. and the pilot drive about 1,300 ft.

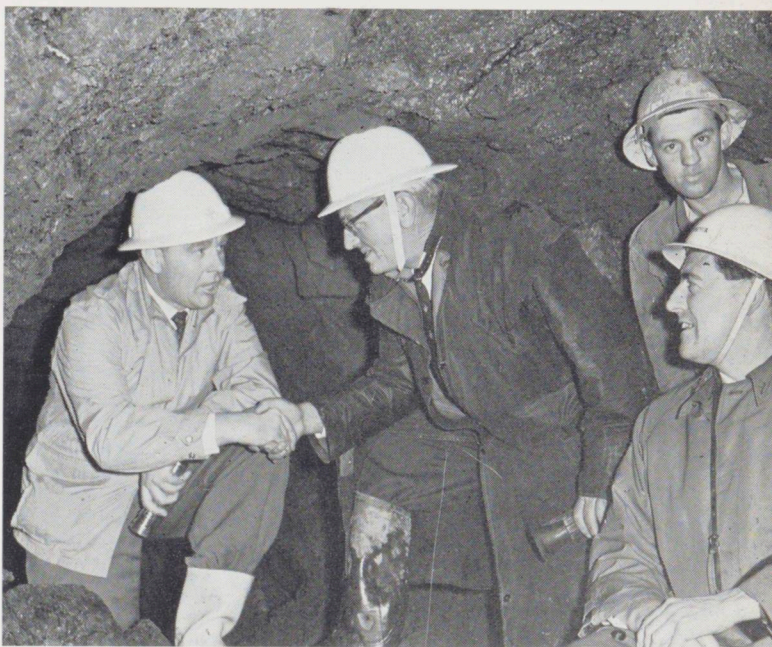
This is the second time the hills have been pierced—the rail tunnel being driven in 1863.

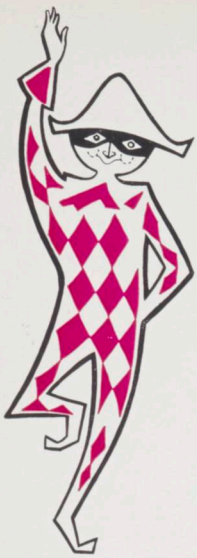
The £2 million road tunnel is a Fletcher-Kaiser joint contract, under the control of Project Manager, J. G. (Jack) Smith, who also was in charge of the Ohakuri Tunnel project.

TOP: On the night of the breakthrough.

CENTRE: The Mayor of Lyttelton, J. B. Collett, shakes hands with the Chairman of the Road Tunnel Authority, R. A. Whitbrock, after the breakthrough. The Chairman of the Heathcote County Council, R. A. Young, is on the right.

BELOW: J. G. (Jack) Smith, project manager, Fletcher-Kaiser, shakes hands with the Mayor of Christchurch.





NEW PRODUCTS

Two new Fletcher Timber products are arousing interest after a first showing in Auckland. Harlequin flooring (shown left with its publicity symbol) consists of short lengths of different native timbers, finger-jointed into running lengths. Laid like tongue and groove, it provides a "feature floor" for little more than the cost of ordinary flooring.

Glamour Wall consists of vertical boards of selected New Zealand or Fiji timbers, finished and cut ready to erect. It is being produced in three designs. Top right, the New Elizabethan design is seen on display at the Auckland Easter Show.

The photograph below shows a portion of the acoustic ceiling in the new N.A.C. administrative block at Christchurch International Airport. This ceiling, based on Fletcher Construction Insulation and Acoustic Division's "Composite Panel", has received many favourable comments for its aesthetic and acoustic value. Eleven thousand square feet of these panels were made and fixed by the Christchurch I. & A. Division. Architects were Griffiths and Moffat. The panels are of hardboard and fibreglass.

For Fletcher Industries, two established products — Vulcatex caulking and Adfast adhesive — have been given a face-lift with new, attractive tube and package designs. The yacht illustration is from the card holding marine Vulcatex.

