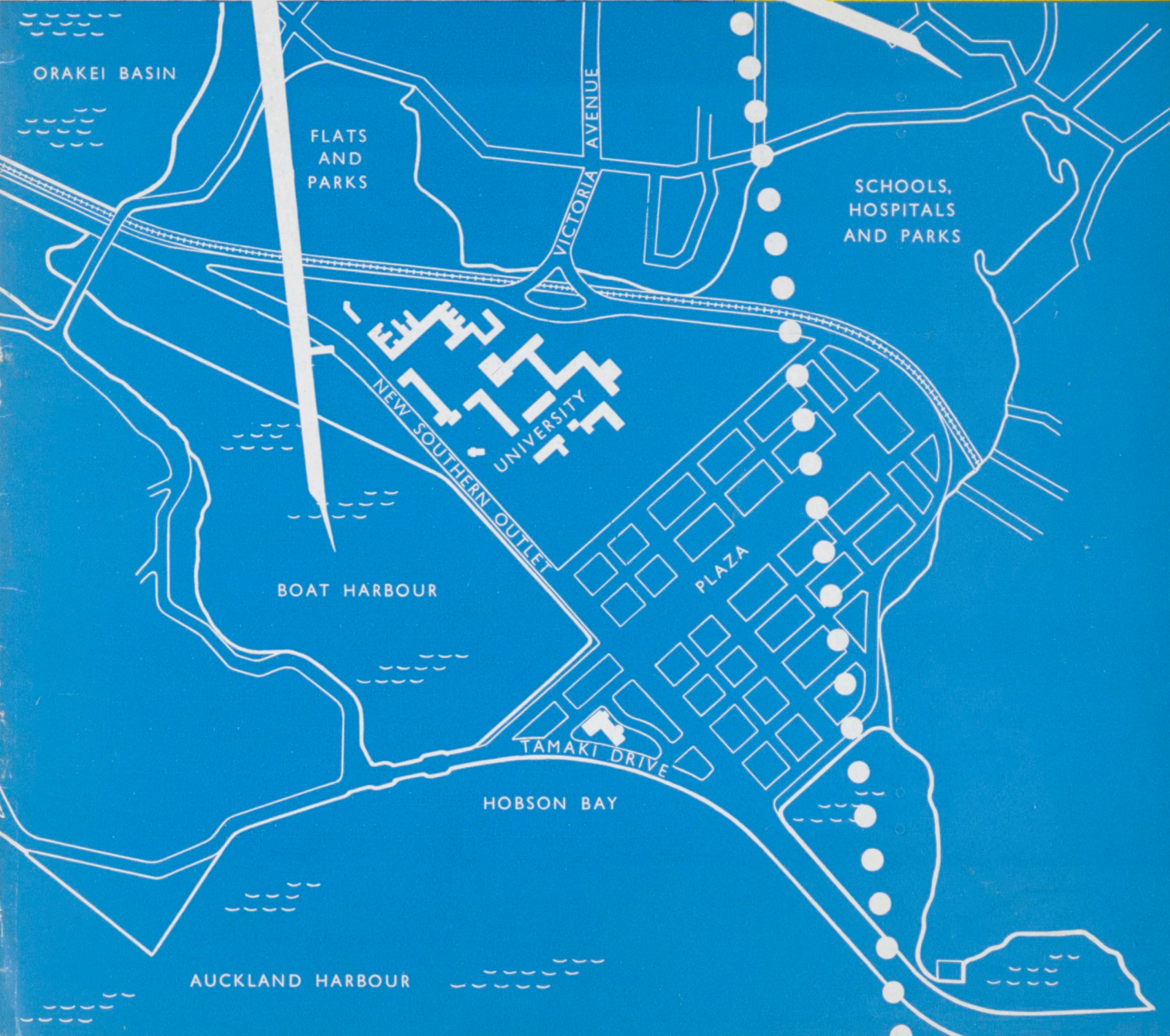


ARROWHEAD

SEPTEMBER · 1955



AUGKLAND
NEW ZEALAND

PUBLISHED EVERY
TWO MONTHS BY
FLETCHER HOLDINGS LIMITED



This issue of *Arrowhead* is the sixth since its inception and marks the end of our first year of publication. Anniversaries are occasions for looking back critically to examine the year that is past and for looking ahead with plans and resolutions for the year to come. In retrospect we can see lots of shortcomings in our first Volume of *Arrowhead*, but letters we have received from all parts of New Zealand and abroad and comments made from time to time by employees give us reason to be fairly satisfied that at least one of the things we set out to do has been done. Fletcher people and the clients they serve know much more about the organisation, its activities and its personalities than they did a year ago. Another thing that gives heart is that readers are beginning to ask for *Arrowhead*. If branches are short delivered—they complain; if people move they are taking the trouble to give us their new address. Most encouraging words of all are the enquiries—When is the next issue coming out?—What's it about? These things show that interest has been created and in a public surfeited with publicity—vocal and in print—the stimulation of a new interest is not the easiest of accomplishments.

