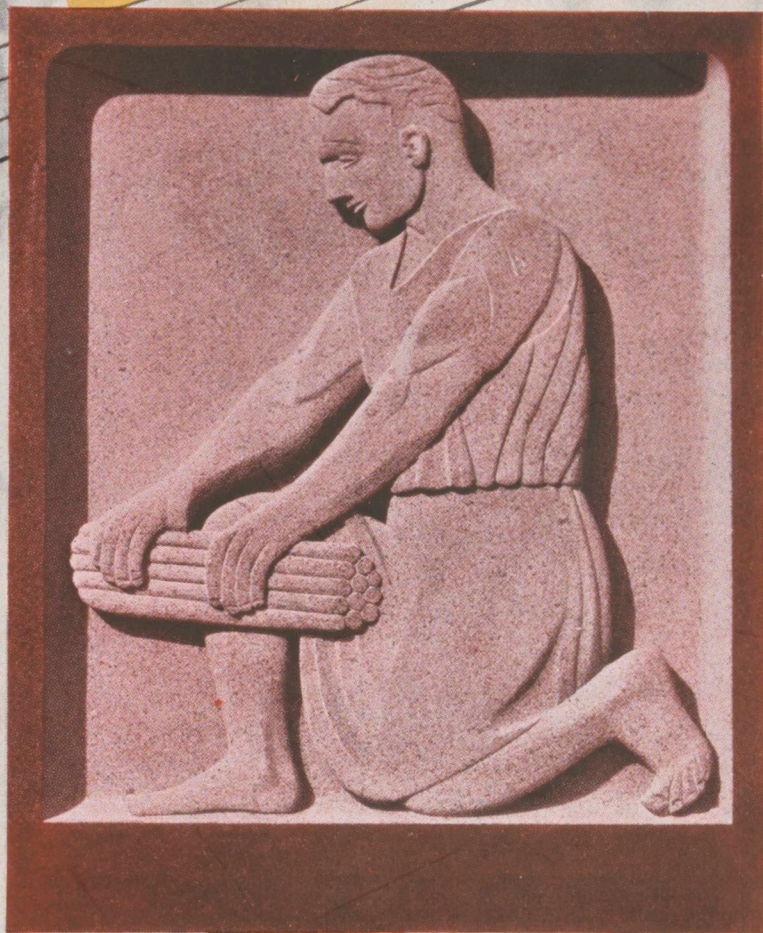
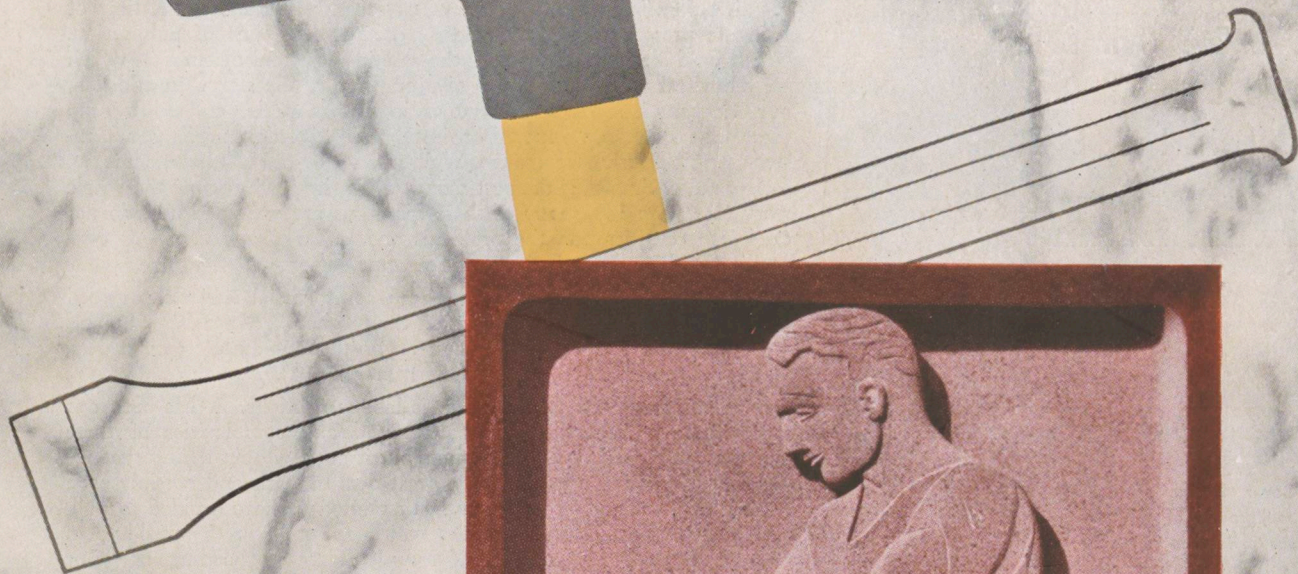


ARROWHEAD



FEBRUARY-MARCH
1956

FLETCHER

Arrowhead

VOLUME 2 No. 3

PUBLISHED EVERY
TWO MONTHS BY

FLETCHER
HOLDINGS
LIMITED

GREAT SOUTH ROAD
AUCKLAND, NEW ZEALAND

Cover Design — Against a background of Italian marble our artist has symbolised the tools of trade of the Stonemason. A feature on page 6 of this issue on The N.Z. Marble Company Limited—a Fletcher subsidiary—is linked with our page 5 story on the M.L.C. building by the superimposed photo of one of the panels in red granite which will be mounted above the entrances to the building.

ACKNOWLEDGEMENTS

Photos of M.L.C., N.Z. Marble Company, State Flats and Auckland personnel by Sparrow Industrial Pictures Ltd.

Photos of jobs in Dunedin by Campbell Photography Ltd. and Invercargill by Johnson Studio.

The photo of the Wellington City administration building is by Wm. E. Toms.

The aerial view of Auckland Harbour is by Whites Aviation Ltd.

Good Relations

One of the criticisms of house magazines is that they often dodge some of the most important issues and problems affecting a company, its staff and the industry generally and restrict themselves to non-controversial subjects and chit-chat about personalities. Such a charge might be made against *Arrowhead*. However, in a magazine coming out every two months and on which printing must begin at least one month before it reaches the readers, current lively issues at the time of going to press are very often nearly dead by the time of publication. This would almost invariably be the case in industrial disputes in which we often feel we would like to give our side of the story. In addition, our Company is not so sensitive to criticism that we feel obliged to jump into print on every issue. For instance, criticisms of Fletcher Construction's performance on the Wellington Town Hall have come up from time to time over the past months. To those who know the whole story (see page 10), many of these criticisms are one-sided and do not take into consideration the problems and difficulties—not of our own making—which have had to be overcome.

We are most anxious to deal with controversial subjects provided we have the editorial and publication time to handle them factually and objectively and without raising unnecessary heckles among our readers.

One of the most controversial problems in New Zealand, or probably any other part of the world today, is labour relations. It has been our endeavour to understand the background and complexities of these issues which arise from time to time, but it goes without saying that we all, management and staff, have a great deal to learn and possibly even a great deal to forget. This month, therefore, we have decided to publish the first part of some articles which appeared in the well-known London Sunday paper, *The Observer*, under the heading of "Our Industrial Discontents". Quite obviously these articles refer specifically to United Kingdom conditions, but it is felt that they also have relevance to New Zealand today.

The Observer has long spoken with an independent voice and, controlled as it is by a specially set up Trust, has never been afraid to voice criticisms of parties and governments of all complexions. According to the magazine *Forward*, known as Labour's Northern Voice in the United Kingdom—"a large number of influential people in the Labour movement always seem to be willing to listen to what this newspaper (*The Observer*) says." Whereas we feel that the article which is republished can stand on its own feet, we make this quote to allay any fears that *The Observer* is the voice of the employers or big business generally. The management of Fletchers do not necessarily agree with all that is said, but it is thought to be of sufficient importance to trade unionists and management to republish in our own magazine.

If sufficient interest is aroused by this first article, we shall publish the remainder in our next issue, in which we are also prepared to leave aside one page or more for letters or comments from the staff or from representatives of Unions with whom we are associated.

Letters and comments on this article are invited from the staff and associated Unions. These must be brief and to the point and reach us by April 1.

The Editors.

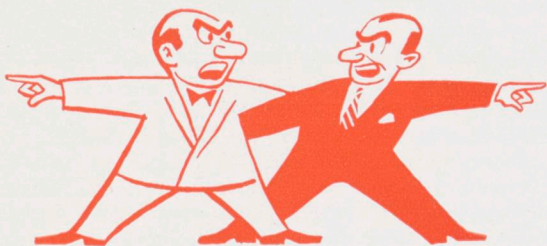
Our Industrial discontents

For the last fifteen years we in Britain have been engaged in a difficult and daring social adventure. In a country impoverished by two world wars and greatly handicapped in competition with the new giant Powers of this age, we have been trying to set new standards of social security, of minimum prosperity and of opportunity for all. And we have sought to achieve this peaceful social revolution while preserving the essential individual and collective freedoms of Western democratic society.