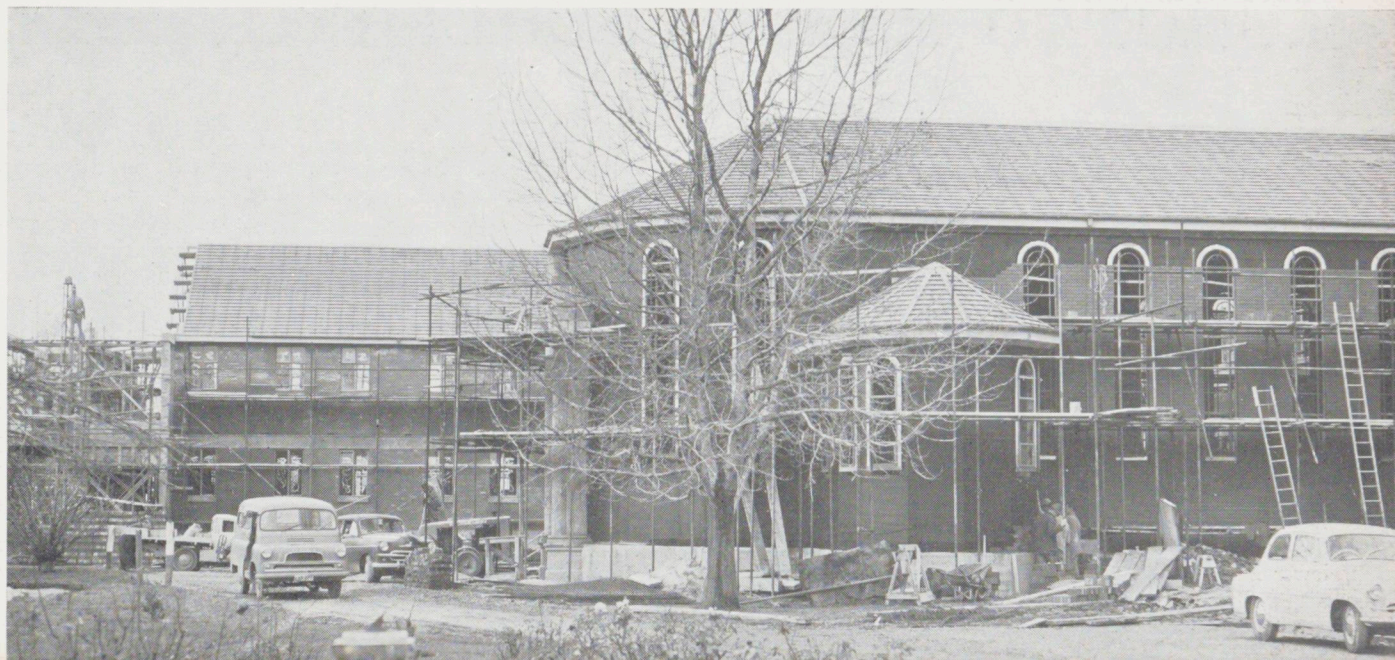




CHURCH BUILDINGS FOR CHRISTCHURCH

Building history is being made in Christchurch with the rapid construction of the Holy Name Seminary at Riccarton (below). This has been achieved by using precast, prestressed concrete floor-slabs and wall-slabs for the 98-bedroom dormitory block. The units are up to 25 ft. by 12 ft. They were made by Certified Concrete (Christchurch) Ltd. The structural engineers are H. G. Royds and Sutherland; the architects, Collins and Sons; and Fletcher Construction foreman is Barry Hegarty.

Also building in Christchurch is a new Roman Catholic convent and girls' college at Burnside. It is sponsored by the Society of the Sacred Heart and will be named *Cottesmore*, after the birthplace of a former English Mother-General of the Society. The perspective (above) is by the architects, Collins and Sons. Fletcher Construction foreman is Noel Stevens. Both contracts are supervised by Cyril Burford.





KURUTAU HYDRO SCHEME OPENED

On 26 May, the Minister of Works, the Hon. W. S. Goosman, officially opened the new hydro electric-power project for the King Country Electric-Power Board on the Kurutau River at the south-west corner of Lake Taupo.

Fletcher Construction was the main contractor. The project was designed and supervised by Lloyd Mandeno, civil engineer, of Auckland.

Work commenced in October, 1960. The spillway of 1,000 cubic yards of concrete is fitted with two 7-ton radial flood gates each 30 ft. long by 7½ ft. high. Adjacent is the rock and earth fill dam which contains 20,000 cu. yds. of varying materials ranging from 4-ton boulders on the downstream toe to brown ash and pumice on the upper side. Across the end of the lake formed by the dam is the control gate structure governing the flow of water into a canal 1,800 ft. long which leads to the lower intake. This takes the flow of water a further 600 ft.

through two 6 ft. diameter concrete pipes to the surge chamber, a concrete tank, 40 ft. high and 20 ft. in diameter.

From the surge chamber the flow is led through twin penstocks which, in a distance of 1,015 ft. drop 100 ft., then cross the plateau where the camp was situated and down again a further 100 ft. to the power house at the side of the river. The penstocks have an average diameter of 5 ft. 3 in. and the effective head of 220 ft. drives two Boving 4,400 horse-power Francis-type turbines coupled to two A.S.E.A. 3,300 K.V.A. generators.

The major sub-contractors were John F. Smythe Ltd. who excavated the canal and spillway; Allan Pain Ltd. (sand blasting and treating of penstocks and gates), and Fletcher Steel who fabricated most of the steel work. Electrical installation was carried out by Turnbull & Jones Ltd. of Wellington.

A. J. (Tony) Campbell was project manager. His enthusiastic team included at various times—Ian Caskey, engineer (now



LEFT: A general view of the project with the lake forming, water in the canal and power house under trial.

ABOVE: Surge chamber and penstocks.

with Morrison-Downer-Fletcher at Kawerau); Carl de Jong, excavation foreman (now with Fletcher-Kaiser at Lyttelton Tunnel); Roy Bevan, foreman-mechanic. Frequent visits were made by Jimmy Hall from F.C.C. at Hastings to assist with plant and equipment. Labourers were under Don Daley, leading hand. A stalwart was carpenter Dave ("Ding") Bell who arrived with the first load of equipment from Auckland and stayed throughout the job.

The Clerk of Works was L. ("Les") Farnsworth. At the opening ceremony, J. J. Craig (F.C.C. managing director) paid tribute to the co-operation received from the engineer, Lloyd Mandeno, and from the King Country Electric-Power Board.



FROM LEFT: John Muir (foreman mechanic), Les Farnsworth (clerk of works), Mrs. G. E. Lee, who was in charge of the cook-house and catering.

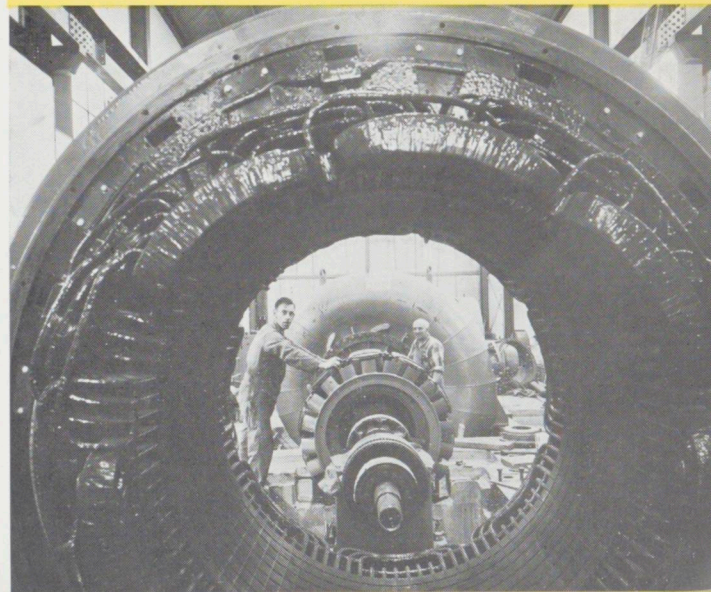


Control gate structure at entrance to canal.