EDITORIAL

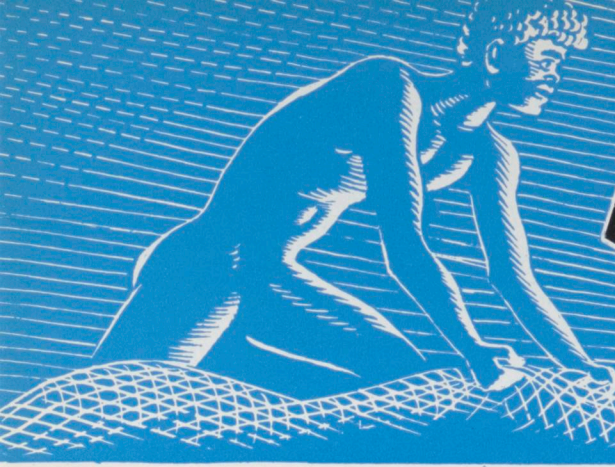
FRONT COVER —

The plan on the front cover represents our artist's conception of the Hobson Bay Development. It is only one of many alternative plans for the area, and, for instance, the new southern outlet and the shifting of the railway line shown on the plan, are suggestions only and have not had any official approval.

Enough of what is behind us. What of the future? Publishers tend to become dictators unless the people who read (or neglect to read) what they put out, insist on having their say. It is not a good thing that one or two people should decide what information is to be disseminated to thousands. But only the expression of opinion can bring editors out of isolation, and make them sensitive to readers' likes and dislikes.

We called our first editorial—"It's Your Baby"—and it still is your baby with a candle on its cake and a few milk teeth. Don't let it grow up to be one-track-minded, wayward or too self assertive. Its good training and the correction of its bad habits lie in your hands.

The Editors.



MAUI COMES TO TOWN...

Maui was a fisherman according to Maori legend. He set out one day in his dugout canoe and caught a fish so big that he couldn't describe it to his incredulous tribesmen. But he could show it and he did by paddling them across Cook Strait to see the North Island of New Zealand. That was his story and he stuck to it and that is how the North Island came to be called Te Ika A Maui (The Fish of Maui). The operation described here tells how a site for a city can be fished out of the sea, but it's not a fish story nor a legend. It may soon become as firm and proven as the ground we stand on.

Rarely in a city's history does the chance occur for a re-cast of its nerve centre to suit the needs of future generations. Cities usually get off to a bad start and have to make the best of a site chosen by pioneers who thought in terms of hundreds instead of hundreds of thousands. Sometimes the mess is perpetuated until there is no civic pride left to goad people into doing anything about it. Ugly examples of this are the industrial cities of England.

Until the 1930's down-town Auckland was a fairly comfortable fit for citizens who worked and shopped there and made their business calls, but since the immediate pre-war years the population has increased by one half and now exceeds 360,000. By 1960 it is soberly estimated that it will have reached 400,000 and it would not be unrealistic to predict a million within our time if the exodus from Europe continues at its present rate. But the

physical growth has been apparent mainly in the suburbs which eddy out to Henderson and Torbay in the North and Papatoetoe in the South covering a superficial area of almost 200 square miles.

In the centre, the change has not been so spectacular and it is only evident in the cramping of premises into smaller and smaller back-rooms and the chronic constipation of traffic. The Queen Street gully is obsolescent, shabby and seriously overloaded. There is no room there for the next half-century's expansion. It was ill-sited in the first place, but who among the settlers from Plymouth could have imagined that their seaside village would within a hundred years be larger than the city they left behind them? Regiments of city buildings must open file but the problem is how to do this in the confines of a narrow valley. How too, can ratepayers foot the bill for staggering compensation payments that would have to be made if buildings were demolished to make way for wider streets.