In brief, we have added the right to social security and full employment to the old-established liberties of the individual under the rule of law, including the right to form parties for the purpose of criticising and changing the Government of the country, and freedom of collective bargaining in defence of common interests.

Britain has not, of course, been alone in setting herself this goal of becoming a genuine social democracy. But no other major industrial country has gone nearly as far along that road, and none has set its sights so high while the international position of its economy was so precarious.

On the outcome of our experiment many hopes have been set—including the hope that it might offer an encouraging example to younger industrial nations which also seek to overcome great social inequalities and to raise their living standards without loss of freedom. Yet it is still an experiment—we have yet to prove that we shall be able to maintain both our new social standards and our ancient liberties while keeping Britain solvent and competitive in the harsh, rapidly changing world of the mid-twentieth century.



Losing our sense of direction . . .

After a promising start, there have lately been signs that we are losing our sense of direction. It is becoming obvious that the adventure on which we have embarked is demanding big changes in some of our traditional attitudes and institutions—bigger changes, indeed, than we have as yet been willing to make. Because we have not made them, something is going wrong in a vital part of our social machinery—the machinery of industrial relations.

For some time there has been evidence of growing friction in various important branches of industry, culminating recently in a wave of strikes and strike threats. During the first half of 1955 more working days were lost through stoppages than in any complete year of the last five—and in each of those five years the number of days lost was higher than in the preceding year.

The discontent is not violent; the strikes are not particularly serious if compared with those of pre-war years; the



. . . the business of the Union . . .

issues are often not very important—sometimes, indeed, they appear quite out of proportion to the trouble they cause. Yet the resulting friction has been bad enough at times to make our sensitive economic system nearly grind to a stop.

We believe that these disruptions, taken together and seen in perspective, point to one basic cause: that we have not yet fully faced the new responsibilities imposed by our experiment on all the main participants — Government, management and trade unions. We do not mean that the Government should take power to restrain the opposing interests of management and labour, or that—apart from real emergencies as during the war—they should restrain themselves from actively pursuing their collective interests. On the contrary, we believe that freedom to organise in defence of material claims is vital for a democratic industrial society, and that preservation of it is an essential part of the experiment itself.

Creation of Wealth

But the intelligent and successful pursuit of group interests in a highly competitive, full-employment economy requires from all concerned a radical readjustment of attitudes that were formed in response to quite different conditions, when Britain suffered from chronic unemployment but was sheltered from the shocks of the world market by a large overseas investment income. Today, when these conditions are precisely reversed, the intelligent pursuit of group interests calls for a new understanding of the importance of fighting inflation, raising productivity, and maintaining a continuous flow of production.

Unfortunately, this realistic grasp of the contemporary situation is not yet at all evident in the trade union rank and file. Much more obvious is the persistent influence of old, out-of-date theories and ideas.

One of these traditional ideas is that the creation of wealth is the responsibility of employers and managements alone: they (it is assumed) have the wealth, in more or less unlimited supply, and the business of the union is to get more of it away from them. Fifty years ago this was true in the very partial and restricted sense that there was in this country a large fund of wealth which could have been distributed much more evenly without impairing the country's economy. But even then it was misleading, and to-day it is ruinous. For it obscures the vital fact that better times for all are now absolutely dependent on raising industrial efficiency and productivity, and that the workers (and the unions) have an indispensable part to play in bringing these improvements about.

There is no doubt that this traditional attitude is obstructing the development of productivity-mindedness in the trade union movement. As the American unions have mostly

come to realise, the worker's pay-packet nowadays is more likely to be kept small by inefficient management than by grasping shareholders, and British unions ought now to be adopting and adapting American labour techniques for compelling employers to introduce new and more efficient methods and machines.

Another traditional influence, still very potent, is an almost neurotic fear of unemployment—although Britain is at present over-employed, with more jobs than available men, and all parties are pledged to maintain employment at a high level. This irrational anxiety has three particularly harmful effects.

First, it tends to freeze the economy in its existing pattern, preventing it from adapting itself to changing needs, for such changes can seldom be made without causing some transitional unemployment.



... too much money ...

Waiting for the Specialist

Secondly, it encourages all sorts of restrictive practices, designed to "spread the work" and to safeguard jobs (the miners' refusal to accept Italian labour is partly an example of this). Some of these practices are carried to fantastic lengths, unknown in most other countries, so that a simple task which anyone could do has to wait because a member of the appropriate union is not on the spot—even though a serious and costly delay in production, or in keeping up to time with a contract, may result.

Thirdly, it tends to obstruct the introduction of labour-saving—and thus cost-reducing—machines.

On this last count there may well be reasonable anxiety in some unions over such coming developments as automation, which before very long may put most industrial societies to an exacting test. But what the unions should realise is that if as a nation we fail to pay our way in the world, serious and lasting unemployment will be unavoidable, and that in order to pay our way we must strive always to make the best use of the most efficient methods. In Britain, particularly, a "Luddite" attitude towards new inventions is likely to prove a much more dangerous enemy of full employment in the long run than the inventions themselves.

This series of articles is intended to deal mainly with the trade union side of the question, but it is certainly not only trade union leaders and members who need to rethink their basic attitudes and reactions in industry today. Restrictive practices, for instance, are equally rife, in other forms, among employers. Price-fixing agreements, designed to ensure the least efficient firms a profit-margin, are the commonest and most harmful example. They spring largely from a wish for a safe, comfortable life, free from the disturbing spur of competition. But this easy-going regime is just what British industry, faced with inescapable world competition, cannot now afford.

In many cases, too, managements still bring to the handling of labour relations an archaic, nineteenth-century—even, some would say, feudal—attitude. Indeed, it is a common-

place saying in the modern management school that "bad labour relations are a sign of bad management."

There are managers who still believe, privately, that "the men are paid to work, not to interfere in the business." They tell them nothing, explain nothing, dismiss joint consultation as a waste of time—and are surprised when they find very little enthusiasm for raising productivity. In the coal industry these attitudes have often been largely responsible for the one, two or three-day unofficial stoppages which, added together, give miners the highest figure for all workers of man-hours lost from industrial disputes.

Management is partly a science and partly an art; it cannot be taught to everyone, but there is a lot that anyone who is to become a good manager must study and learn. It still happens too often here (less often in America) that men are promoted to managerial posts without having the necessary qualifications—or without even realising what the qualifications are.

Lastly, there is the problem of the proper attitude of the Government and the law towards industrial relations in the society we hope to live in. It did not arise while the wartime struggle for survival imposed a compelling national discipline; it was obscured during the early years of the Labour Government, when the unions exercised voluntary restraint so as not to embarrass "their" party. But since this restraint broke down, in the later years of Labour rule and under the Conservative Government, the cry for Government intervention to prevent strikes by legislation has been raised by a growing minority.

Government's Task

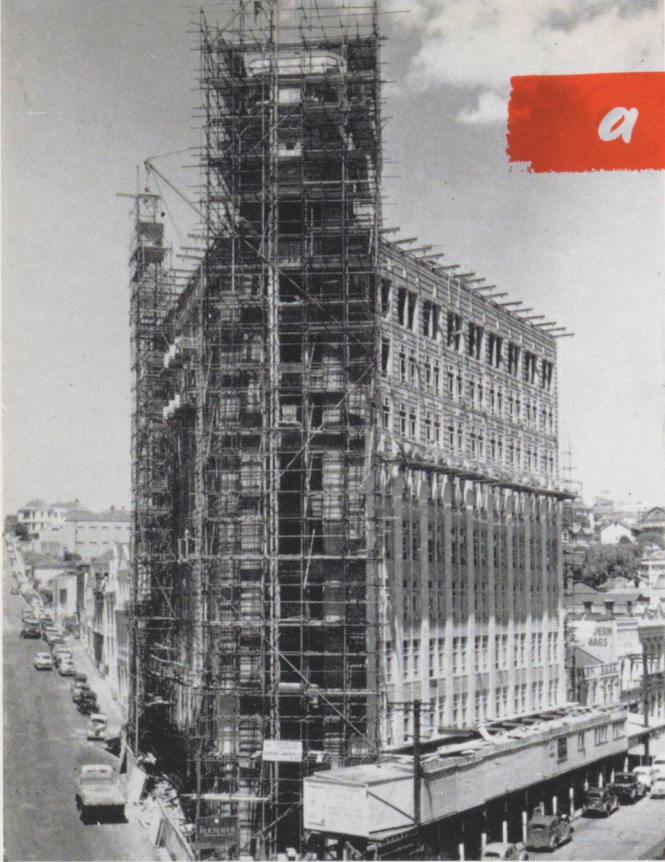
We believe that this demand is wrong, and that the Government's ostentatiously neutral attitude of "holding the ring" between unions and employers has been right. Britain's industrial malaise will not respond to authoritarian remedies. It is true that the Government, now as before, must accept final responsibility for maintaining essential services and protecting the economy from disaster. But it must show plainly—as it has, in fact, done under both parties—that it will not intervene until it has to, and that it is then just as liable to intervene on the unions' as on the employers' side. Only thus can it live down the worst handicap to its own authority in industrial matters—the legacy of 1926, when a Government helped to starve the miners into submission, and implanted in a whole generation the belief that government action must always be directed to keeping down the workers.