ABOVE: E. L. Young (Fletcher Construction), Hon. W. S. Goosman, Lloyd Mandeno, J. J. Craig, A. J. Campbell.

BELOW: Installing electrical equipment in the power house.



PACIFIC STEEL IN PRODUCTION

Steel has been rolling from Pacific's mill in Favona Road, Otahuhu, Auckland, for some months now. Production will save the country £2 million in overseas exchange annually, besides ensuring a continuity of supply.

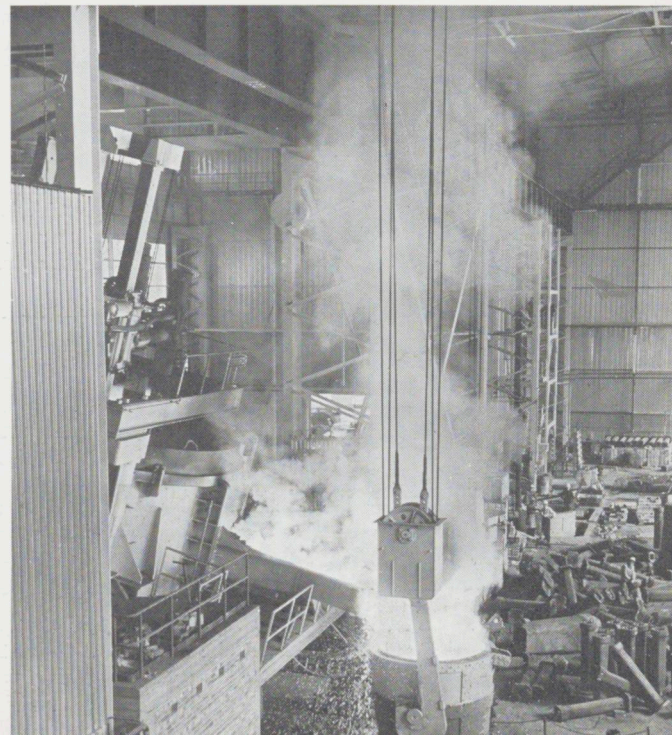
In this enterprise, Fletchers have played a leading role—in initiating the project, procuring the land, building the plant and investing substantially in the new company.

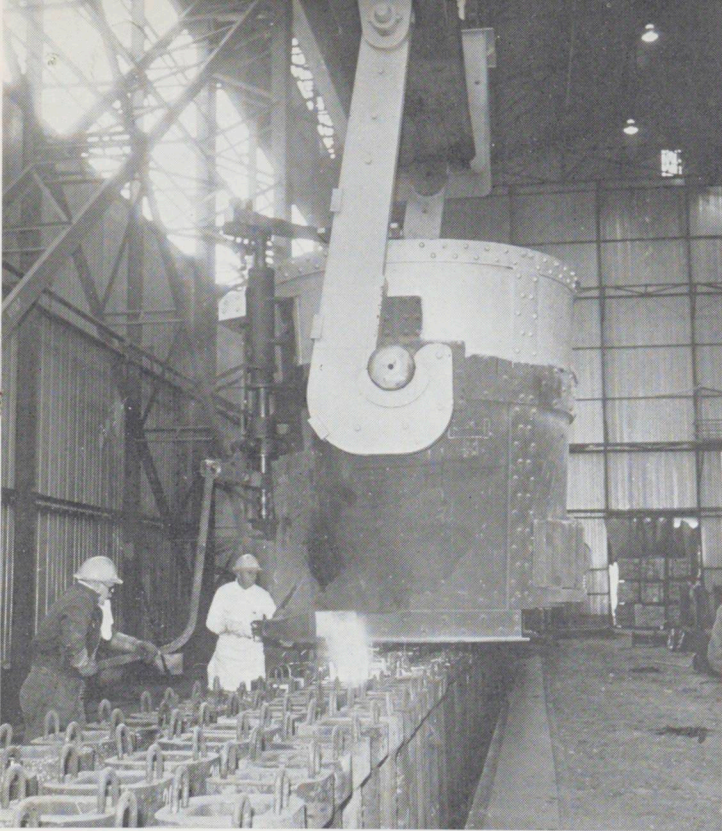
J. C. Fletcher is chairman of directors and F. H. Kember is deputy chairman. Other directors are K. C. Campbell, J. G. Gowan, B. R. Law, R. C. Macdonald, J. Fraser McLean and Dr. J. S. Watt (Fletchers). L. M. Lonsdale-Cooper is general manager and A. Hogg, secretary. Arthur Brown is in charge of the rolling mill, and Tony Mason the melting shop.

Top Left and Below: Liquid steel pours from the tilted electric-arc furnace into a pre-heated 40-ton ladle.



A small section of the mountain of scrap stockpiled at Pacific, and (below) half-inch bars being loaded for dispatch from the rolling mill.