When the problem looks insoluble it is abandoned like a vehicle beyond

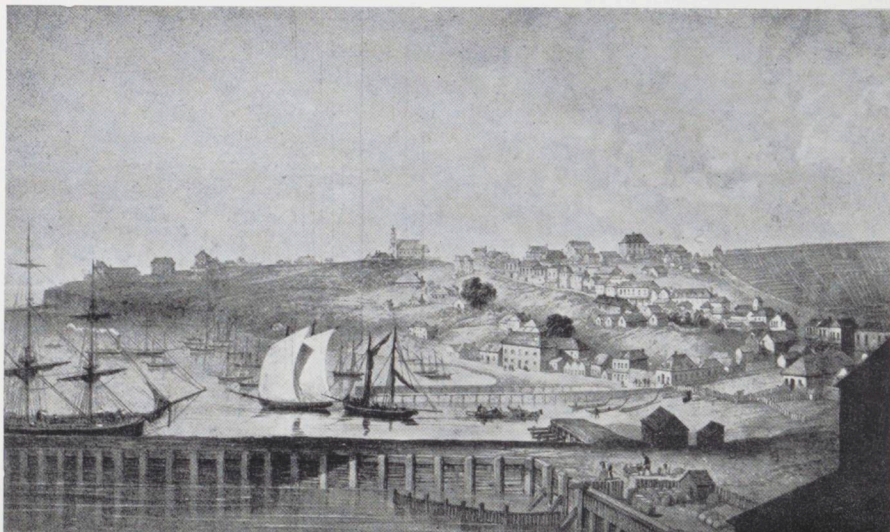
repair and as the Mayor of Auckland said recently "the sign of the blight we call decadence has already appeared in the heart of our city". Mr. Luxford welcomed as a revitalising tonic the Harbour Board's announcement of The Fletcher Construction Company's scheme to reclaim Hobson Bay for city development.

Aucklanders were jolted out of complacency by a week-end of press headlines challenging their readiness to look beyond Queen Street and visualise a city of the future. Described as bold and imaginative, and by one daily "a vision splendid" the scheme is to recover 340 acres of flat building land from the harbour bed by pumping harbour sands through a high-capacity suction dredge to fill in the basin already enclosed by the railway embankment and part of Tamaki Drive — picturesque at high tide but most of the time a dreary mud-flat crossed by sewers and railway lines.

The announcement came as the climax to months of investigation and preparation following the Company's invitation to overseas consulting engineers to come here and give an

Auckland waterfront a century ago, showing Shortland Street and Point Resolution in the background.

(From a lithograph by courtesy of the N.Z. Herald)



on-the-spot opinion as to the economic feasibility of the project that had long been in the minds of the proposers. Although most of the Auckland waterfront has been reclaimed from the sea, it is years since any major work of this kind has been done. Costs of reclamation outstripped the value of city land, but the inflation of property values during the past ten years coupled with the advances made in modern dredging developments has put the order in reverse.

The press has generously given credit for the authorship of the scheme to Sir James, but Fletchers do not claim to be the originators of the idea to reclaim Hobson Bay; it has been broached several times in the last half century and was the life's ambition of Mr. James Frater, onetime Chairman of the Harbour Board. In 1948 the City Engineer, Mr. A. J. Dickson, brought down a scheme to fill the same area but this was shelved by the City Council due to high cost and the shortage of labour. When Tamaki Drive was looped across the Bay long before the war, it was intended that ultimately the lagoon created by the new road would be filled for recreational purposes. Fletchers have revived an old idea but, in presenting it to the Harbour Board for consideration, they have backed it up with the latest mechanical developments and economic evidence of its workability if a sector of the land is made to earn revenue.

Land valuations have now reached the level where reclamation again makes sense money-wise; in fact the modern method of pumping harbour sediment inside retaining walls enables the Local Authority to gain central commercial land at a fraction the price

per acre it now fetches on the real estate market.

But even at bargain prices the reclamation could be a financial hurdle for local government already heavily committed to a £4,500,000 harbour bridge and a £9,000,000 drainage scheme.

The Harbour Board itself will have to finance other schemes at Mechanics Bay and at Te Atatu to provide additional berthage for shipping.

The money obstacle has been anticipated in the proposals placed before the Harbour Board by Sir James Fletcher. A development corporation could finance the reclamation and recover expenses by the sale of leases for a term of 60 years. At the end of this time, the leases, which would by then have greatly appreciated, would revert to the Harbour Board.

Fletchers are confident that the land can be ready for building within two years of start time.

Aesthetically the reclamation would enhance the city front and place Auckland among the world's most beautiful ports. Picture a sweep of tall white buildings facing on to a promenade overlooking the Waitemata and Rangitoto Island. There is room in Hobson Bay, if required, for a new town centre twice as large as the present commercial zone but it is not desirable to make it entirely commercial in a way that would be detrimental to Queen Street. To make best use of the site a balance should be kept between the revenue earning zones to be occupied by shops, offices, hotels and blocks of flats on the one hand and the areas to be reserved for cultural and recreational purposes on the other. Wide boulevards and ample parking spaces could be provided

and sunny open spaces give room for long vistas of the harbour and surrounding hills and the elegance that architecture can add to nature's beauty.

It has been proposed that Auckland's new University should claim a large central position taking a part in the life of the city and endowing it in turn with some of the campus atmosphere that pervades cities like Edinburgh. Nearby could stand a sports stadium of Olympic Games capacity. New Zealand's turn might come in time if the facilities were here. A site has been set aside for an international hotel of luxury class, and schools and a modern hospital would have an important place in the new town.