The new real responsibility imposed on the Government by the attempt to maintain free collective bargaining in a full-employment society is not in the field of labour legislation, but in that of economic policy. Just as no effort by managements and union leaders could have prevented social bitterness in a period of mass unemployment, so no such effort can avoid recurrent, futile and damaging industrial disputes in a period of steady inflation. Only the Government can provide the stable economic foundation for industrial peace; only the Government can give direction to a joint endeavour to keep the economy flexible and to raise its productivity.

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[If you believe these views are worth expanding and enlarging upon, let us know and we will republish the remainder of the series.—The Editors.]

a floor a month!



The M.L.C. building as it appeared on 1st February. Architects are Mitchell & Mitchell & Partners of Wellington.

The skyline of Queen Street, Auckland, static for too many years, is starting to show signs of activity in the vicinity of the Town Hall. First of several tall buildings to break through is the nine-storey block of offices Fletcher Construction is building in Upper Queen Street for the Mutual Life & Citizens' Assurance Company Limited (M.L.C.).

Although this £400,000 contract began in May, 1954, evidence of construction was not seen to passers-by until the beginning of 1955. The first eight months were taken up in demolishing old building foundations on the site, underpinning adjacent buildings, excavating and completing sub-floor construction. But the second stage—the erection of the nine-storey reinforced concrete superstructure was spectacular, and work progressed at the rate of a floor a month up to the completion of the roof slab and parapets 100 feet above ground level. Concrete work, including the erection of the 20-foot tower, the caretaker's penthouse and the elevator machine room, all above the main roof, was finished twenty months after starting the contract. The 40-foot stainless steel flagpole was raised just before Christmas, an occasion celebrated by Bert Brown (job foreman) and his colleagues and recorded by our cameraman who took the group standing on the roof of the building.

For Seymour Jack (Auckland Manager of the Commercial Division of Fletcher Construction) and his team, the job has not been without its difficulties. All concrete base-ment walls had to be bone dry to take a two-coat application of asphalt membrane lining and, in the early stages, time was

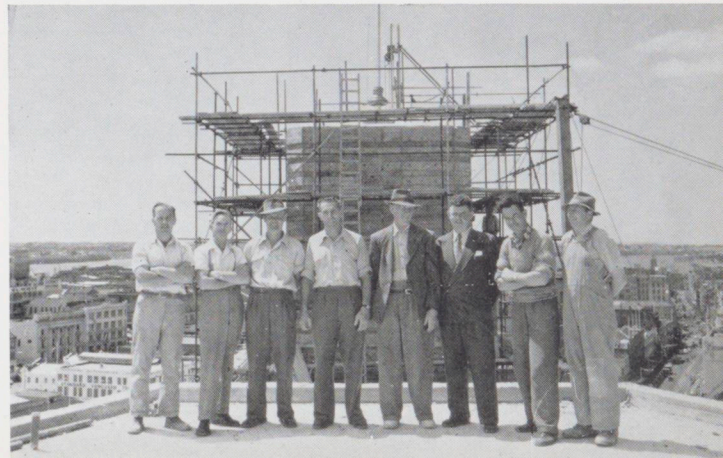
lost controlling seepage water due to the foothills location of the site. Although the ground floor of the building does not cover more than the area of half-a-dozen houses, excavations costing more than £12,000 were necessary, and 1,500 cubic yards of reinforced concrete had to be placed below floor level. Because of the restricted nature of the kite-shaped site and the limited footpath space the City Council could allow, it has been a problem to find room to stack gear, plant and fabricated reinforcing steel. For the first few floors, boxing had to be made some distance away from the job and transported as required. All concrete was delivered to the site pre-mixed and was internally vibrated during placing. Access to the hopper at street level was cramped in Airedale Street, which apart from being steep and narrow, had to be kept open to heavy traffic. A steel framed mobile ramp was so constructed that it could be swung out into the roadway while concrete was being poured and then swung back into line with the footpath when not in use. Concrete was hoisted by a high-speed electric clutch winch operating a 10 cubic foot elevator bucket in a rigid tower frame 130 feet high.

The final stage of construction has now been reached and all emphasis is on exterior and interior finishing work.

Facings are of 2 inch thick ceramic blocks which will give the surface of the building a glazed masonry or tiled effect. The blocks are imported from Australia, packed in sawdust in wooden crates, and are numbered and coded for positions indicated on the setting plans. A carefully laid programme for fast continuous sheathing has unfortunately been upset because of unforeseen manufacturing difficulties in Australia, accentuated by shipping hold-ups. Striving to maintain schedule progress rate, they have had to change techniques and continue with fixing window-frames alone while waiting for further supplies of terra-cotta (The veneer, the windows and the glazing were planned as a combined operation.)

Balmoral granite veneer from our Marble Company (see feature, page 6) faces the ground floor frontages, and this has already been fixed on the Queen Street elevation. Sculptured granite panels, similar to the one on our cover design, will appear over the street entrances and others in terra-cotta are to go on the tower of the building. The lift halls and main corridors are to be panelled with Queensland maple veneer and the entrance lobby is to be in marble.

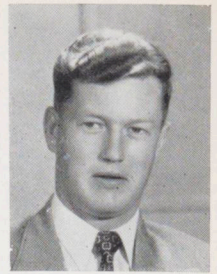
It will be several months before the bronze-sheathed doors are hung, but work is being speeded up to complete the contract as early as possible this year.



Right—Foremen and leading hands on top of the building. Left to right: Tom McMillan (foreman plasterer), George Isaacs (leading-hand carpenter), Alec Clark (foreman in charge of reinforcing steelwork), Bert Brown (job supervisor), Bob Buchanan (foreman labourer), Jim Barry (costing clerk), Jack Johnson (assistant foreman), Lionel Simpson (leading-hand carpenter).



Working in Stone



HUGH REDPATH —
manager of The N.Z.
Marble Company Limited.

For sheer dignity, there has been nothing in the advancement of building materials and techniques to supplant the craft of the stonemason. And although architects in this age of reinforced concrete and structural steel rarely have occasion to design a building constructed entirely of stone, its use for facing and interiors is no more an anachronism than hand-finished joinery.

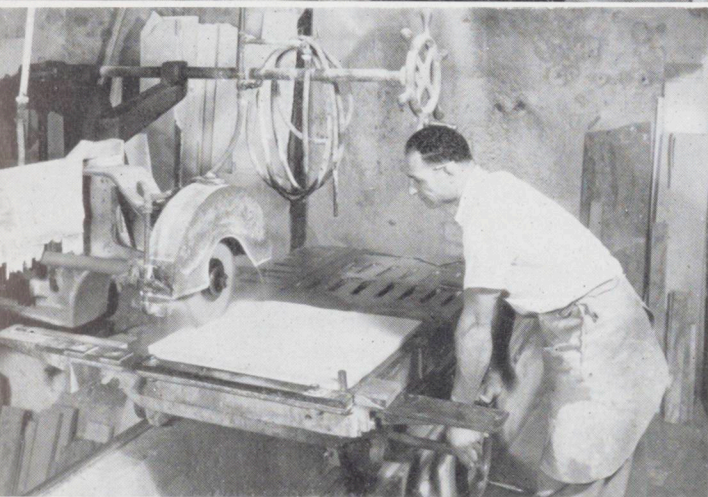
The New Zealand Marble Company Limited, a member of the group of Fletcher industries has, since its establishment in 1923 to handle the masonry contract for the Auckland University College, been fully occupied on some of the Dominion's largest public buildings. Among these are the Dunedin Post Office, the Railway Station and Departmental Buildings in Wellington and the South British Insurance Buildings in three principal cities. In Auckland they include the Government Buildings in Jean Batten Place and the new M.L.C. Building now under construction.

As the photographs on this page illustrate, mechanisation has taken the place of handicraft in the processing of marble, granite and stone for commercial buildings, but the art of the stonemason has by no means been dispensed with, especially in decorative and monumental work of granite and marble.

No precision machinery can interpret the feeling of a monumental artist nor do more than aid the skilled hand of the mason in tracing the often delicate and always gentle curves and nuances of sculptural work. There are hushed moments when mere tradesmen step aside to admire the deft fingers of the artist, and old hands of the Marble Company become lyrical in their reminiscences of how masons such as Bill Morrison and Syd Usher used to fashion the fluted blocks for classical columns.

The taper from the plinth to the capital of a Doric pillar appears uniform to the eye, but, in fact, there is a slight bow in the surfaces calculated by ancient Greek designers to correct the optical illusion that straight surfaces tapering to a point appear to be concave.

The bulge is called *entasis* and has to be carefully plotted through each block in the column. The mason has templates to follow this through but he relies on the artisan's sixth sense to guide his chisel and control the blow of his mallet.



Top—General view of the organised chaos of the factory with the gantry crane in the left foreground.

Second—Fred Brown (stonemason) alongside one of his panels for the M.L.C.

Third—George Batty, cutting marble on the gravity saw.

Bottom—Ron Campbell, polishing red granite for the M.L.C. contract.

A false move can ruin hours of patient work and only men with nerves of steel and a devotion to their craft can become good masons.