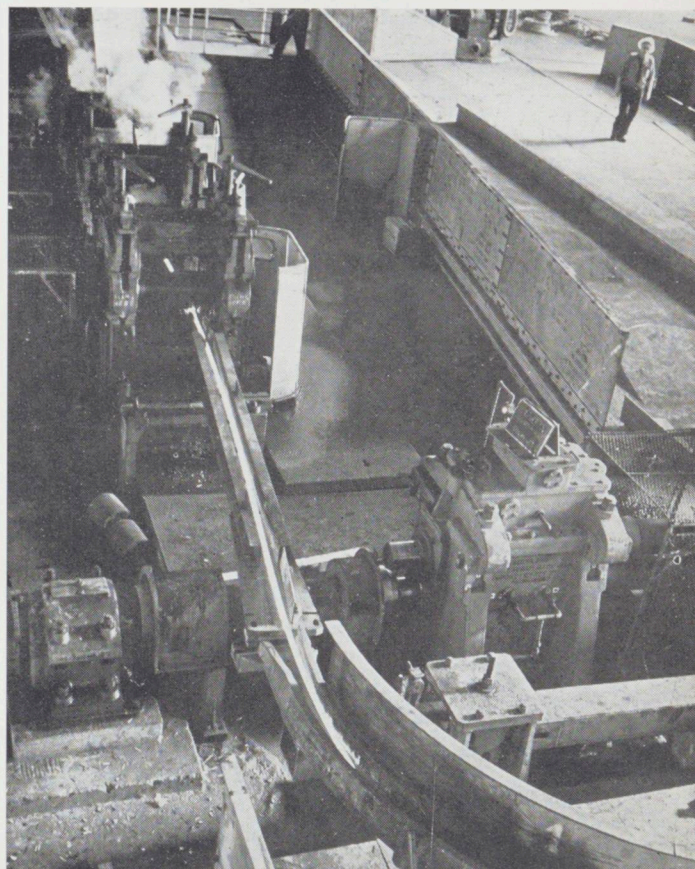
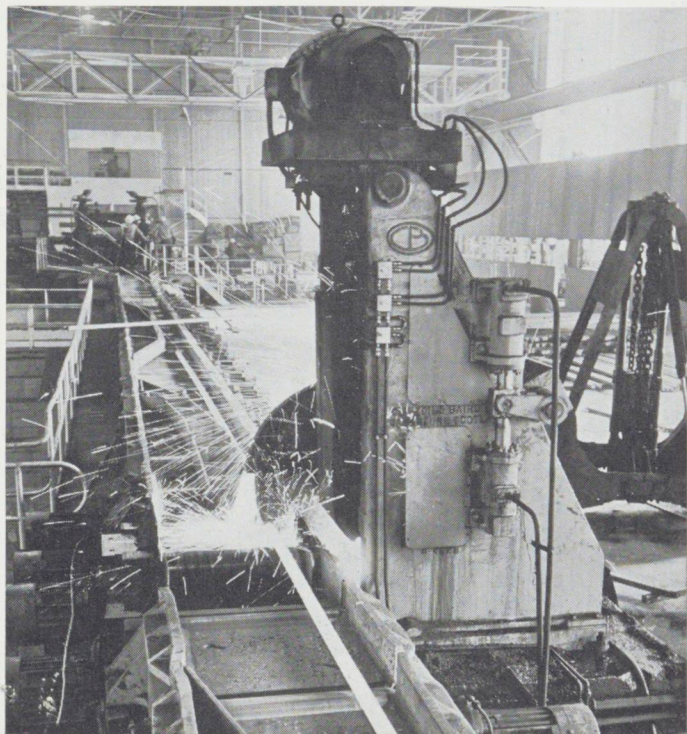




ABOVE: Pouring molten steel into the moulds which shape the ingots for the rolling mill. The ladle has a capacity of 20 tons of steel.

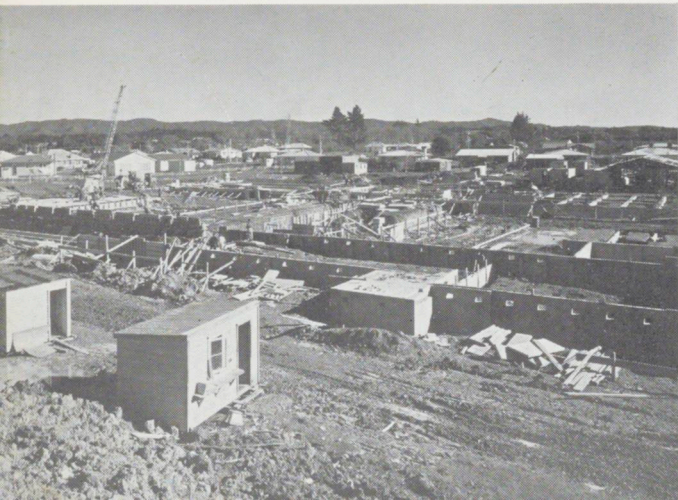
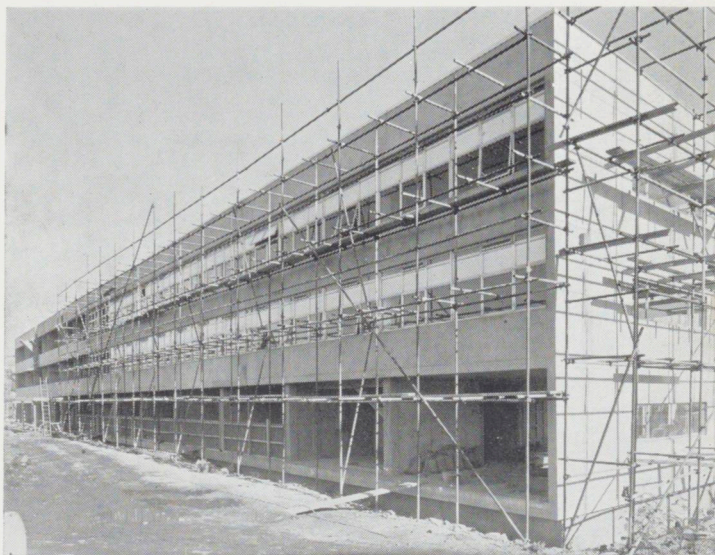
TOP RIGHT: A general view of the rolling mill. In the foreground the red-hot ingot passes through the rollers. It runs back and forth fifteen times, each time emerging longer and thinner than before, and each time turned "by hand" to ensure even rolling.