In the first stages of development, the reclamation would be an ideal site for the proposed World Fair which is being sponsored by Auckland businessmen and the Council. It would be within easy access by road and rail from all parts of the city and province and the cost of erecting exhibition buildings on clean flat land should be cheaper than on any other site.

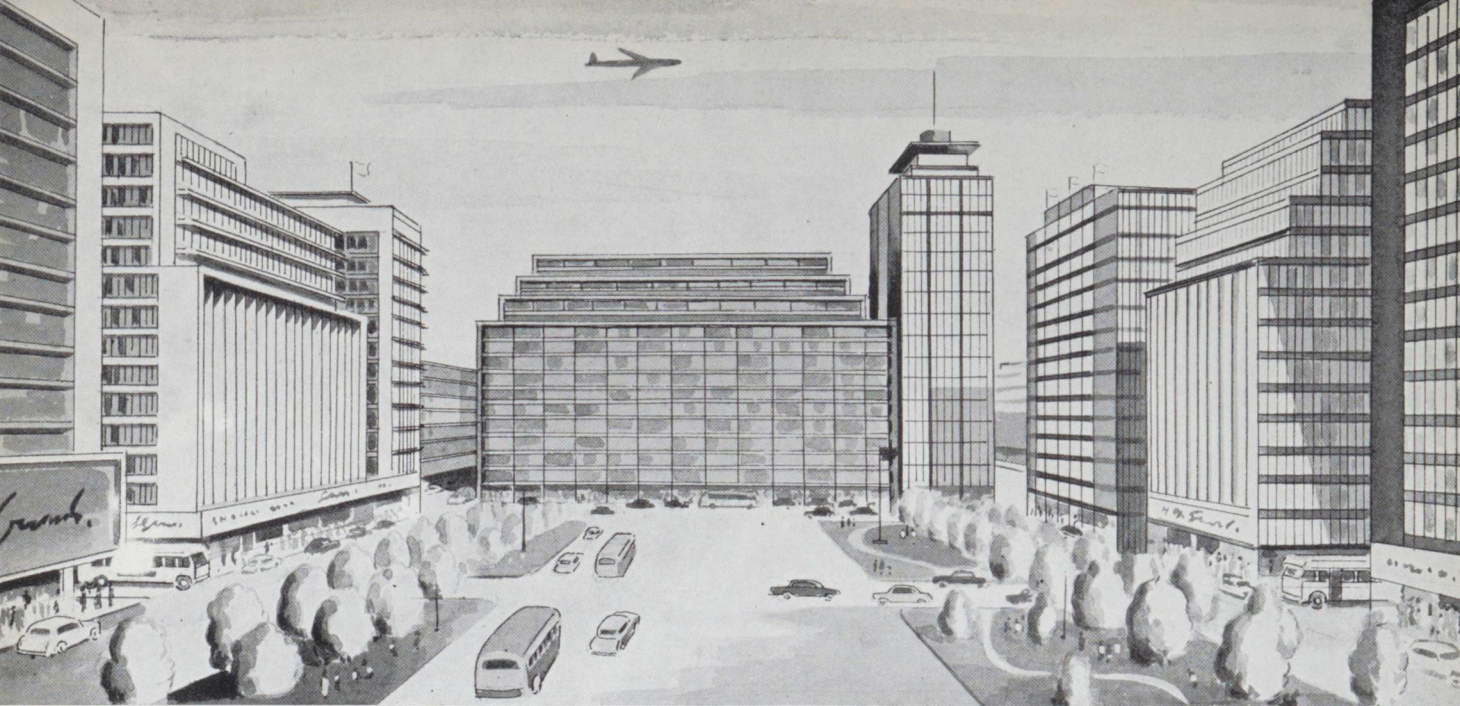
With careful pre-planning the skeleton structures for the exhibition could become the shells for the permanent university buildings. Certainly the saving in installed services—water, drainage, sewerage, power—would be very considerable.

The scheme suggests the re-routing of the railway so that it would skirt the bay leaving the present causeway which cuts across from Point Resolution to carry the arterial highway for fast-moving traffic. The main trunk line would approach Auckland Central station and marshalling yards through a tunnel passing under the Parnell Rose Gardens. This part of the plan could entail considerable cost and the New Zealand Railways have yet to give it their consideration. It may be that re-routing would suit the master transport plan for Auckland now in the course of preparation. Certainly, if the Hobson Bay Scheme is to proceed there must be provision for a short-cut shuttle service connecting the new city with the old, but a lot would depend on whether the contentious underground loop line linking Queen Street with suburban centres is finally approved.

The draft scheme plan is flexible within the outlines of the reclamation.