Jobs calling for the highest quality of handicraft are not so frequent these days and the bas-relief panels such as Fred Brown is making for the M.L.C. Building are really a sculptor's work. Stonemasons like woodcarvers are, unfortunately, the Mohicans of our time.

Most of the work in the Marble Company is run-of-the-mill, but precision and experience nevertheless supervise all operations.

The initial stage of preparing a block of granite or stone is to cut it into slabs on a gangsaw. In the case of soft-stone, these slabs are then ripped across by a Duplex saw which has seven circular carborundum blades. The stone, in strip form, may then be cut into suitable lengths on a gravity saw and finally polished.

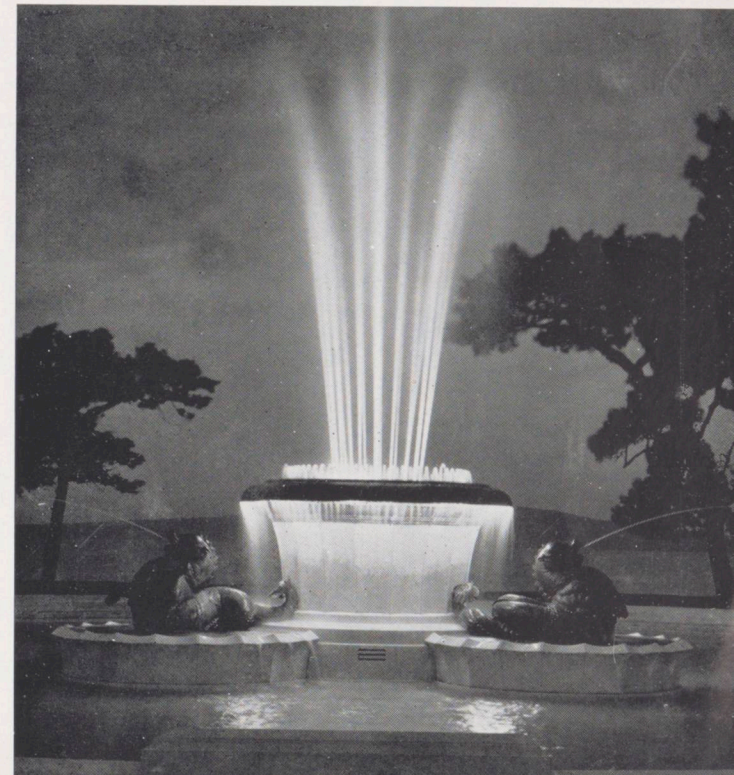
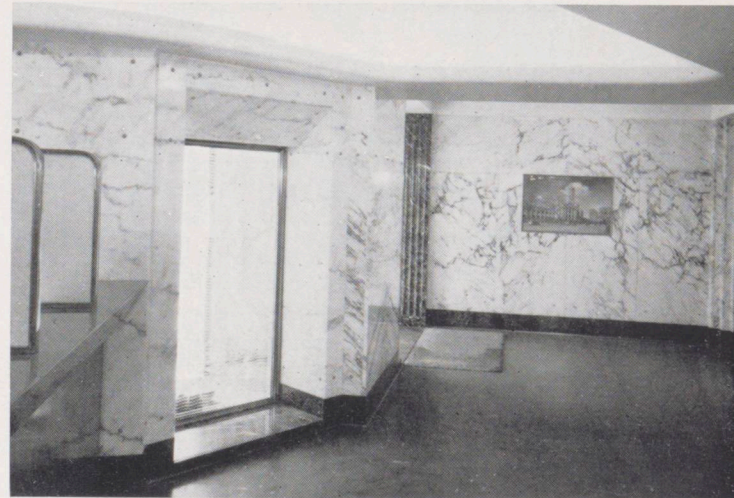
Granite slabs have to be polished before being sawn into shape. This is a key process and a slow one. It takes approximately one hour to polish one face foot after gang-sawing. Initially the rough sawn face is ground with heavy grits and, following this, abrasive segments of diminishing coarseness on a rotary head are used to produce a fine surface. A high polish is ultimately obtained by using a very fine carborundum powder followed by oxide of tin, a fine white powder.

The polished granite slab is cut to size on a gravity saw using a harder blade than for marble or stone. Whereas a stroke of the saw cuts up to nine inches deep into softstone, it bites only a sixteenth of an inch into granite. Hence cutting a two-inch slab involves thirty-two traverses of the cut.

Raw materials come from Belgium, Sweden, Norway, Finland, Italy, South Africa and Australia. Granites are uniform in texture and may be purchased with confidence on the basis of a small sample; stone for interior work presents no difficulty. However, sandstone and limestone for exterior building and marble for any location work have to be considered carefully, since weathering characteristics and resistance to atmospheric impurities are factors of importance. Further, in the case of coloured marble, a standard sample will give no reliable guide to the appearance or physical quality of the bulk supply. For this reason, a degree of caution and experience is required when ordering this commodity from a distant source.

Present Manager of the Marble Company is Hugh Redpath who is assisted in the office by Gerry Weston and Ron Rau. Bill Harding is foreman in charge of twenty-five men; among them Jock Henderson who has to his credit the longest service (45 years) of any Fletcher employee.

Bill Harding worked on the demolition of Waterloo Bridge in London in 1935 and, twenty years later and 12,000 miles away, he received into the factory some of the Cornish granite from the bridge for the Tablet commissioned by Sir Ernest Davis to dedicate Brown's Island to the City of Auckland.



Top—An Auckland house showing exterior stonework executed by The N.Z. Marble Company.

Centre—Interior marble treatment of new entrance lobby at Fletcher's Penrose office.

Bottom—The Elliot Davis Memorial Fountain fashioned by The N.Z. Marble Company.



This is a land of homeowners where six families out of ten own the houses they live in—or will do when the mortgage is paid off. Home, to most of us is a cottage in the suburbs with a fifth of an acre of land to do what we like with short of running chickens without a permit or letting wild nature and the wrath of the people next door take their full course.

The advantages of living in this way are considerable, particularly for young families. There is fenced-in space which in theory should keep children off the streets, there is a home grown supply of vegetables which cost you only the countless hours of free labour you put into your garden, and there is the quiet of the countryside to enjoy between motor-mower endurance trials. But it is not without its disadvantages if gardening is not your preferred narcotic and, if your nonconformity goes as far as not having a car, the distance separating your domestic retreat from shops, buses and friends can become tiresome in wet weather. Perhaps the drawback that many wives would underline is that suburban life seems to grow more peasant-like year by year and they would prefer to be within shorter range of the stimulus of what goes on in town.

But the pattern of living has long been set by pioneers who came here to escape the smoky congestion of industrial cities and to aspire to a way of life that gives free reign to individualism. But where does it all end? According to a leading town planner, we and our forebears have created "petty individualism triumphant". We have gained a mess of cottages and lost a lot of the vitality of urban life with

Fletchers are to build an eleven-storey block of State flats which will include seventy-five "maisonettes"—the name and kitchen on one floor and bedrooms and bathroom on another. Construction is less costly, as only alternate floors are of reinforced concrete. The cost of the roof structure is halved.

The building will be a handsome partner to the existing block on the adjoining site by Fletcher Construction in 1947. The flats are almost 100 ft high. The maisonettes will run right through the block both east and west, claiming a maximum of light and air. Balconies on the upper floors, of the city and harbour view, are located on the roof. The ground floor is to be reserved for shops.

Taking all development costs into consideration, the estimated cost of each maisonette will approximate that of the average cottage. However, the 12' x 18' living room will be larger than in a cottage.

Excavation of the site commenced in January but the work is not yet started. Jimmy Hill is foreman in charge.

all its interests, activities and sociability. And the mess is spawning further and further afield like a banyan tree which never develops a central trunk but puts down suckers with shallow roots all over the place.

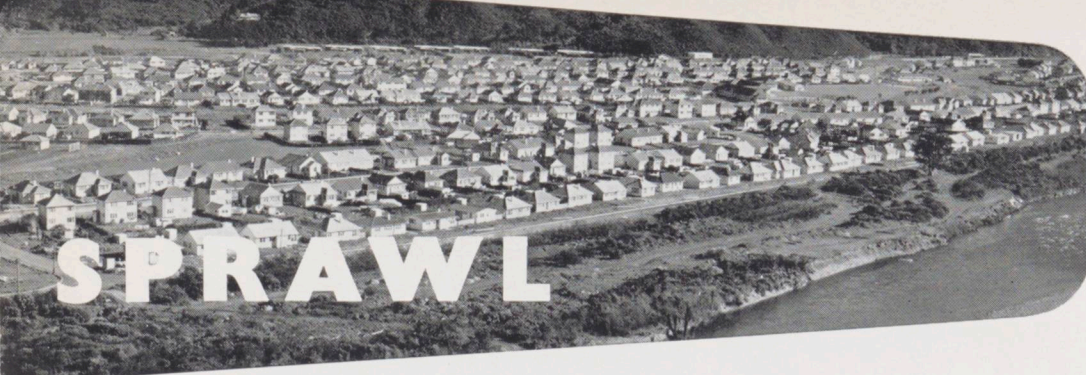
Apart from the faults or merits of suburban living, this dispersal of our cities is producing an economic monster that is a nightmare to local bodies and ratepayers alike. We are beginning to learn that we cannot afford to roll out the residential carpet over miles of market gardens which feed the city. Nor can the network of communications and utility services be extended indefinitely without crippling loans or mounting taxes and rates. The population is too thinly spread to pay for and maintain costly miles of paved roads and footpaths, and the semi-rural state of streets and services in outlying suburbs speaks more eloquently than balance sheets.

