

FLETCHER

Arrowhead

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FLETCHER HOLDINGS LIMITED

GREAT SOUTH ROAD PENROSE, AUCKLAND NEW ZEALAND

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editorial

With this issue *Arrowhead* completes its second year and naturally, on the threshold of the third, we wonder how we're making out. In getting each issue to press we live close enough to it to go through a variety of moods, from thinking it the best yet to considering it the worst ever. Comes the day when the copies roll off the press, roll out to our factories and branches, to our men on the job and to outside readers, and from then on we lose touch. What reception *Arrowhead* gets we never really know. The odd brickbat and the occasional bouquet do come our way, but our best means of measuring support is to have readers stand up and be counted.

Hence the postcard, enclosed with mail copies this time, which we are asking outside readers to return to us, and so affirm that they wish to remain on the list. Not that we're merely wanting to satisfy our curiosity. Every so often it is necessary to update the circulation list and to do it we need readers' co-operation. We think it reasonable to assume that a reader not interested enough to return the card could not care less that the magazine will stop coming.

This October issue is very much of a South Island number, dealing with our main industries in Christchurch (which is soon to have another Fletcher factory; see News Page) and with the revival of the linseed industry nearer the Antarctic. Not only are Fletchers industrially vigorous in the South Island, but our people down there are challengingly productive, as is evident from the provocative Personalia note from Christchurch.

The Editors.



The Greeks had a word for asbestos: we use it to make a versatile building material.

The Siberians used to make a fireproof cloth out of asbestos and kid tourists, notably Marco Polo, that it was the skin of salamander—the lizard which, according to legend, lives in fire. Marco, however, was sharp enough to discover that asbestos is a fibrous mineral extracted from a certain kind of rock.

Going back to 1250, Marco Polo and all that may seem academic, but we have a reputation for historical research to keep up (see Slings and Arrows column) and if today we are using asbestos fibre in our Durock products, instead of farming salamanders for their skins, thanks may be due in some part to Marco Polo for settling a nonburning question.

MANY PRODUCTS

It was not till the turn of this century that an Austrian—Ludwig Hatschek, for the historical record—found a practical process for combining asbestos with Portland cement. Today in their Durock Factory in Riccarton, Christchurch, Fletchers have a big output of asbestos cement and manufacture from it a variety of products for the building trade.

A lot of local initiative in research, experiment and technical innovation has gone into the industry to make it what it has become since the Durock Factory was established in 1943.

At that time building materials were in short supply and Durock's output was a precious addition. In more conservative opinion, however, the material



WORKS MANAGER Eric Adams



PRODUCTION MANAGER George Holmes*

was a makeshift at best; it would disappear when trade became normal again after the war. As a matter of fact, the earliest production was not good by later standards. But as knowledge was acquired, as operators became more skilled and production problems were solved, the product showed that it had an unquestionable place in modern building and that it had a versatility its critics had not suspected. Over the years the demand for Durock has not slackened and new lines are constantly being added to the range of products. You could build a house with outside walls, interior lining walls, the whole roof including ridging and capping and eaves soffits, and the spouting and downpipes all of asbestos cement. You could fence the section with it; even have a Durock statuette in the garden. It would be hard to find another material as versatile.

Durock

The mineral itself, which has several commercial uses, is winnowed by powerful fans out of crushed asbestos rock. Its silk-like fibres are individually so slender that they are only revealed under the electron microscope. Graded as required, the fibre can be spun, woven, mixed in paint and combined with plastic or with Portland cement.

BASIC RESEARCH

Up to 1950 the fibre used in Durock products came mostly from Canada; the rest from South Africa. A little before then, a start had been made on experiments with fibre from Takaka, Nelson. Results were reasonable and, following on a decision to use a proportion of Takaka fibre at Riccarton, arrangements were made with Hume Industries Limited to open up their mine and supply Fletchers with a tonnage of suitable grades. Since then Humes have improved the grade of fibre, Fletchers' staff have done rewarding basic research on its correct usage, and in consequence a great deal more of the New Zealand fibre is now used.

In the making of asbestos cement, Hatschek's is still the basic method. Thin layers of wet asbestos and cement are built up on a sizeable roller until

^{*} Latest news is that George Holmes has been appointed to head the Company's Organisation and Methods Section and will shortly be moving to Auckland. John Cann is the new production manager at the Durock Factory.

a board of the required thickness is obtained—a lamination in which fibre is coated and intimately commingled with cement. Cement by itself, in a slab of the same thickness, would have nothing like the strength and resilience of the asbestos-cement board.

A major improvement in processing was the introduction of silica sand which combines with the cement when the mixture—fibre, cement, silica—is steam-cured under pressure. Because carried out in steam vessels for which the technical name is autoclaves, the curing process is known as autoclaving. Silica makes for lower moisture absorption and, as an ingredient in autoclaved asbestos-cement, has the effect of reducing dimensional changes: a decided advantage in a country like New Zealand which has extreme changes in climate.