BELOW: A power saw cuts the billets into lengths for reheating in an electric oven, from which it emerges like a whipping snake (bottom right) for the final processing, cooling, cutting and dispatch.





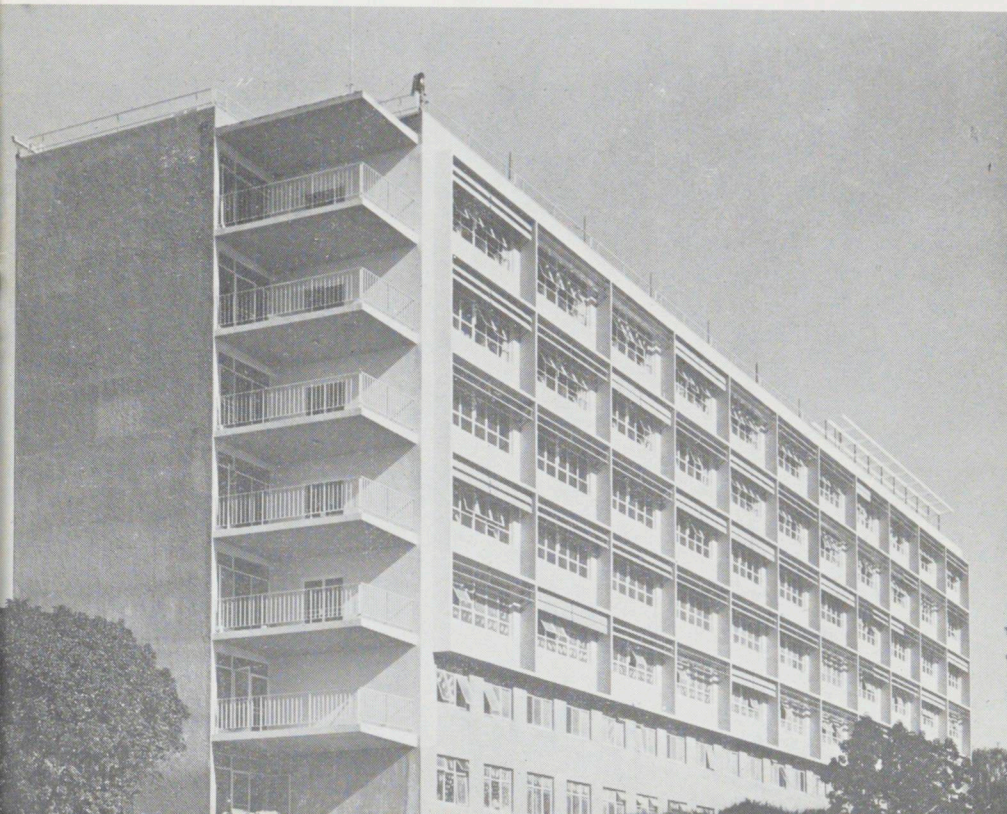
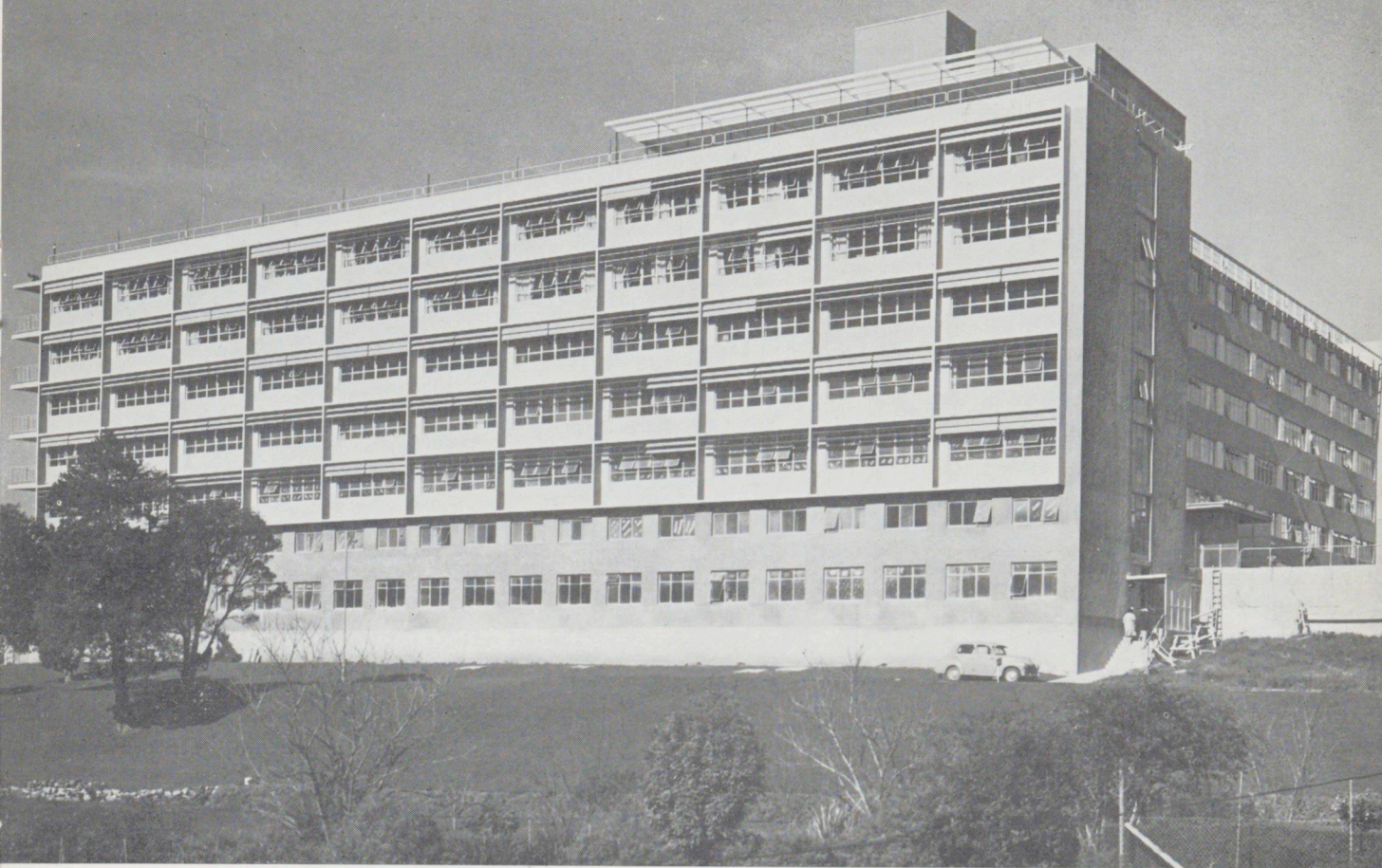
NEW HOSPITALS
for
AUCKLAND