In Auckland the Power Board has reached the end of its resources and is warning intending housebuilders that they cannot be guaranteed the installation of electricity. There are 80,000 citizens still without proper sanitary services. Even with its rising 360,000 the city does not have enough people to afford a £9,000,000 drainage scheme and a £5,000,000 harbour bridge. The deficit of Auckland public transport was £145,000 last year. All this points to the extravagance of what has been called "the cult of the quarter acre".

Furthermore, the receding tide which takes citizens further and further out is leaving the centre of the city high, dry and neglected. Older residential areas are falling into ugly decay and commercial development is not fast enough to replace unsightly slums. Business premises are left to carry the increasing burden of city rates, while, on the other hand, trade is retreating with its customers into the new suburbs.



The 50-unit block of State flats in Greys Avenue completed by Fletcher Construction in 1947.



SPRAWL

te rental flats in Greys Avenue, Auckland. The 87 unit given to family apartments on two levels with living room upstairs. This type of earthquake-proof "spine" constructed concrete and the number of corridors and elevator

isting block of fifty State flats which were built on an ontage of the new block will be 208 ft. and it will gh the 34 ft. depth of the building to have an aspect to fresh air and, incidentally, a splendid view, from wide ... Laundry facilities with washers and ample drying space rved for twelve bed-sitting room flats for single people. ncluding the value of the land and utility services, the verage State house but floor space will of course be less. n most small houses and there are two double bedrooms. it will take three years to complete the contract.

The time has come to about face the outward march and repopulate the derelict central areas. Flats have become a necessity.

The mention of flats to many people throws a picture of gloomy ill-ventilated and often jerry-built boxes built by penny-pinching landlords in the 1920's. There are few examples in New Zealand which hint at the spectacular progress architects have made during the past few years in the design of multi-unit dwellings, and even the best of what we have does not satisfy our endemic wish for open space and gardens. But in New York and the densely populated cities of Europe, living room is one of the first considerations in slum clearance programmes. Tall blocks of apartments are surrounded by shaded walks and recreation parks with tennis courts and swimming pools. In some of the larger projects day nurseries and restaurants are included and every thought is given to healthy and dignified living. It is doubtful if apartment houses in New Zealand will ever be large enough to justify plush social amenities but there are physical advantages which flat-dwellers can and will enjoy. Central heating with air conditioning is one of them and better access to city life is another. With good planning, there is no reason why in districts like Parnell and Grafton, large gardens and sporting facilities cannot go with multi-storey dwellings. There have only to be enough units to average out the cost of the land.

In its recently published programme for housing promotion, the Government has heeded what local authorities and regional planning committees have to say. The Minister of Housing's report encourages the building of flats to replace blighted central areas in our cities. Plans for multi-storey blocks in Wellington and Auckland have been prepared by the Government Architect and Fletcher Construction has

successfully tendered for the eleven-storey block in Greys Avenue and for five three-storey blocks in Western Springs totalling 90 units which are now all under way.

The Auckland City Council has also made headway with pensioners' flats in Freeman's Bay and a large project is planned for housing over 150 families in terraced houses grouped round a twelve-storey block to be sited on nine acres of land cleared in Phillips Street as the beginning of an ambitious slum clearance programme.

The Government and Council schemes are for rental purposes, however, and do not satisfy the desire of most New Zealanders to own a place of their own. This need has been translated into new legislation which enables flats to be purchased by individual occupants—a practice that is widespread in most countries abroad and is now well established in Australia. In brief, the idea is that intending purchasers form themselves into a company and each buys a block of shares corresponding to the value of his flat. A cash deposit is paid and the balance is paid off over a period of years to the company which raises a mortgage over the entire property. Some flats are soon to be built for sale by the Government and several private concerns are interesting prospective buyers in flats to be built for individual ownership.

The difficult first moves have been made and it seems safe to predict that, if New Zealand can equal in design and organisation the fine apartment houses which grace some of the loveliest cities overseas, we may be turning back to urban living. At any rate we are going to have a pleasant alternative to suburban over-development which is proving too slow and too costly to satisfy in itself the nation's housing problem.

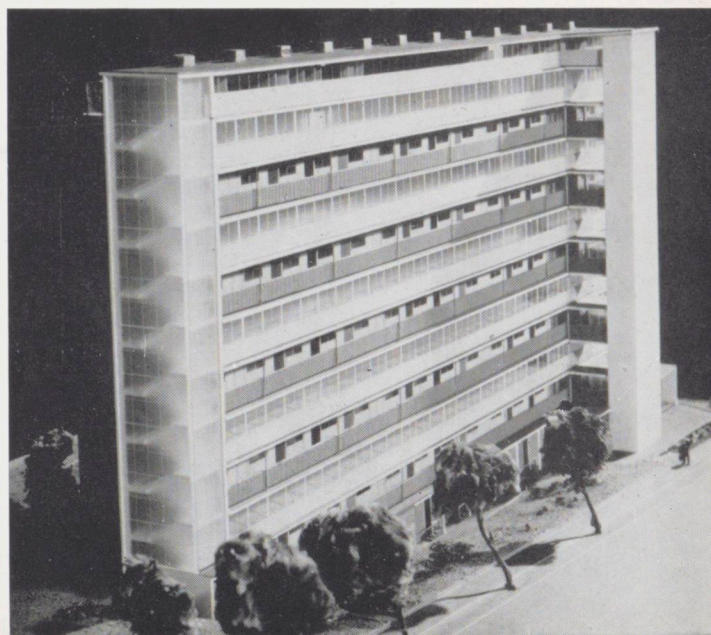


Photo of Government Architect's model of the new eleven-storey block which Fletchers are to build.

WELLINGTON'S FINEST BUILDING

On the 25th January the Wellington City Council's new Administrative Building was formally opened by the Mayor, Mr. R. L. Macalister, who said: "This building is one of which the Council and the Citizens of Wellington can be truly proud."

Fletchers, too, are proud of it and the other fine public buildings they have built in the capital — the Dominion Museum, the Railway Station, the Stout Street Departmental Building, the Central Library and the Main Hospital being outstanding examples. The Administrative Block rightfully joins this select company. The *Evening Post* has described it as Wellington's finest building.

This massive eight-storey structure encloses almost 100,000 sq. ft. of modern offices. On the ground floor are a well-proportioned public office and the 'Green Room' panelled in marble and oak. The high standard in the finishings of these rooms is carried through the general offices on all floors to the staff cafeteria and the caretaker's flat on the top. The timbers of the counter fronts in all the public areas are inlaid in striking designs by Fletcher craftsmen, and in the senior executives' rooms the walls are of french-polished exotic woods. Corridors are tiled and at random intervals the City's Coat of Arms is emblazoned vividly on



a light background. Paintwork is in pleasant pastel shades throughout and, with most of the interior served by natural lighting, gives an airy effect without glare.

Structurally separated from the Town Hall by a seismic break, the new offices join with the older building without any shock of transition to form a complete Municipal Headquarters. The Architect, Mr. S. W. Fearn, has ably succeeded in producing a design that has the dignity suitable for a civic building, is modern, and yet harmonizes with a structure fifty years older. The magnificent triangular site at the meeting of the commercial and shopping areas of the city has been used to the greatest advantage, and a stately building has been erected where it can be seen in true perspective.

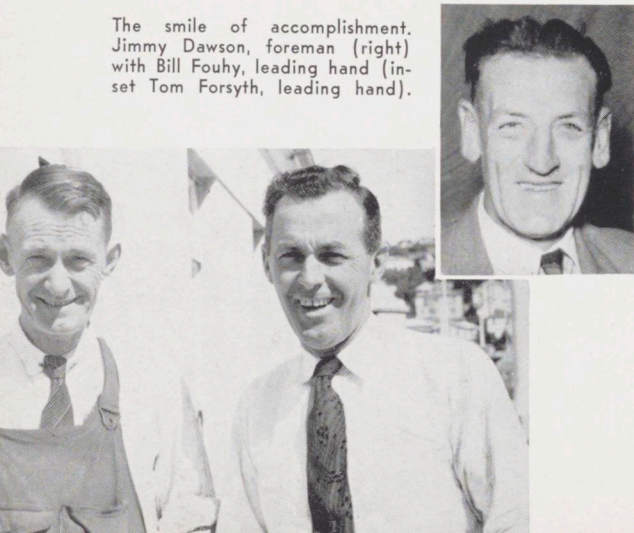
To Mr. Fearn and the Clerk of Works, Mr. C. H. Downes, we say thank you for the co-operation we received and for the wealth of helpful experience brought to bear on the problems of construction.