LAYER BY LAYER

The capacity of the Durock factory is two million square feet of asbestos cement a year, and the present annual production is about one-and-a-quarter million square feet. This is from one machine: the Hatschek or, as it is usually called, the wet machine. For feeding into the machine, a porridgelike slurry of asbestos, Portland cement, silica and water is prepared in the Hollander (or "beater"), a big trough fitted with a multi-blade rotor like a paddlewheel. The machine makes the slurry into a thin layer, at the same time sucking and squeezing surplus water out of it. As already explained, this raw spread is then built up layer by laver on the machine roller. When a board is ready it is cut off the drum and the next one begins to build up.

As it comes off the drum, a board looks like thick, damp blotting paper and is just as pliable. It can be fashioned to order in moulds or templates. Roofing sheets, for example, are made by pressing boards against a corrugated steel sheet. Or, if downpipes are the order, they are made by wrapping damp boards around cylindrical mandrels. Once the cement has set, the product will retain its shape after leaving the mould.

Flat sheets for exterior or interior wall cladding are simply stacked on a steel sheet as they come from the wet machine; trimmed at the edges; and next day racked for autoclaving. With further processing, flat sheets become Durock Sidings.

A siding is a flat asbestos-cement board measuring two feet by one foot, with face patterned to resemble cedar graining, with nail holes punched in it and with a wavy edge (so that, on a building, any slight irregularities of line in fixing will not be noticed). Flat sheets go under a roller to be embossed



Above-

A sheet of asbestos cement coming off the accumulator roller. Left to right around the Hatschek machine are Joe Burke, Graham Jackson, Bill Butler (Foreman) and George Butler.

Below-

Man filing is Ted Denny; man pointing is Frank Ferguson (Despatch and Orders); man measuring is Harry Ede (Foreman). with cedar graining. Next, they are fed into a "punch press" which cuts them to size, puts the wave on one edge and punches the nail holes. As with other Durock products, autoclaving, inspection, grading and packing are the subsequent steps.

Soon a new type of siding is to be marketed. It is pure white and, instead of cedar grain pattern, has a striated surface rather like Weldtex plywood. On a wall the effect of this pattern is to make the joins between sidings less apparent; a run of White Sidings looks like a continuous strip. It was essential that the sidings should be absolutely white, to make them distinctively different from the light-coloured grained sidings, and delay in marketing the new product has been caused partly by difficulties encountered in achieving purity of colour.



Mouldings account for relatively little of the factory's output but, in point of usefulness and variety, are a vital part of it. The range includes skylights (for use with corrugated "Big 7" roofing), exhaust ventilators, and caps for residential guttering and fire surrounds, as well as display figures up to 12 feet in height, statuettes and wall plaques. For these specialised lines considerable skill in hand moulding is needed—even a doll has been made.

NINE MILLION

To a degree and of a kind, the Durock Factory has automation-timesaving and labour-saving automatic devices invented by the electrical engineer, Bill Douglas, who, in the words of a colleague, "dreams up improbable circuits which shouldn't work, but do." Inventiveness helps to keep down operating and manufacturing costs. In a measure it is thanks to technical improvisations that Durock products have not increased in price since 1952, although costs have risen considerably. The technical and development staff have achieved much, over the years, in improving quality, diversifying products and minimising costs.

Nine million sidings have been sold since the Durock Factory was established nearly 13 years ago. Beyond question, asbestos-cement products meet a need in building and in commercial construction. The material requires no maintenance and is impervious to coastal atmospheres, a quality that makes it admirably suited to a country where so much building must necessarily be close to the coasts. Another factor in its favour is that it commends itself to lending institutions because it is proof against vermin, rot and fire. It is safe to say that its place among modern building materials will be increasingly recognised as it is produced in new forms and as new uses are found for it.

Above-

A rack of Durock pipes and mouldings in the autoclave in which they are steamcured at high temperature.

Below-

At work grading and packing Durock Sidings are Mrs. Eileen Dawe, Mavis Ollerenshaw, Mrs. Pat Johnson and Mary Morris.

COVER DESIGN

A crayon scribble on a sunlit section of a Durock Sidings wall, photographs of two attractive Durock-sheathed homes, and our artist had all he needed for a cover theme. Conditions have changed since 1954 when Fletchers meant to quit the industry, so with our ideas revised and farmers keen to resume cropping...

WE'RE BACK IN LINSEED!



This battery of oil expellers is a main part of the modern plant at the Linseed Oil Division's factory at Dunedin. Although in 1954 we announced our retirement from the linseed industry, we never quite reconciled ourselves to that course. Since then our Linseed Division has disposed of stocks of seed and oil, and then the time came to take the last irrevocable step—to dispose of the basic machinery and factory buildings in Dunedin.

Before making a decision that would have brought a New Zealand industry to an end, the Board of Fletcher Holdings Limited gave the situation a last careful look. After discussions with Government Departments, farmers and other interested groups, the Board decided to remain in the industry, but on a limited basis. We believe that the decision to continue in this important industry will be generally welcomed.