Avenida Nove de Julho,
Buenos Aires.



An artist's conception of what the Plaza at Hobson Bay could look like.

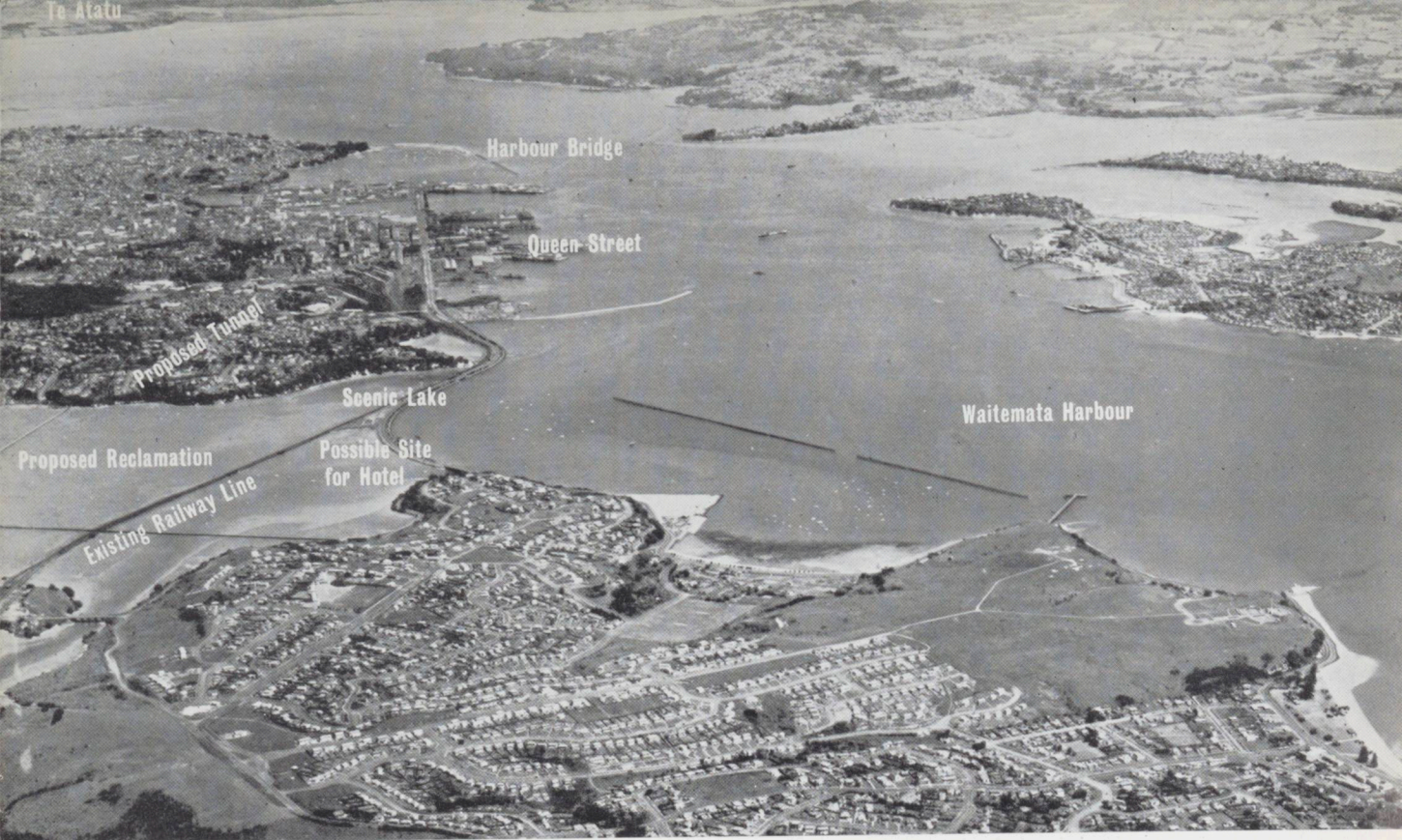
When the time comes specialists in their various spheres of town planning and communications will bring in their knowledge to determine what services should be incorporated and what line they should follow. It is not intended that the plans and perspectives which have been published with the announcement of the proposals should be accepted as the final scheme—they have been produced merely to show one way in which the area could be developed once it has been reclaimed. Fletchers at the moment are mainly concerned with the ways and means of recovering the land. The town plan will be drawn up in consultation with the Local Bodies and Government Departments concerned, and although it is desirable that New Zealand engineers and architects with their familiarity with the habits and preferences of people in this country should play a big part in the city plan, it is proposed to draw also on the breadth of experience of overseas experts.