Our general foreman, Mr. Jim Dawson, has added another job well done to the impressive list of major buildings he has been associated with in his 28 years with Fletchers. He was ably assisted right through by leading hands Bill Fouhy and Tom Forsyth. The men of Fletchers' team, the sub-contractors and their men can all look with pride at this building and say with satisfaction: "I helped to build it."

Over recent months some public criticism has been voiced on the delays in finally completing this contract. In his brief speech at the opening ceremony, Mr. J. J. Craig, Managing Director of Fletcher Construction, said: "We must agree with your Worship that the time taken to complete this building has been unusually long. But in fairness to my Company I can say that there has also been an unusually large number of changes during construction (including the addition of an extra floor) — changes which we must agree are for the better. We will not dwell on this today, however."

May we leave it at that.—(Ed.).

The smile of accomplishment. Jimmy Dawson, foreman (right) with Bill Fouhy, leading hand (inset Tom Forsyth, leading hand).





The Big Haul

Everything to do with the pulp and paper industry seems to be on a big scale and the Caxton Paper Mill at Kawerau, alongside Tasman, is no exception.

To iron out the paper into crepe and tissues, a giant steel cylinder, 17' 6" x 12' 11", weighing 41 tons and known as the "M.G. Cylinder", is a vital item of plant.

Caxton's M.G. cylinder, manufactured by Bertrams of Edinburgh, arrived on the *Hororata* in the middle of January and had to be moved by road to Kawerau and installed in the mill. One hundred and eighty miles on North Island roads in the holiday season is no cakewalk, and George Dale & Sons did a first-class job with their 32-wheeled articulated truck supplemented by an "anchor" truck to help out on steep hills and give extra braking power. The cylinder was loaded on to the trailer by the Harbour Board's 75-ton floating crane *Mahua*, and departure was at dawn. A steady speed of about 12 m.p.h. was averaged on the journey which took two days to complete and involved detours around bridges and lifting of overhead wires on the journey.

Mill construction was right up to schedule when the cylinder arrived, but a part of the exterior wall had been left open to receive it. The unloading was accomplished without the use of cranes: a temporary ramp was built and, with the assistance of four 30-ton jacks, the cylinder was moved into place 25 hours after its arrival. Despite the fact that there was only $\frac{3}{4}$ " possible head room clearance at the point of entry for the cylinder, the operation went through smoothly and, according to Bertram's erector, Bob Douglas, Jr., of Edinburgh, the time taken was a record. In his experience he had never seen a similar cylinder installed in less than three days.

Credit for the job must go to Fletcher Heavy Construction Division's staff at Kawerau led by Jack Smith, the Field Superintendent and Doug Joy, Mechanical Superintendent.

The remaining machinery for the plant is being steadily installed and production is expected to begin in April.

The Heavy Construction Division was responsible for the erection of the buildings and the installation of the machinery which also involved its purchase and transportation to the job.

The Heavy Construction Division came about in response to the growing demand for a complete engineering service—from the footings to the key of the door. It was set up last year under W. A. (Bill) Bourke's guidance with G. R. (Bob) Stanbrook as General Manager and J. G. (Jack) Smith as Field Superintendent. Bob and Jack are both professional engineers with considerable experience behind them before joining Fletcher's.

Bob Stanbrook joined Fletcher-Merritt-Raymond in 1951 as Senior Field Engineer on the Import Wharf job in Auckland, and in 1953 was transferred to Sydney as Chief Engineer for the construction of the 3,720-ft. reinforced concrete pier for A.O.R. at Kurnell in Botany Bay.

Jack Smith, who was previously on the engineering staff of the Wellington City Council, worked with the Raymond Concrete Pile Company in their New York office and on numerous jobs throughout the States. On his return to New Zealand he was appointed Assistant Engineering Manager with Fletcher-Merritt-Raymond on the Tasman project.

The Caxton contract was the Heavy Division's first major job (see *Arrowhead*, September, 1955). Work has now started at Te Kuiti on the Waitomo Cement Company Works, and construction of a second cement works in Southland commences this month.

The Division has recently completed the two temporary jetties—a caisson-launching slipway and a materials wharf—at the site of Auckland's new Harbour Bridge (see aerial photograph), and other projects are on the drawing boards.

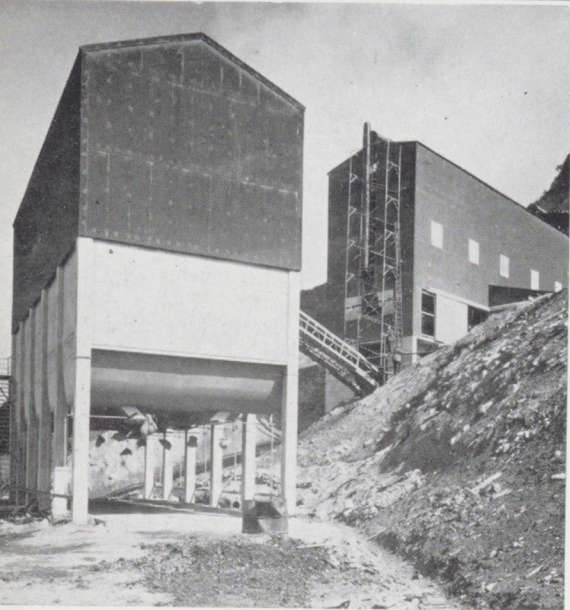
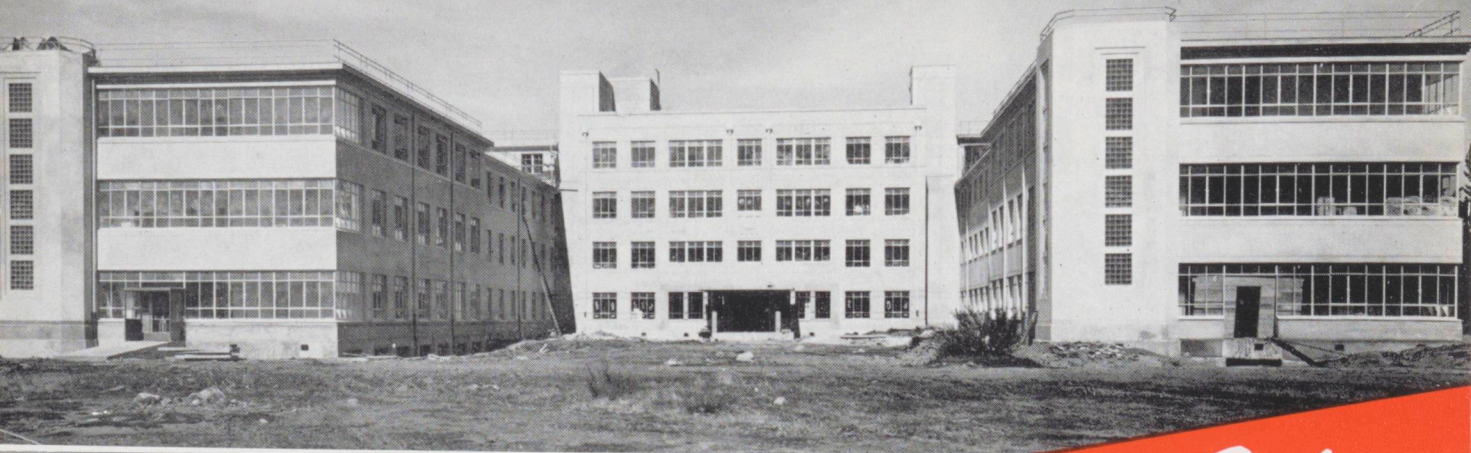
Chief Estimator for the Division is John Whale, M.Sc., who has had practical field experience in addition to office engineering.

Doug Joy, who worked for Fletcher-Merritt-Raymond, is Mechanical Superintendent and John Potts (who hopes to pay a short private visit to his home in England this year) is Field Office Manager.

Above—The 41-ton cylinder on the start of its 180-mile journey to the Caxton Tissue Mill.

Below—Jetties at approach to Auckland Harbour Bridge. (Whites Aviation photo.)





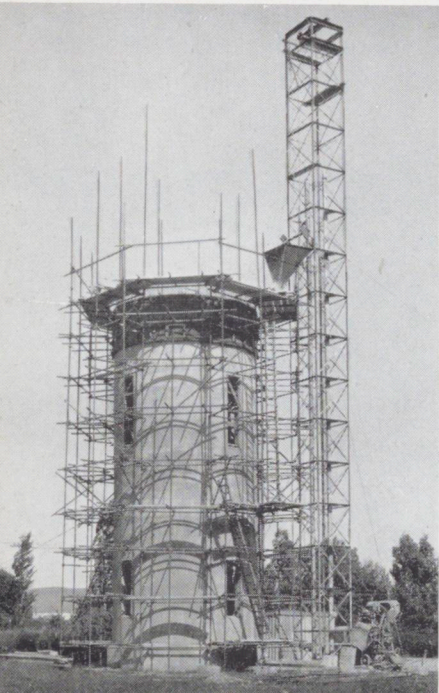
Above — WAKARI HOSPITAL: North elevation of the main block of the £1,000,000 Wakari Hospital Scheme, Dunedin. This building includes — apart from the main block — a nurses' home, boiler-house, reservoirs and workshop. The site construction is under general foreman J. Lukeman, assisted by J. Brown and W. MacKenzie on reservoirs and boiler-house. The main block was designed for the Otago Hospital Board by Messrs. Mandeno and Fraser. All reinforcing steel has been done by Fletcher Steel. Most sections of the project are due to be completed at the end of this year.