Up to 1954 the emphasis was on oil production; relatively small importance was attached to the sale of linseed cake for stock food. (Cake is made from meal, which is the crushed seed with most of the oil expelled.) Price control, import control and rapid fluctuations in overseas prices, together with the substantial outlay in financing farmers for crops, had all combined to discourage the Company; but now we are confident that with a limited oil output of about 100,000 gallons annually, and with increased emphasis on the use of linseed cake, a more stable enterprise will result.

Ups and Downs

All in all, New Zealand's experience of the linseed industry has not been very satisfactory. Time and again during this century, and even before, growing has been encouraged only to die away again because, mainly, of vacillating markets overseas and the uneconomic prices at which oil could be imported. In some countries it is the linseed stock foods that are allimportant and the oil, regarded as a by-product, is from time to time sold abroad at dump prices. When war broke out in 1939, New Zealand industry was wholly dependent on imported supplies of oil. Fletchers' association with the linseed industry began in 1942 when these overseas supplies became practically unobtainable and when the local paint manufacturing industry was facing a major problem of existence. At the time, a surplus of linen flaxseed (a species closely related to linseed) was available from the linen flax industry and, at the request of the Government of the day, Dominion Industries Limited, now part of The Fletcher Industries Limited, established a small factory in Dunedin to process oil. In September, 1945, this factory was destroyed by fire and high replacement costs involved the Company in heavy capital expenditure.

As supplies of linen flaxseed diminished from 1943 onwards, the Company had to set about the task of encouraging farmers in South Canterbury and Otago to sow linseed again. Despite the background of past disappointments, Dominion Industries' field staff, led by W. G. Weight, brought about renewed confidence in the industry, and the acreage of linseed grown rose from next to nothing to more than 24,000 acres, the figure for the 1950-51 season.

National Importance

It might be argued that linseed oil's most important use is as dressing for cricket bats; but it has numerous industrial uses besides. It is the basic ingredient in oil-based paints. It is needed in one form of manufacture of hardboard. Some of the more refined products from the oil make printers' and specialised inks. In addition, after the oil has been expelled the crushed seed is rich in protein and, mixed with meal such as bran and pollard, forms a valuable stock food.

During the war and for some years afterwards, linseed oil produced at the Dunedin factory was sold in New Zealand at prices far below those ruling overseas. At one stage New Zealand oil sold at approximately 13 shillings a gallon compared with an overseas landed price of more than 26 shillings a gallon. Consequently, it is easily proved that during those years the New Zealand industry saved the country hundreds of thousands of pounds in overseas currency and kept the paint industry in operation during the years of national emergency. After the war, and with the revaluation of the £N.Z., there was a gradual fall in the price of imported linseed oil—although the curve was by no means steady —while the price of oil from the Dunedin factory rose slowly in keeping with the rising cost-structure in New Zealand and, in particular, because of the necessity to pay growers a return equivalent to what they would have obtained from competing crops.

Future Plans

The fluctuations of the linseed oil market overseas are notorious, yet no sooner was the Government-controlled price of Dunedin oil a few pennies more than the price for which oil could be imported than a propaganda barrage was opened from certain quarters to assail the New Zealand industry as monopolistic and uneconomic. By late 1953 the difference between imported and local prices was too great, meagre as the Company's profit record was, and, considering how it strained finances to pay for crops many months before seed could be processed and sold as oil, the Board of Fletcher Holdings Limited decided to retire from the industry.

Meanwhile conditions have radically changed. Import control has been removed; importers and paint manufacturers are free to buy linseed oil where they will; and control over the price of linseed oil has been removed. With the air cleared, farmers are keen to grow the crop and are supported in their attitude by the Department of Agriculture and other Government departments whose specialists recognise the value of the industry.

Pure strains of seed for sowing have already been procured and plans are well advanced for limited production of oil which we are confident can compete in price with overseas oil. Plans are also in hand for the development and extension of stock food production. A crop is being sown in September-October for harvesting in March-April, and processing will begin in the Dunedin plant soon after that.

A decade's association with the industry gave us crops of headaches as well as linseed, but the decision to save the industry, though on a limited scale, is one that was taken with very real pleasure.



The "Going Up" series was started in May, 1955, and has been a record of Fletcher Construction's main undertakings in Auckland, Wellington, Christchurch, Dunedin, Invercargill and Hamilton, with Howie Moffat and Fletcher projects in Australia also featured. A few of the goingsup outside of the cities during that time are illustrated in this general survey of New Zealand contracts.

Goin North

The South British Insurance Company's office premises in Whangarei, completed last December: floor space, 3,995 square feet. Foreman was Len McCullough.

THE SOUTH BRITISH INSURANCE COMPANY LIMITED

III



At Moerewa Freezing Works, this three-storey extension to the freezing chamber was started in April, 1955, and completed in the following December. The ceiling of the top floor was erected first in stages to give cover and obviate delays in wet weather. Photograph shows the final process in the insulation of the walls of the top storey; the material being applied is aluminium foil reflective insulation.