There are two features of the draft plan that might be criticised as "foreign". One is the broad "plaza" that gives the town its main thoroughfare and the other is the inclusion of streets of multi-storey blocks of flats. There are few British towns in the world that provide facilities for open air social life. Usually generous with parks and greens for more active

recreation, they shy away from the "continental" custom of enjoying life in the streets of the city. Yet, oddly enough, in their travels abroad, British people are loud in the praise of what is denied to them at home. The elegant boulevards of Paris, the Piazza San Marco in Venice, the Avenida Nove di Julho in Buenos Aires—all gracious spaces within these cities where people meet and take refreshments or just walk for the pleasure of promenading in fashionable places—why should their like be precluded from our cities simply because it is not consistent with our set pattern. Auckland, with its generous climate and passion for out-door living, should welcome a thoroughfare like the Plaza suggested in the architect's perspective.

One of the standard criticisms of Auckland by visitors from abroad is that outside of working hours it is depopulated and dead. Leaving aside the matter of Saturday closing and the relative lack of places of entertainment, the reason for the gloom that creeps down like a fog on our cities at night and on the weekends is that nobody lives there. We live in the suburbs and close up the city like a shop when we go home to our families, but why should we persist with something that few of us really like? Suburban life for families is pleasant and healthy but for the lonely ones it is bleak and

accentuates their condition. Also there are many people mostly young, but sometimes old, who would prefer to live down town and be handy to centres of culture and amusement—and why not? There is nothing essentially "foreign" about flat life and in a young country like this we have much to learn from foreigners anyway. The inclusion of an urban residential zone big enough to accommodate up to 50,000 people has not been made apologetically. It is considered to be necessary and progressive and something that will add to the fullness of life. There is a sterner reason for this inclusion that has to do with landlords and tax collectors and the sterling stuff that keeps a city going. City land bears high financial charges which have to be balanced against revenue coming in from the occupants. Populating it with high-density residences is one way of paying the rent. There is another economic fact that is coming home to roost and that is that, the thinner we spread our suburban population, the more impoverished do our Local Bodies become by mounting costs for new roads and footpaths, more miles of sewerage and water reticulation, extensions of power and telephone lines and not least of all the expanding network of bus services. And it's not only our Local Bodies that are getting ulcers over our living like country squires.



Aerial view of central Auckland showing location of proposed reclamation in relationship to the business centre and present communications. In the background can be seen the location of the Harbour Bridge, at present in course of construction.

In the long run it is the ratepayers who pay the bills and many are beginning to wonder whether they can afford to keep a borough that is always on the sprawl. City shopkeepers too have an interest in repopulating the centre. As Auckland's boundaries extend, retail business forms its colonies in the suburbs and people are tending to shop locally rather than travel the distance and pay the fare to town. The argument in favour of high-density residential zones becomes more convincing year by year.

Sir James has been most emphatic in his public statements about the scheme that industry should be absolutely forbidden in the zoning of the Hobson Bay reclamation. The area is now surrounded by some of Auckland's loveliest suburbs and they must not be allowed to deteriorate as a result of the new development. The necessary ugliness of smoke stacks and railway sidings has already dominated the waterfront of Auckland from Parnell to Ponsonby and logically it should be kept within those limits. A large triangle west of Nelson Street has been

dedicated to industry, but when this is filled, the city will be short of industrial sites in the existing city plan which makes over the rest of Freemans Bay to residential zoning. Although there is much merit in the town plan for this area, people may have serious prejudices about making their future homes in a district which has long been regarded as the slum quarter of Auckland. Would it not be better to let industry take its course on this side of town and let the urban residential zones grow in Hobson Bay and other similar areas?

There will be many differences of opinion before the reclamation scheme is crystallised but, in spite of the expected conflict of interests, the first promulgation of the scheme has been received with enthusiasm and almost a total absence of rancour. Those whose interests are at stake have come forward in the spirit of people who want to find ways and means of making the project work and every encouragement has so far been offered by public men, citizens and press.

The Auckland Harbour Board has approved the Hobson Bay Reclamation

Scheme in principle but, before it can in fact proceed, sanction must be given by the Board as well as by the Auckland City Council and other authorities. Fletchers have been given the green light to go ahead with detailed investigations and within the next 12 months are required to produce the hard facts to convince the engineers and economists. One of the factors to be thoroughly examined is the depth of the mud in the Bay before solid ground is reached. On these soundings will depend the depth and cost of foundations of buildings to be erected there. It still has to be proved that a satisfactory system of drainage can be devised there to cope with the population of a new town. The Railways Department and the Highways Board have to be satisfied that the proposed re-routing of communications is necessary and consistent with their long-term plans. Finally, we must satisfy ourselves that the scheme is an economic proposition.

This is the second stage and results of the investigations will be watched with interest by public bodies and citizens alike.