TOP: Mater Hospital extension. Architects were Daniel Patterson, Lewis and Sutcliffe. Les Cook was foreman. Slim Avery and George Bourke were responsible for supervision.

ABOVE: St. Helen's, a £200,000 project at Mt. Albert, is well advanced. Newman Smith and Partners are the architects in association with Orchard and Allison, appointed by the Ministry of Works. Chas. Grey is foreman and George Bourke contract manager.

LEFT: Early stages of work on the £540,000 Henderson Hospital, designed by the Auckland Hospital Board (R. A. Wilkie, Chief Architect). Ian Irvine is foreman, and Bill Anderson contract manager.



And for Whangarei

Two views of the recently completed £850,000 Base Hospital at Whangarei.

The architects were Haughey and Fox and Partners, and the engineers, McKay, Crossley and Gerbic. Supervision was by Slim Avery, Trevor Hefford and Peter Barton. Trevor was foreman until he took over from Slim Avery as contract manager, when he was followed by Len McCullough.



DEVELOPMENTS AT PAKURANGA

The rolling countryside of Pakuranga, south-east Auckland, is rapidly changing from farmlands to Auckland's newest, well-planned suburb.

Fletcher Trust are responsible for the development of two large residential blocks there, and for planning a comprehensive town centre.

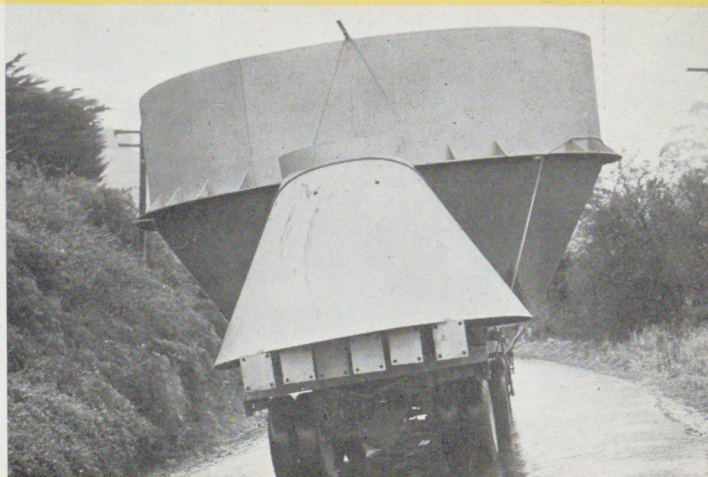
Sections on Pakuranga Downs (above), where roading is now being carried out, will be available for purchase towards the end of the year. Rangitoto can be glimpsed to the right of the line of bluegums in the foreground. The subdivision can

also be seen in the top left corner of the aerial view below.

Centre of the aerial photograph is Pakuranga Park Anchorage subdivision, which is on an isthmus. A parade of homes is being held there early in August. This photograph was taken shortly before the building of the parade homes, which will be on the top street of the oval at the end of the isthmus. Many new homes have been completed here recently, and the few remaining sections should be sold by the time Pakuranga Downs is on the market. There are 317 sections in the Park Anchorage subdivision, and 208 in the first stage of Pakuranga Downs.



THREE LOADS FULL . . .



ONE FOR ROTORUA : This is a limit load from Edgecumbe. The total length was 59 feet 11½ inches, which is ½ inch under the maximum allowed. The all-up weight was 35 tons, 12 cwt., and the timber measured 13,700 super feet.

ONE FOR MATAURA : Part of the mechanical pulp mill on the road from Christchurch to New Zealand Paper Mills at Mataura. The journey took 28 hours. The plant will hold 10 tons of wood chips. Its installation is part of development plans at Mataura.



ONE FOR THE SHAREHOLDERS : Sam Hartley of Fletcher Holdings' share department (right) and his team of helpers, preparing the 1962 annual reports for dispatch. The total dispatch order weighed over one ton. The report showed a record year, with a turnover of over £27 million, but carried a warning from J. C. Fletcher that current economic conditions were not as buoyant as 1961-62.

FLETCHER

personalia

JAMES FLETCHER SCHOLARSHIP

The 1962 James Fletcher Post-Graduate Scholarship has been awarded to W. G. Ferguson, who is a Bachelor of Engineering (Mechanical), and a Bachelor of Science. He was awarded the Robert Horton Engineering Scholarship in 1959, and the 1960 Evan Gibb Hudson Scholarship.

AUCKLAND

WELCOME: Peter Gaskin, Geoff Merton, Dick Goodall (ex Hamilton), Joe Nol (ex Tucks, Taupo), Muriel Bird, Beatrice Wigman (Timber) Jay Vermont (nec Rosair) and Carolyn Edge (Trust), John Frost (Group Services), N. Cole, Gwen Douglas, Paula Paton, Marie Rogerson, Wolf Walton, Ian MacLachlan (back from Australia), Murray Gould, Frans Jamin, Bob King, Norm Reynolds, Ted Ward (Steel), Ethel Simmonds, Bernadette Barriball, Marie Phillips, Diane Geldard, Susanne Elley, Pauline Blackman, Jack Leighton, Peter Tax, Len Bisley, Murray Carey, Gordon McKay, Ted Dawson (Industries), Max Legge (Construction).