> South-west and south elevations of the four-storey technical block at Whangarei Boys' High School. The floor area is 11.790 square feet and the block was completed less than one month ago Foremen were Pat Tierney (concrete work) and "Sandy" Sanders (finishing work).

ORAWIA OCEAN BEACH

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MOEREWA WHANGARE

> A panoramic view of Cherry Farm A panoramic view of Cherry Farm Mental Hospital, 23 miles north Con-Mental On this site Fletcher Con-Undefin. Juit seven modern villas of the struction built seven modern was M. M. type shown here. Foreman was M. M. Mackinnon.

TRANS



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IN MARKET

Structural steelwork for the Southland Cement Company's plant now nearing completion at Orawia. The plant will have a capacity of approximately 40,000 tons and it is expected that production will start before the New Year. Fletchers have carried out all phases of this project—design, construction and plant installation. The job superintendent is Dick Jones.

Recent additions to the Ocean Beach Freezing Works, originally built by Fletchers in 1950, Foremen were Noel McKinley and Brian Phillips. Late in the afternoon of August 11 two steel barges, the smaller one riding pick-a-back on the other, were towed into Bluff Harbour by the inter-colonial ship *Babinda*. According to a southern newspaper the barges were "the largest ever to enter New Zealand"; but in fact they were built in Auckland by the Vulcan Works of Fletcher Steel in 1951, had been in service in Australia as well as here, and were returning to their homeland for further service.

PICK-A-BACK TASMAN TOW

Fletcher-built Barges Return to Service in New Zealand

Vulcan Steel fabricated and built the barges for the Import Wharf contract from designs prepared by the Raymond Concrete Pile Company. With the Import Wharf completed, Fletcher-Merritt-Raymond moved on from Auckland to build a tanker-pier for the Caltex Refinery in Botany Bay. On this contract, too, the barges were needed and they were towed across to Sydney by the *Viti*.

The largest barge—the pile-driver known as "Billy"—is 85 feet long and 35 feet wide, with a dead weight of 110 tons. "Jimmy" and "Stonewall Jackson", the two smaller barges used for carrying piles, are each 70 feet by 28 with a dead weight of 70 tons.

No work was immediately available for them with the Company after the tanker-pier was built and so they were sold to the French firm, Societe Nationale de Travaux Publiques, for use in New Zealand on the Bluff Harbour contract.

For the return voyage it was decided to mount one of the smaller barges on big Billy and to tow pick-a-back while the second small barge came to Wellington as deck cargo on the *Kopua*.



"Billy" the pile-driver barge takes to the water—the launching in 1951 of the biggest of the three barges built in Auckland by Fletcher Steel for the Import Wharf contract. (Photo by courtesy of the "Auckland Star.")

In order to comply with the Australian Marine Department's safety requirements for the tow, a good deal of strengthening work on the barges was done in Sydney. A false bow had to be fabricated and fitted, and special navigation lights were welded to the barges. Sufficient oxyacetylene to ensure lighting for 30 days was carried in cylinders attached to the lamp fittings.

Towing arrangements were complicated but very safe and *Babinda* with her barges—a tow of a total length of 400 feet—left Sydney at 10 o'clock on the morning of Saturday, August 4. In good weather she made the journey in just over seven days, delivering the barges to the Bluff Harbour Board on Saturday afternoon one week later.

Engineers from Fletcher Steel then had the task of separating the barges before handing them over to their new owners. The other small barge was moored at the Eastbourne Wharf after being landed in Wellington. From there it was towed to Bluff by Northern Steamship Company's *Tainui*.

Credit and thanks are due to the Master, officers and crew of *Babinda* and *Tainui* and to the harbour and navigation authorities in Australia and New Zealand, from whom we had excellent co-operation.

All three barges will shortly be doing another important job of work in developing one of New Zealand's major ports.

A false bow was fitted to the smaller barge so that in heavy seas water would be deflected to stop the barge being wrenched away from the deck to which it was welded.

Special navigation lights with 30 days' burning capacity were fixed to the barge deck.

"Babinda" in Sydney Harbour with the "pick-a-back" barges alongside.



SOUTH ISLAND PLYWOOD

Upper right-

Veneer accumulating on the lathe reel as a log is peeled—a different method from that used at the Auckland factory where the veneer is taken from the lathe along a deck system.

Lower right-

Off the peeling lathe, the reel unwinds its load on to a sorting platform where defects are clipped out of the veneer at the same time as it is cut into standard-size sheets.

Below-

Laying up batches of plywood for gluing, after which the assembled layers are put through the big press (at left) under high pressure and at high temperature.

Bottom left-

In this section of the factory, narrow strips of veneer are joined together to make wider sheets.

Bottom right-

The two machines are sanders. It is not until the face is sanded that a plywood sheet can be graded.