Going DUNEDIN &

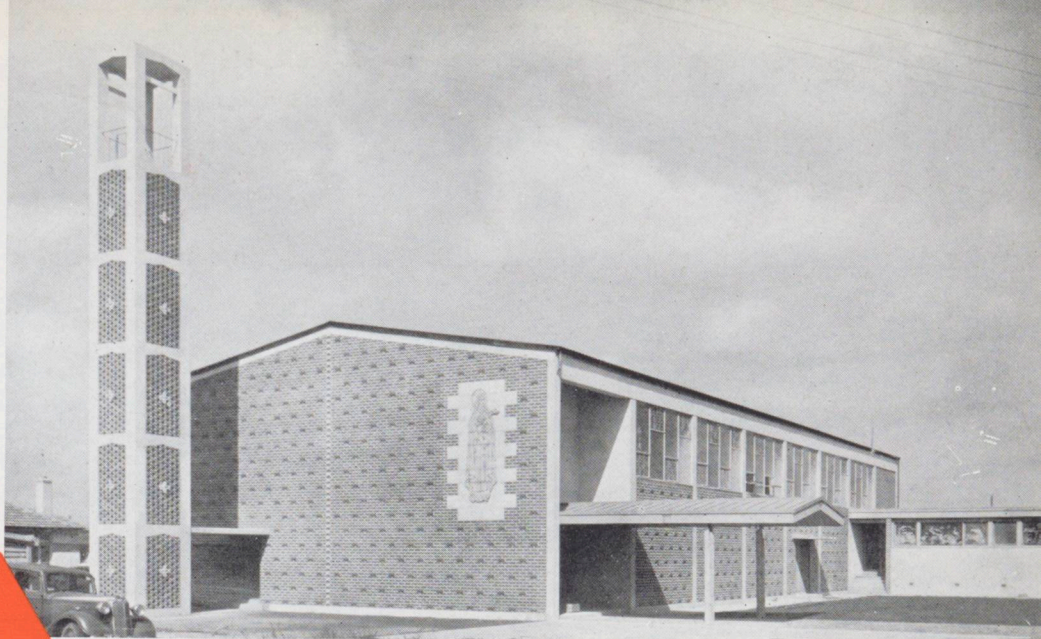
Bottom Left—WATER TOWER: The Tower under construction for the Gore Borough Council is built of reinforced concrete and is due for completion in June, 1956. The reinforcing steel was supplied by Fletcher Steel. The Tower was designed by F. M. Corkill, Registered Engineer, Invercargill. D. MacPherson is foreman.

Centre Left—MT. ZION QUARRY: The recently completed quarry buildings and plant designed for the Dunedin City Council by their Engineer. Fletcher Steel supplied all steel and installed the machinery. G. Davey was foreman-in-charge.

Below—MATAURA BRIDGE: The bridge spanning the Mataura river at Gore. It was designed by the Ministry of Works for the Highway Board and built by Fletcher Construction. Steel was supplied by Fletcher Steel. G. Prattley was foreman.

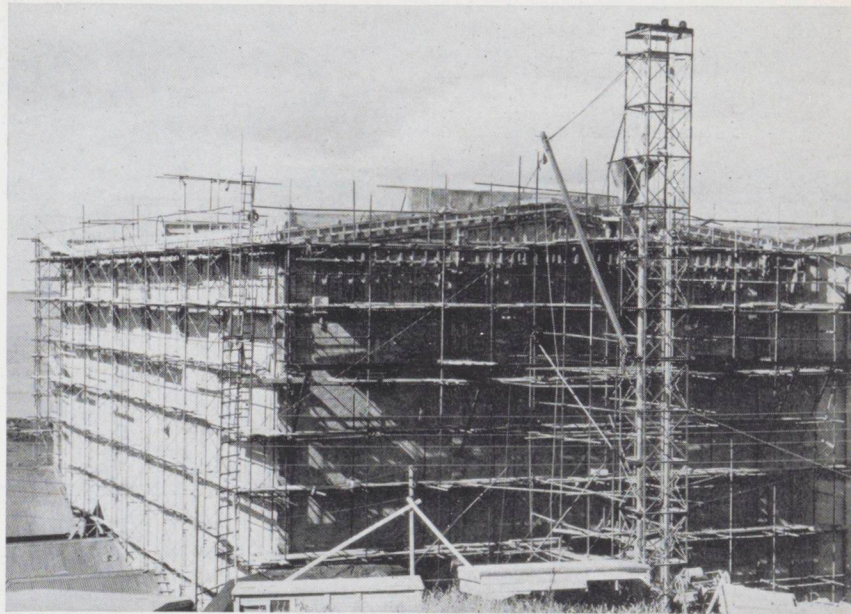


Right—ST. THERESE: A Roman Catholic Church in North Invercargill of portal-frame construction. The design, by Mr. E. J. McCoy of Dunedin, is a new departure in ecclesiastical architecture, featuring decorative brickwork and including a central heating system provided by water circulating through pipes in the concrete slab floor. Job foreman is Jack Mulholland.



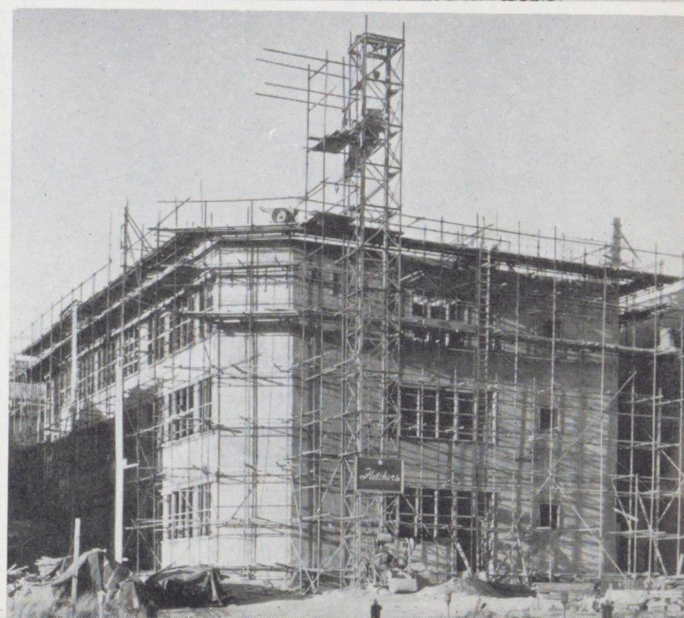
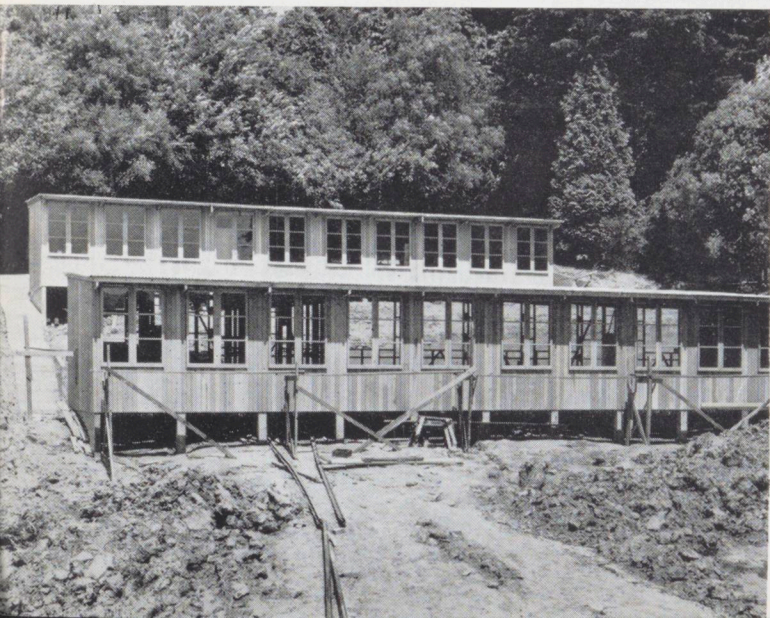
up in INVERCARGILL

Bottom Right—TELEPHONE EXCHANGE: The new three-storey block which will house Invercargill's new automatic telephone exchange. Bill Cairns is job foreman.



Centre Right—OCEAN BEACH FREEZING WORKS: This job, under the foremanship of Noel McKinley, is the new cold store for the Ocean Beach Freezing Works. It is a five-storey building which, when completed, will provide 40,000 sq. ft. of freezing chambers.

Below—OTAGO BOYS HIGH SCHOOL: The woodwork classrooms designed by the Architect of the Otago Education Board. This £10,000 addition to a famous Dunedin college is due for completion this month. Job foreman is H. Mullins.



PICTURE Personalia



The Editors have received so many photographs taken in the various centres of staff picnics, Christmas functions and dances that they have decided to let the March "Personalia" speak for itself in pictures.