MORE PAPER

Fast Progress on Caxton Tissue Mill

Overshadowed by the giant Tasman newsprint mill at Kawerau, Fletchers' Heavy Construction Division is building a tissue and light weight paper mill for Caxton Paper Mills Ltd. As raw material, Caxton will use imported baled chemical pulp and mechanical pulp supplied by the Tasman mill alongside. Steam and process and domestic water too will be supplied under contract from the Tasman plant.

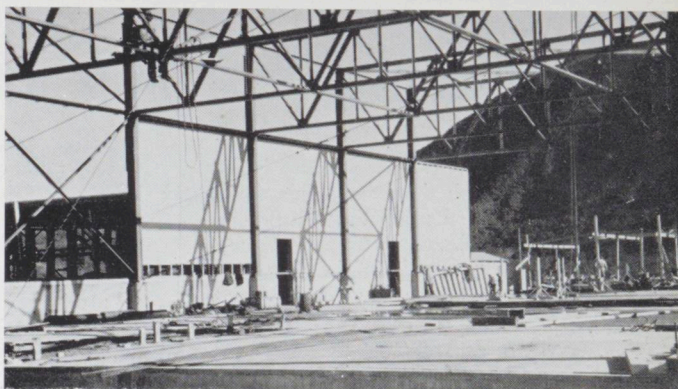
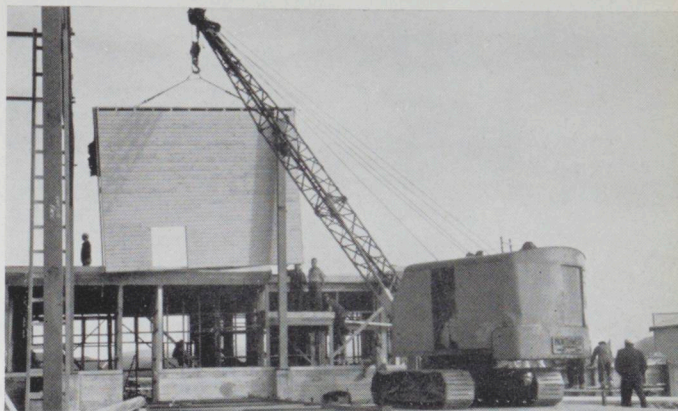
The new mill is to have a single storey main building 306 ft. long and 54 ft. wide with a partial basement and an attached administration block. The skeleton of the building is a trussed steel frame, and the walls have been designed to be sheathed with timber in prefabricated panels for speedy erection. The illustrations show these panels being hoisted into position by crane for bolting on to the steel framework.

Construction commenced on 12th April, 1955. The contract is scheduled for completion by April next year. Job Superintendent is Jack Smith, a Fletchers' engineer who was Assistant Engineering Manager for Fletcher-Merritt-Raymond on the Tasman mill following his return from the U.S.A. last year. The contract involves the purchase and installation of plant as well as the actual construction, and Jack has with him John Potts as Office Manager and Charlie Mellis as General Foreman.

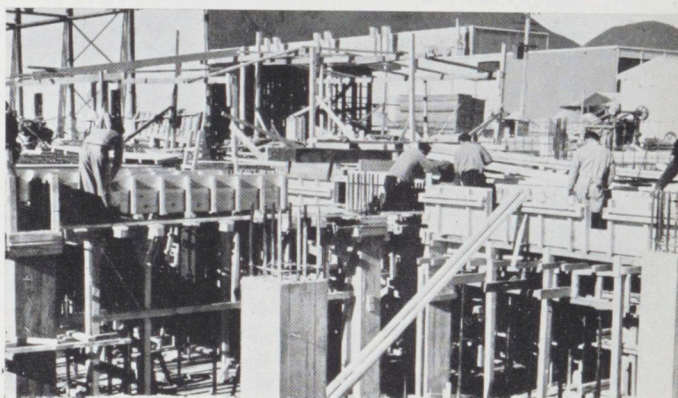
The mill was designed and construction is being supervised by Sandwell & Company Limited of Vancouver, the designers of the Tasman mill.

Credit for the conception of the plant must go to Mr. Berridge Spencer, Managing Director of the Caxton Printing Works Ltd. in Auckland. It has long been his ambition to see such a mill in New Zealand and its establishment has been made economic and possible by the recent development of the New Zealand pulp industry. Caxton Paper Mills Limited is a private Company with a capital of £300,000 jointly owned by the Caxton Printing Works Ltd. and Fletchers.

The 130-inch paper machine being manufactured by Bertrams of Edinburgh is of the fourdrinier type (M.G. machine), with a 12-ft. drying cylinder suitable for manufacturing a variety of crepe and plain papers. The machine is designed to operate at all speeds from 400 to 1,200 feet per minute and to produce up to 30 long tons every twenty-four hours.