In 1955 New Zealand's output of plywood was more than 30 million square feet. The greater part of it was produced by N.Z. Plywood Limited, Auckland, which is a wholly-owned member of the Fletcher Group, and N.Z. Plywood (South Island) Limited, Christchurch, which is jointly owned by the Kauri Timber Company and Fletchers. Operations are much the same at the two factories; and since manufacturing processes at the Auckland factory were fully described in our May issue this year, we are leaving it mainly to the camera to show readers around the plant at Riccarton, Christchurch.

Logs for this factory come from the West Coast of the South Island and in general are younger and smaller than those processed in Auckland. Mostly they are Rimu, though some white pine (Kahikatea) and a proportion of local Radiata pine logs are also peeled.

Established in 1950, the factory now has a capacity of $11\frac{1}{2}$ million square feet.

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NEW FLETCHER FACTORY FOR CHRISTCHURCH

Within the next few weeks work will begin in Christchurch on the Chipboard Factory for N.Z. Plywood (S.I.) Limited. This building of 16,000 square feet will be adjacent to the Plywood Factory at Riccarton. It is expected that production will start toward the end of next year. The plant will have an initial capacity of two million square feet a year, rising to a maximum capacity of five million square feet. Full details of this new Fletcher industry will be published in *Arrowhead* early next year.



WELLINGTON, Oct. 20, 1906

—The Wellington Racing Club was again favoured with delightful weather for the concluding day of its Spring meeting. The racing was interesting and speculation was brisk. The successful double was Ellerton and Flotilla, investors receiving £115/10/- for each pound invested. The amount handled at the totalisator (inclusive of £1,669 on the doubles machine) was £15,949 as against £8,328 for the corresponding day last year, making a grand total of £27,500 for the meeting, as compared with £18,320 last year.

RIG REPLACEMENTS FOR KAWERAU

Early in September, less than three months after the accident to Fletcher - Bechtel - Raymond's geothermal drilling rig, a new mast and sub-base were unloaded from the freighter, *Waitomo*, at Auckland, and taken by road to Kawerau. The equipment came from the United States. *Waitomo's* cargo also included special grouting cement for consolidating the ground around the holes that will be drilled now that the geothermal investigation programme is under way again at Kawerau.

TRUCKS FOR OHAKURI

Photograph shows the first two of a fleet of specially-constructed Bedford diesel trucks which Tappenden Motors have supplied to Fletchers for work on the Ohakuri tunnel contract. Each six-ton truck can carry loads of up to seven tons and the fleet will be used to carry spoil from the tunnel. Because of the danger from petrol vapour in work of this kind the trucks are fitted with 108 b.h.p. Perkins R6 diesels and, as an extra precaution, with water tank fume arresters. All the modifications were carried out in Auckland, including four-wheel drive, which gives a total reduction in bottom of 96 to 1; heavy-duty ram telescopic hoists; and "shovel-back" bodies with cab protectors.



DUNEDIN, October 20, 1906

-The new Railway Station which is to be opened for traffic tomorrow is in a class by itself so far as New Zealand railway station buildings are concerned. For size, for convenience, and in imposing appearance, it stands alone. Built of igneous bluestone brought all the way from Waipiata, backed up with concrete and faced with Oamaru stone, there is nothing flimsy in its construction. The design, which is modern Renaissance, with free Flemish treatment, is based more upon the American than the British model. The tower, which forms so important a feature of the building, is a regular adjunct to almost every modern American railway station building.

PLANT AT WAITOMO NEARS COMPLETION

With the arrival in Auckland in September, ex Otaki, of the cement grinding mill for the Waitomo Cement Works, Te Kuiti, another Fletcher Construction project was brought a stage nearer completion. The mill is the last major piece of equipment required for the Fletcher-designed plant, to the assembly of which many countries have contributed— England, cement mill and cone crusher; Germany, kiln and raw mill; Sweden, compressor; Australia, bagging machine; America, jaw crusher; New Zealand, conveyors and hoppers made by Fletcher Steel.

7,200 YEARS TO GO OF SQUEEZE

"The Bank reaffirms its objective—to retain the 'credit squeeze' until monetary demand ceases to exert an upward thrust of prices and excessive pressure on the resources of labour and materials and on the balance of payments."

According to the Bank's bulletin for July, 1956, the above is an extract from the annual report of the Reserve Bank of New Zealand for the year ended March 31, 9156. At first we wondered if this was meant as an official forecast of the duration of the squeeze. On second thoughts we took the year (9156) to be misprinted. We live in a glasshouse ourselves and never know when a brick of our own dropping may come through a window; but we are sure our friends at the Reserve Bank will not mind our reproducing their accidental prophecy, with a plea for no more shocks of the same kind.

Tunnel Time Extension

WELLINGTON, Oct. 4, 1906 —The Mount Victoria tunnel is the only break in the tramway track between Kent Terrace and Kilbirnie Park. The time allowed by the contract for the construction of the tunnel expires in about a fortnight, but owing to the exceptional difficulties encountered in boring through a mass of solid granite the like of which has never been encountered on earthworks in Wellington before, it is probable that a three-months' extension of time will be granted as recompense for the fine supply of metal the tunnel has yielded at so opportune a time.