AUCKLAND

The Office Social Committee combined with Plywoods Social Committee to organise a most successful Christmas picnic for the children. Photos show:—

Right: Kathryn Davies (4) receiving her present from Santa.

Below: Single Ladies' Tug-o-War—Right to left—Ngaire Floyd, Joan Fox, Judy Prins, Anne Other, Esme Flavell, Dimity Clarke, Beverley O'Leary, June Irvine (leg at rear is Angela Pettit).



Taken at the Plywoods Dance are (from right): Jim Sinclair, Roy Salisbury, Johnny Drent.



J. G. GRANT, V.C.

J. G. Grant (Vulcan) who was one of the 12 surviving V.C.'s who took part in the ceremony at Dunedin on 29th January when a "V.C.'s Corner" was dedicated at the R.S.A. Rooms, Dunedin.

SPORT

The Auckland Cricket Team and supporters visited Wellington on Anniversary weekend to play the home team. Highlights of the match were a stolid 34 by Doug Anderson for Auckland and two brilliant catches, one by Jack Bentley (Wellington) and the other by George Dixon (Auckland). Result of the match: Wellington 100, Auckland 68.

The Wellington team have lost only two of their ten matches in the competitions this season and are now leaders in their grade.

The Christchurch team played five games during December and January and have retained their unbeaten record. Wellington has challenged them to a match which is to take place in Christchurch on 7th April.



WELLINGTON Wisdom

A staff picnic was held at Maidstone Park and was attended by 330 children and their parents. Seen in the photos are:—

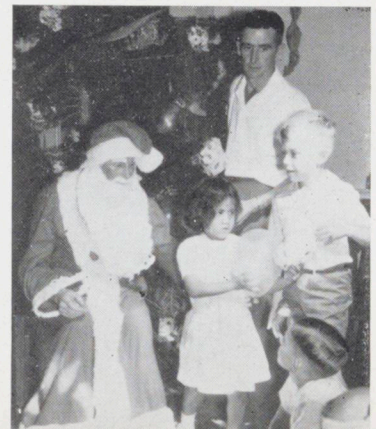
Left: Frank Parker (Fletcher Steel) Chairman of the Picnic Committee.

Right: Miss E. Robinson, winner of the Single Ladies' Race. (Len Prosser at rear, assessing form?)



HAMILTON Hearsay

Santa Claus distributing presents at the Children's Party attended by 80 children and their parents. Any resemblance to Ray Tod is purely co-incidental.



CONGRATULATIONS EVERYWHERE

BIRTHS: Sons to Bill Landl (Fletcher Timber, Wellington); John Potter (I. & A. Division, Auckland); Frank Hoets (Fletcher Construction, Christchurch); Jack Carberry (Transport, Wellington).

Daughters to Murray Austin (Durock) and to M. J. Burton (Plumbing Division) both of Christchurch; to Brian Ellis (Invercargill).

MARRIAGES: Yvonne Berghan (Head Office typist) becomes Mrs. Vodanovich on 17th March.

N. G. Clark (Durock, Christchurch) is to be congratulated on his recent marriage.

CHRISTCHURCH News

A Staff Party at Elizabeth house started with cocktails, and supper was served later in a marquee on the lawn. Dancing followed until 1 a.m. and the walls of the ballroom were decorated with caricatures by cartoonist Tom Mayne.

Right: 'Cyril' Burford (Fletcher Construction) admires his caricature.

Right: A smiling group of office staff.

The Annual Christmas Party for the children of employees was held by the Social Club in the gardens of the Company on 10th December. Photo shows children enjoying donkey rides in Plyco factory grounds.



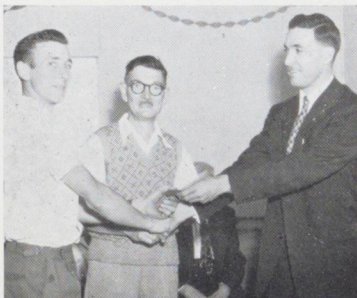
SYDNEY Section



The Christmas function held in the offices at Brookvale was the occasion for presenting long service badges.

Above: "Mac" MacDonald receives his 15-year badge from Manager Jim Eespie.

Below: Bill Seakins and his son Rob (5th-year apprentice) being presented with their badges.



SILVER PINS AMONG THE GOLD

Last issue we published the photographs of those with thirty years and more service with the Company. At various Christmas functions gold pins for thirty years and silver pins for twenty years were presented, but unfortunately we have not the space to publish photographs of the 'silver men' in this issue and must content ourselves with the list below. In later editions it may well be possible progressively to show you what people look like after twenty years or more with Fletchers.

As we expected, having launched the scheme, we are faced with additions, amendments and apologies.

Additions: In the Thirty Year Group we did not make mention of Jimmy Hill (Auckland), Bob Buchanan (Auckland), Bill Anderson (Wellington) and Bob Paxton (Wellington).

Amendments: Under the heading Top Brass, we stated that both Joe and Alec Craig had 30 years service. Truth is that Joe has 27 and Alec 30 years. Our mistake; Joe was overseas at the time and we erred.

Apologies: Also in Top Brass, in quoting Lyall Young as having over thirty years service, we completely forgot to mention Stan Kingston who is in a similar category. Again our fault.

Worse to come—when ordering the pins, we made no provision for John Fletcher, Bill Bourke OR Sir James. Was our face red?

Jim Hill, who came to Fletchers in 1919 to serve his apprenticeship, went on to become foreman on some of the Company's biggest contracts, including the Green Lane Hospital and Bycrofts, Otahuhu. After 36 years of service he has increased his stature (and girth) considerably and has been made foreman of the contract to build the eleven-storey block of flats in Greys Avenue.

Bob Buchanan, foreman labourer on the M.L.C. job in Auckland originally joined Fletchers in 1922 and, apart from a two-year interruption from 1929-1931, has worked continuously for the old Residential Construction Company and latterly for the Commercial Division of Fletcher Construction. He has completed 31 years of service.



JIM HILL



BOB BUCHANAN



BILL ANDERSON



BOB PAXTON

Bill Anderson joined the Fletcher Construction Company Limited in 1922 and since then his service with the Company was interrupted for only one year (1930) when he was on loan to Wellington City Council. He is now foreman for the Fletcher Timber Company Limited in the Kaiwarra joinery factory.

Bob Paxton came on to Fletcher's payroll in January, 1924, and has just completed thirty-two years' service, during four years of which he was on leave for military service. He was associated with the building of the Pahiatua and Masterton bridges in 1931-33 and is now a Fletcher Construction Company foreman.

			Years
A. Dunlop	F.C.C.	Wellington	29
W. L. O'Brien	F.C.C.	Auckland	29
E. Owens	F.S.E.	Auckland	29
C. J. Dawson	F.C.C.	Wellington	28
W. A. Parmenter	F.S.E.	Auckland	28
W. L. Williams	F.C.C.	Auckland	28
C. T. Brown	F.C.C.	Auckland	27
J. J. Craig	F.C.C.	Wellington	27
W. J. Fitzgerald	F.T.C.	Auckland	27
T. H. Solomon	F.T.C.	Auckland	27
F. Carmichael	F.T.C.	Palmerston N.	26
C. R. Clews	F.C.C.	Auckland	26
N. W. Avery	F.C.C.	Auckland	25
A. Clark	F.S.E.	Auckland	25
J. McDonald	F.S.E.	Auckland	25
D. Comrie	F.C.C.	Wellington	24
N. J. G. Marsden	F.T.C.	Palmerston N.	24
T. Dutch	F.S.E.	Auckland	23
W. H. Watson	F.S.E.	Auckland	23
W. Irving	F.C.C.	Wellington	22
W. A. McLean	F.S.E.	Dunedin	22
G. F. Mitchell	F.T.C.	Palmerston N.	22
R. E. Rawle	F.T.C.	Auckland	22
E. G. J. Richards	F.S.E.	Auckland	22
J. Scheigis	F.C.C.	Auckland	22
A. Bell	F.C.C.	Auckland	21
W. A. Bourke	F.T.C.	Auckland	21
C. Cramond	F.S.E.	Dunedin	21
D. K. Gwilliam	F.C.C.	Auckland	21
H. Martin	F.S.E.	Auckland	21
G. W. Bending	F.C.C.	Auckland	20
W. F. Curgenven	F.C.C.	Wellington	20
J. Dunne	F.C.C.	Wellington	20
W. Eriksen	F.S.E.	Auckland	20
J. S. Fletcher	F.Ind.	Christchurch	20
W. V. Goodwin	F.T.C.	Palmerston N.	20
E. O. Knewstubb	F.C.C.	Dunedin	20

SERVICE



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You know that we design, fabricate and erect large steel frame buildings to architect's or engineer's requirements. You know our reputation for speed, quality, workmanship and reliability. You may not know that the greater part of our business comes from the 2,500 smaller builders, engineering shops and industries throughout New Zealand who regularly buy from us because of our special service on Structural Steel, Reinforcing and Bolt stocks—and because we carry the biggest selection of stock in New Zealand in five strategically-placed yards. You may not know that we have a big business in supplying many industries with the famous Link-Belt chain. You should know that, although steel is in short supply, we can give you what you want, when you want it, if you give us time to schedule your requirements.

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