ENGAGED: Kay Cook (Trust) to Patrick Tattley, Corinne Parvin (Industries) to Douglas Reid, Marlene Strahan (Industries) to Denis Anderson, Jack Yeo (Steel) to Jennifer Mitchell, Maureen Beckett (Steel) to Gavin Morris.

MARRIED: Bob King (Steel) to Jean Moxon, Jay Rosair (Trust) to Robert Vermont.

BIRTHS: Sons—Michael Riley (Trust), Ned Taumoli, Colin Conaghan, Lew Purdie, Vic Taylor (Steel), Bruce Wallace, Harry Maunsell (Timber). Daughters—Dave Caldwell, Ian Souster (Steel), Trevor Hefford (Construction).

FAREWELL: Cherry Hume (Trust), Laura Parratt (Holdings), Dianne Ferguson, Tim Parker (after 43 years), W. Raisher, P. Brett (Timber), Bernie Cox, Leo Bradfield, Ipuasa Aito Tuala (Industries), Tony Dyer (Construction).

FLETCHER TIES

A new order for Fletcher ties has been placed with the manufacturers. Although it will be several weeks before these come to hand, requests for the tie should be sent now to Rosalind Tollis, Fletcher Group Services, Auckland. The ties will be sold at 5/-, but money should NOT be sent with advance orders.

SPORT: Alan Reid (F.C.C. carpenter) won the N.Z. Yachting Title at the National Cherub Championships held at Gisborne at Easter. The contest was held over a series of four races.

Fletcher-Kauri were defeated at Soccer by a well-experienced Dempsey-Morton eleven. Another challenge is expected shortly.

ROTORUA

WELCOME: *Ngongotaha*—P. M. Abbott, C. Archer, D. Beckett, C. Blackwell, T. Clark, P. Dawes, L. M. Denny, R. M. Fisher, G. Fleet, R. O. Grant, S. Hakaraia, L. L. Head, W. Hinton, S. Kerr, K. Luxford, B. Mackie, T. R. McDonnell, W. Ngahere, A. Rangirangi, M. J. Reid, A. T. Shields, S. S. S. Simpkins, A. Stuchberry, K. Tamatea, H. Waerea, S. Watene, K. Woodhill. *Kopaki*—G. Ashby, P. Kingi, P. O'Sullivan, S. Te Huia. *Turangi*—R. Ham, J. Hepi, G. Heremaia, E. Lindsay, P. Moke, L. Ngaperera, P. Otimi, G. Phillips, R. Plowman, C. Ruakawa, G. Tahau. *Tatara-akina*—E. Batt, P. Graham, P. Harland, D. Karaitiana, J. Wijohn. *Ruatahuna*—J. Te Kaawa.

BIRTHS: Sons—I. F. Barnett, A. Porter, W. P. Pitiroi, J. Manihera, K. August, C. McWhirter, W. E. Turner. Daughters—C. Butterworth, E. Kiel, C. R. Gillard, R. Hulton.

EDGE CUMBE

WELCOME: R. Towns (Benchman) transferred from Waipiri Timber Co., Taumarunui.

TRANSFERS: P. Wastney, logging manager, Edgecumbe, to Tuck Brothers, Taupo. L. A. Thurlow (manager) left on June 28 for a

short visit to Fiji, where he will supervise grading.

BIRTHS: Son—A. J. Skinner.

SOCIAL: A successful farewell evening was held in the Kauri Social Hall on June 26 for Jim Lamb on his retirement after over 23 years of continuous service. At the function, Ken Civil presented service pins to employees with over 5 years' service. Recipients included Cecil Hunt who had reached his 35 years' service.

WELLINGTON

WELCOME: Ben Heiderman (Industries), Peter Baruch, Vivienne Casey, Iris Highet, Gordon Cornford, Ken Snalam (Construction), Robin Dwane (from Kauri, Carterton), Yvonne Wylie (from Kauri, Wellington), Claudette Millar, Kyra Cooper (Timber). Welcome back to Margaret Lather (Hardware) after an extended tour of Australia.

MARRIED: Joyce Shiel (Construction) to Graeme Lockyer, Elizabeth Slade (Construction) to John Lister, Ben Heiderman (Industries) to Brigit Matthiesson.

BIRTHS: Sons—Norm Tutton (Hardware), Gordon Cornford (Construction).

CONGRATULATIONS: Graham Hanify (Hardware) was selected as a member of the N.Z. Brass Band to compete at the World Championship in Holland. Graham's brother is also a member of the band. Graham is leader of the "Fletcher Flesonic Furies" dance band which performs at Wellington socials.

SOCIAL: The Flesoc Party in May was the usual grand success.



"Over and Out" was the press caption on this photo of Jim Carter, taken after his 3½-ton truck turned turtle in Remuera when the load shifted as the truck was backing across a drain. Jim was thrown out, escaped with a cut hand.

CHRISTCHURCH

WELCOME: Ivan Laby, Adrienne Mugford, Paul Robinson, Morris Wood (Hardware).

FAREWELL: Dawn Laws, Robert Bushby (Hardware).

SPORT: Dunedin visited Christchurch during the first week of April for an inter-branch tournament. They brought cricket and bowls teams. Christchurch declared at seven down for 204 and Dunedin were all out for ninety on a sticky wicket. Dunedin won the morning bowls match 24-22. The afternoon bowls match was abandoned because of rain.