THE FLETCHER INDUSTRIES

WHO'S WHO

IN THE NEWLY-REGISTERED COMPANY



J. S. WATT, Managing Director of The Fletcher Industries Limited, came to Fletchers in 1953 from I.C.I., in which organisation he held important posts in U.K., New Zealand and Australia. Before his present appointment, Dr. Watt was General Manager of our Industrial Consulting Division. A New Zealand Rhodes Scholar, he holds a Master of Science degree and a Doctorate from Oxford University.



T. C. B. COOPER, General Manager in charge of production, joined Dominion Industries in 1946 as a mechanical draughtsman from the N.Z. Railways. In 1950 Mr. Cooper was appointed Chief Engineer of Dominion Industries and N.Z. Plywood (South Island). He became Manager of the latter company in 1951.



W. G. WEIGHT, General Manager in charge of sales, joined Dominion Industries' Linseed Division in 1947 as factory supervisor and subsequently was Manager of the plant. Mr. Weight was formerly associated with the paint industry in India and the United Kingdom. Because of the vagaries and complexities of the law, it was some time before we could formally register The Fletcher Industries Limited, which now embraces all our manufacturing companies:—

New Zealand Plywood Limited, Penrose.

Dominion Industries Limited (Asbestos-Cement Division, Christchurch, and Linseed Oil Division, Dunedin).

Duroid Products (N.Z.) Limited, Onehunga and Dunedin.

The Kaiwarra Door Factory, Wellington.

Dominion Sales Corporation Limited.

Now that the Company has been registered, we are taking this opportunity, in an issue which deals with some of our industries, to set out the personnel changes brought about in the course of the re-organisation.

Managing Director

Mr. J. S. Fletcher resigned as Managing Director of Fletcher Industries and Dr. J. S. Watt has been appointed. Mr. J. S. Fletcher, a Director on the main Board of Fletcher Holdings Limited, remains on the Board of Fletcher Industries and is also a member of the Boards of all our other subsidiary companies — Fletcher Construction, Fletcher Timber, Fletcher Steel, and Fletcher Sales and Services.

Senior Management

Mr. T. C. B. (Brian) Cooper has been appointed General Manager in charge of production.

Mr. W. G. (Bill) Weight has been appointed General Manager in charge of sales.

Mr. C. M. (Colin) Gurr is the Secretary of Fletcher Industries and both he and Mr. Weight recently moved to Auckland where the entire senior management of Fletcher Industries is now domiciled. (Mr. Cooper may return to Christchurch for a period to set up the new chipboard factory.)

Factory Management

There are no changes in factory management, the "Who's Who" of which is:---

Plywood, Penrose:

Mr. B. A. (Brian) Henry.

Duroid Products:

Mr. A. E. (Alick) Trenwith. Asbestos-Cement Division:

Mr. E. (Eric) Adams.

Kaiwarra Door Factory:

Mr. K. R. (Ras) Goddard.

Linseed Oil Factory:

A. J. D. (Don) Robb.

Mr. H. G. R. (Graeme) Gunthorp manages the Christchurch Plywood Factory which Fletchers operate in partnership with the Kauri Timber Company.

Sales Management

Personnel remains unchanged, the Area Sales Managers being:-

Auckland:

Mr. J. C. (Jack) Lereculey.

Wellington:

Mr. J. W. (Jack) Neale.

Christchurch:

Mr. H. B. (Brian) Stewart.

VALEDICTORY

The Marble Division of Fletcher Industries will be closed down as from October 1.

The stock and some of the plant are being taken over by W. Parkinson and Company Limited, Victoria Street West, Auckland.

The Marble Company's future was in doubt when we published its story in the February-March issue of "Arrowhead", but, come what might, we nonetheless wished to acknowledge the significant contribution is has made to the progress of the Fletcher group of companies since 1923.

As we had occasion to say in that article, marble and stone, though less used in this age of reinforced concrete and structural steel than they were 20 years ago, are by no means materials of the past; they have an assured place still.

Fletcher's position, however, can be quite simply stated. With only limited funds available today and with Bank credit restricted, we have had to accord priority to more urgent developments in timber, for instance and in plywood and linseed. We must withdraw from some activities in order to progress in others.

On another page we welcome the restoration of the linseed industry, but the pleasure we take in this is tempered to a degree by the regret with which we bid farewell to the Marble Company.

ersonalia

AUCKLAND

STAFF CHANGES: Allen J. Wilson, who joined the Company five years ago on the Import Wharf contract, has been appointed Auckland Sales Manager for Fletcher Steel. Allen was one of the old originals with Fletcher Construction in Kawerau, later joining Purchasing Division and serving in Wellington and Auckland. A small farewell function was held in the Board Room for him on August 14 and his five-year service pin was presented by W. A. Bourke who had engaged Allen originally on behalf of Fletcher-Merritt-Raymond.

We also said cheerio to Ted Kane, one of Penrose Office's best-known personalities, who is now at Fletcher Steel as Purchasing Officer. At "Vulcan" Ted will certainly be among football friends.

WELCOME: To Anne O'Reilly (Penrose Office); to Ramsay Mowat who has joined the sales staff of Fletcher Industries; to Harry Sigerson (Drawing Office), a recent arrival from U.K.

Cartage contractors Jim and Ken Carter were welcomed at a Fletcher Timber function at which Managing Director W. A. Bourke wished them a happy association with the company.

- FAREWELL: To Betty Findlater (Fletcher Timber), June Irvine (F.C.C.) and Anne Olsen (Sales and Services), Marie Talbot (Industries). Also to Bill Cramond and Tom Doherty (F.C.C.).
- TRANSFER: Dianne Gillespie, formerly of Preload Division, is now with Sales and Services.
- RETIREMENT: Bill Neithe (Precut Mill) has retired after 20 years with Fletchers.
- SERVICE: Jack Greenhalgh recently received his pin on completion of five years with F.C.C.
- CONGRATULATIONS: To Doug. Notley on his engagement to Dimity Clarke.
- WELCOME HOME: To Fletcher Holdings' Secretary Harry Molony, and Mrs. Molony, who returned at the end of September from their trip to U.S.A. and U.K.

INVERCARGILL Intelligence

George Bourke has taken to collecting stamps (Traffic Department issue).

Vin O'Connor (Cartage Department) gave up handling timber for a week to look after 500 girls down here for the New Zealand K Cup Hockey Tournament. He has returned without a scratch but with a few more grey hairs.



Kath Dinsdale and husband Doug. at a Flatcher Timber social evening held for Rotorua and Ngongotaha staff members.

ROTORUA

WELCOME: To John Wiseman, Joan Webber (both Office).

FAREWELL: To Ann McPherson (Office). CONGRATULATIONS: To Bill Rowe on the birth of a daughter.

WELLINGTON

- WELCOME: To Mrs. Marlene Smith (Filing Clerk), Miss G. Roberts, Jill Longuet (Shorthand Typists), Dorothy Bain (Teleprinter Operator), Mrs. Just (Teas), Alan W. Lawrence (Driver) — all of F.C.C. Fletcher Industries: Anne Perkins (Shorthand Typist). Fletcher Steel: Mrs. Fay Keane (Shorthand Typist), Mrs. Bev. Christianson (Book-keeping Machinist), Bev. Woodbury (Cashier).
- FAREWELL: To Mrs. Margaret Whiffin, Christine Simon, Gladys Lambert, Doug. Drinkwater. Other branches will also miss our teleprint operators, Margaret Whiffin and Gladys Lambert. Margaret is taking up employment nearer her home, Gladys is about to marry.
- SICK LIST: Best wishes for a speedy and complete recovery to Basil Hanify, Driver at Kaiwarra office, who is well known to all Fletcher's Wellington companies and to visiting personnel.

CHRISTCHURCH News

- WELCOME: To John Cann who has returned to Fletchers as production manager in the Durock Factory.
- FAREWELL: To Barry Holland (Fletcher Timber); we wish him well in his new career in newspapers. To "Pat" Patterson (F.C.C.) who is returning to England—a convert, we are pleased to be able to tell Dr. Craven, to our national religion of Rugby.
- CONGRATULATIONS: To Wray Fee (F. C.C.) on passing his accountancy final.
- TRANSFER: Barry Heggarty has left Fletcher Steel office to return to the building industry as foreman for F.C.C. in Christchurch.
- SERVICE: Marie Flood and Frank Ferguson, both of Asbestos-Cement Division, have been awarded their five-year service pins.
- MAN & SMILE MISSING: George Holmes is returning to Auckland to continue with the supervisors' course on organisation and methods arranged by Associated Industrial Consultants. He will probably be turning up again in Christchurch shortly in his new capacity.

A FIVE-BABY HANDICAP

It's a women's world and girls outnumber boys by five to two in recent Christchurch births. Congratulations to the seven fathers: J. O. Buzzard (Plywood) and J. A. Grant (F.C.C.) who achieved boys; A. R. Hudson and H. Gray (Plywood), C. E. Fagan (F.C.C.) and Jack Palmer and John Matheson (F.S.E.) who scored girls.

In reporting this quiverful to Arrowhead, our Christchurch correspondent refers to previous issues to sustain his claim that Fletcher folk in that city are making notable contributions to the Dominion's vital statistics and asks if other centres would care to gird their loins for a Stork Handicap. The terms of contest: "We in Christchurch

The terms of contest: "We in Christchurch are quite confident that we can give any challenger a start of five babies (singly or up to quint lots) and carry off the trophy with a comfortable margin for the next year."

After which provocative offer, we can't see other centres not taking issue with Christ-church.

DUNEDIN Diversions

- WELCOME: To Carl Ryan who has transferred from Auckland to be Fletcher Steel's Branch Manager here; to Ken Hogg (Quantity Surveyor) who has come to F.C.C. from Wellington office.
- FAREWELL: To Eric Knewstubb who has gone to Auckland as Secretary of Fletcher Steel. Eric was Branch Accountant with Steel in Dunedin.