SAWMILL MANAGERS conferred at Ngongotaha at the end of May. Lecturers were Ken Civil (organisation and control), Syd. Brown (native production), Colin McLeod (Radiata production), Bill Waller (orders), Jim Lawry (factory), G. Transom (logging), R. Grant and Henry Anaru (accounting), H. V. Barker (personnel, safety, insurance). In the group photo are seen: Back row (from left): B. Waller, G. Transom, H. Barker, L. Thurlow, L. McIndoe, B. Thompson, M. Edhouse, E. Batt, G. Edhouse. Middle row: J. Lawry, J. Carter, K. Civil, T. Taylor, B. Smyth, W. Blenkinsop, R. Grant. Front row: S. Brown, C. McLeod, B. Ormsby, P. Mariu.

DUNEDIN

WELCOME: Mary O'Mahoney, Brian Galland (Industries), Thelma McKibbobb (Steel).

BIRTHS: *Daughter*—Tony Sanderson (Industries).

ENGAGEMENT: Alma Brooks (Industries) to Alan Douglas.

FAREWELL: C. F. Thomas, J. McCallum (Hardware), P. Eccles (Industries).

CONGRATULATIONS: On recent capping to Jim Boyce, M.Sc., and Margaret Rule, B.Sc. (Industries).

LIFE INSURANCE and SUPERANNUATION

Fletchers operate a Staff Insurance and a Superannuation Scheme, both of which are of considerable benefit to employees. The Life Insurance Scheme provides a cover of £1,000 on death.

The Insurance Scheme (for purely taxation reasons) requires a payment of a few shillings annually. The Superannuation Scheme is

completely free. These are open to male employees other than salaried staff.

There have been ten claims under the Insurance Scheme, and payment of £1,000 has been made promptly to next-of-kin in each case. The total cost to the employees concerned was under £3 in Social Security Tax—an average of six shillings per member.

Full details will be supplied on application.

Superannuation Fund Scheme "C" has also paid four death claims amounting to £1,300 during the past three months, at no cost to members.



Harold Robertson, retiring managing-director of J.D. and L. Robertson Ltd., of Nelson (a Fletcher subsidiary), displays part of a presentation set received at a function to mark his retirement. With him is T. R. Carter, contract supervisor, who made the presentation. The second photograph, taken at the function, shows one of the company's oldest employees, Nelson Goodman, with John Bush (formerly at Hawera), manager of Robertsons.

Weldtex

GROOVED WOOD PANELLING

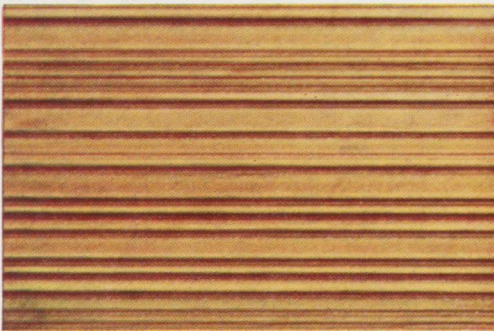
The sophisticated wall decoration for home, shop, or office



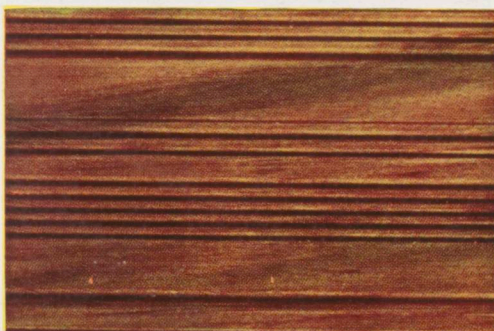
BLONDE WELDTEX



MATAI WELDTEX



KLEARPINE WELDTEX



RIMU WELDTEX

WELDTEX

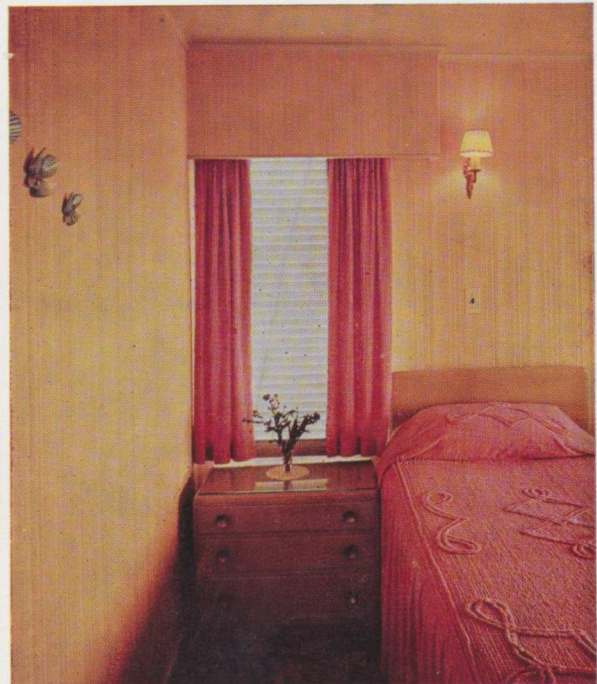
grooved wood panelling makes an outstandingly attractive wall decoration and has been used to great effect in many homes, shops, offices, restaurants, cafes and hotels.

It is available in four different timbers, and for those who like natural wood finishes, it appeals in clear varnish, oiled or waxed.

However, Weldtex lends itself equally to colour. It can be painted in a single colour or with striking effect in two colours. This treatment is achieved by brush painting the first colour, wiping the paint from the raised surfaces, and applying the second colour with a roller.

Whatever the decorative plan, in new buildings or modernisation schemes, versatile Weldtex can be used to achieve charm, interest, and sophistication.

It is very modestly priced and is available from builders' suppliers everywhere.



A product of

FLETCHER

industries

Private Bag, Auckland; P.O. Box 2052, Wellington; P.O. Box 1168, Christchurch; P.O. Box 973, Dunedin; P.O. Box 121, Rotorua; P.O. Box 468, Napier; P.O. Box 307, Palmerston North.