Northland Foremen—With this issue given over mainly to a review of some of our South Island industries, we can still keep the other Island in the picture by printing this photograph of Northland foremen and listing their present assignments to indicate the range of Fletcher Construction's northernmost activities. From left: Len McCullough (Government Life Insurance contract), Pat Tierney (Ideal Laundry), "Sandy" Sanders (Whangarei Boys' High School), "Bres" Bresnehan (A. & N.Z. Bank), Lou McDonald (Steel Reinforcement), Dick O'Donnell (Maternity Annexe).

THE HEAD

From the picture we published last November of a schoolmaster with his class we have snipped out this shot of the schoolmaster in order to re-introduce Mr. J. Peter Clapham. At the time the photograph was taken he was instructing a Fletcher - organised class on Sprayed Limpet Asbestos, having come from Australia as a representative of J. W. Roberts Ltd., Leeds.



Peter Clapham has returned to New Zealar.d with his family and will be taking control of Fletcher Construction's Acoustics and Insulation Division, operating from Wellington.

Welcome back, Peter.

The card enclosed with each mail copy of this issue must be returned to us if readers still wish to have "Arrowhead" sent to them.



(By our own Correspondent)

Colin Beeton, former Kawerau person and personality, now in Essex as Volunteer Chief of *Arrowhead's* United Kingdom Bureau, reports a gathering-in-strength in London of the Kawerau tribe:

"This tribe owed its origin to the contemporary New Zealand feeling that the proper thing to do with wood is to convert it into paper. The corroboree^{*} was attended by folk of various countries who worked at one or another time for Fletcher-Merritt-Raymond at Kawerau. Actually it took three parties at different places in London within the space of a few weeks to get everyone together."

By country alphabetically and by Kawerau occupation, those present were:----

America: Tom Smith (Boilers).

Australia: Bruce McLean (Plant Dept.).

- Canada: Muriel King (Time Office), Percy King (Purchasing).
- England: Doreen Biddulph (Stenographer), R. Biddulph (Boilers), Lionel Edwards, Ian Peacock, Vic Penson, Colin Beeton (all of Quantities).
- New Zealand: Monika Marr (Telephonist), Maureen D'Arcy and Ngaire Davis (Purchasing), Neil Patterson and Keith Williamson (Engineering).

*(Black mark, Beeton; what sorts of characters did you mix with in New Zealand? If this wingding was, as you report, a corroboree, McLean was the only one at it not gatecrashing. A corroboree is either an Australian native carmagnole or else a witness who remembers to say in Court what the lawyers tell him to say. *Hangi* is the Maori word you want for your London jamboree.—World Affairs and Languages Editor.)



(To the Editors)

Sirs.-In a magazine as streamlined in its make-up as Arrowhead, spare us your yen for antiquity. In your article on Duroid, last issue, you dug up Noah and some embalmed Egyptian royalty. When Fletchers decided it would be fun to dig up Hobson Bay, your notion of writing it up was to dig up Maui and the old guff about his fishing the North Island out of the sea. There was some damned learned stuff about ancient Greeks in the Marble Company article. Greeks again, in your piece about prestressed concrete-Greeks plus the Romans, with La Scala Opera House (built seventeen-seventy-something) thrown in as a sop, I suppose, to modern-minded readers like Salvador Dali and myself.

Down into the past, dig, dig, dig all the time like Disney's seven dwarfs or a committee of hoary historians. Good idea to leave the deep research to Bob Stanbrook and his Banjo Shovel Boys at the Ohakuri tunnel job, eh? Watch it, or you'll find you've got one foot in the groove.—YELLOW BADGE.

(We like modern-minded readers who call a spade a spade.—Eds.)

SYDNEY Section

- WELCOME: To Pauline Wilson and Elsie Tambling who have joined our Sydney office staff.
- WELCOME HOME: By the time this is in print, Manager Jim Espie will be back from the trip in the course of which he and Mrs. Espie have visited U.S.A., Canada, U.K. and the Continent.
- FAREWELL: To Mrs. Jones and Miss Wood. Mrs. Jones was with us for over four years and on leaving was presented with a mantle clock engraved: "From your many friends at Fletchers."
- LONG SERVICE: His 10-year service pin was recently presented to "Bluey" Whittleston, formerly of the construction company in Dunedin. Five-year pins were presented to Digby Kitching, Hilton Struthers and Harry West.

OBITUARY

With regret we record the death recently of Jimmy Graham of the Plumbing Division, Christchurch.



If you want the smartest home at lowest cost (and who doesn't these days) Durock Sidings are your answer. These beautiful cedar-grained sidings that look so lovely actually cost between £26 and £90 less than other sheathings! And your home stays beautiful . . for life . . . with Durock Sidings. They never need painting ever. (You save some £400 in paint and labour over a 30 year period.) They're borerproof, rotproof, fire-resisting, give extra snugness and insulation. Isn't that the kind of house you want? For full details see any Builders' Supply Merchant.



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