TOP: Hoisting prefabricated panel into position.
MIDDLE: The steel frame of the Mill with the panels erected.
BELOW: Work proceeding on the basement.

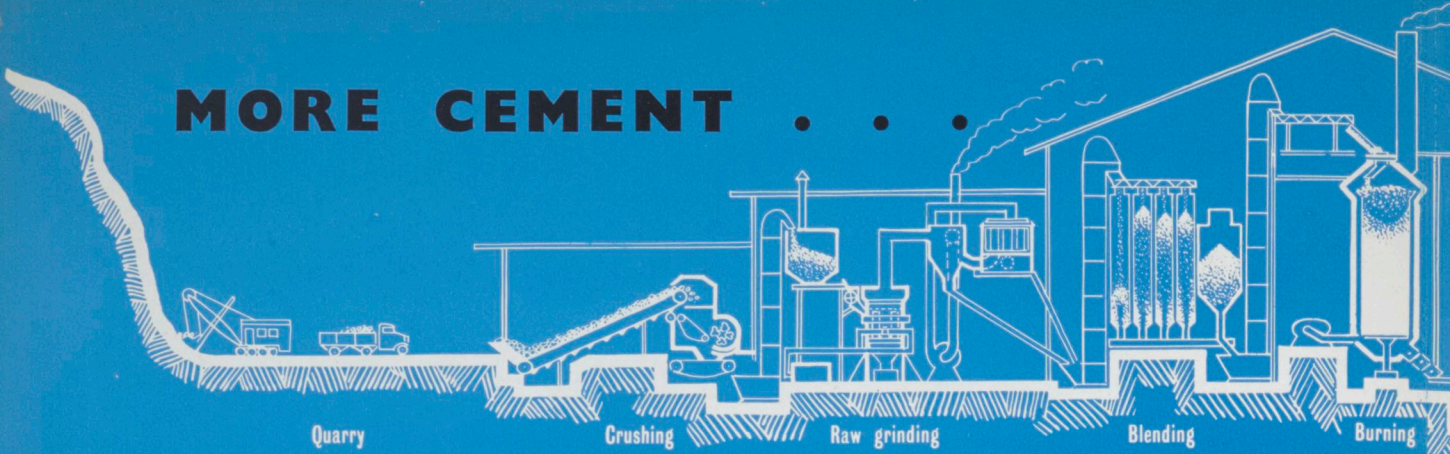


FLETCHER'S UNIQUE FIELD OFFICE



This is New Zealand's first mobile Field Office before making the journey to the Caxton mill site at Kawerau. The transformation of a superannuated railway carriage into a unique works unit was carried out in Auckland, and incorporates living accommodation as well as complete office facilities for an engineer and assistant. Its amenities include comfortable sleeping quarters and a shower.

MORE CEMENT . . .



Fletcher's to build TWO NEW CEMENT WORKS

The Fletcher Construction Company is to build two new cement works—one in each island of New Zealand.

Although there are ample deposits of limestone (the raw material) the Dominion's production of cement falls far short of demand. Over the past five years there has been a steady growth in the usage of cement by the building industry and in 1952 it climbed to 490,000 tons of which about 193,000 tons were imported. This represents nearly 500-lbs. of cement per head of population and usage since then has increased beyond even this high rate.

There are three companies at present producing cement in New Zealand; Wilson's, Golden Bay and Millburn (Dunedin), and while they are increasing their capacity by extension of plant, it is estimated that their combined actual production will probably not exceed 430,000 tons although the nominal capacity will be 540,000 tons.

The two new plants will each have an initial capacity of 40,000 tons and when they go into production before the end of next year they should have the effect of considerably reducing the Dominion's importation of cement.

The new works in the South Island is to be built for the Southland Cement Company Limited at Orawia, close to the limestone quarries at Clifden. The North Island plant will bring industry into new territory at Te Kuiti, centre of a prosperous farming and logging district. A new company is to be formed to exploit natural deposits there.

Designs of the buildings are being prepared by The Fletcher Construction Company and drawing work is well under way. In association with Fletchers on the design and installation of the production plant is a well known Australian company—Gippsland Industries Limited, who have a modern vertical kiln cement works at Traralgon (Victoria). Their Managing Director is Dr. S. Gottlieb, D.Sc. A.M.I.E., who has designed several of this type of cement plant in Europe. Dr. Gottlieb is a world authority on the vertical kiln method of production which is being used by his Company and which will be a novel feature of the two new works in New Zealand.

The vertical kiln cement process differs from the rotary kiln method, which is at present employed by all three existing producers, in the use of solid feed instead of the conventional slurry feed. In other words, the limestone is introduced in powder form instead of being mixed with water. The vertical kiln installation is cheaper especially

at low capacities and makes a 40,000 ton unit fully competitive with rotary kiln units of much larger capacity.

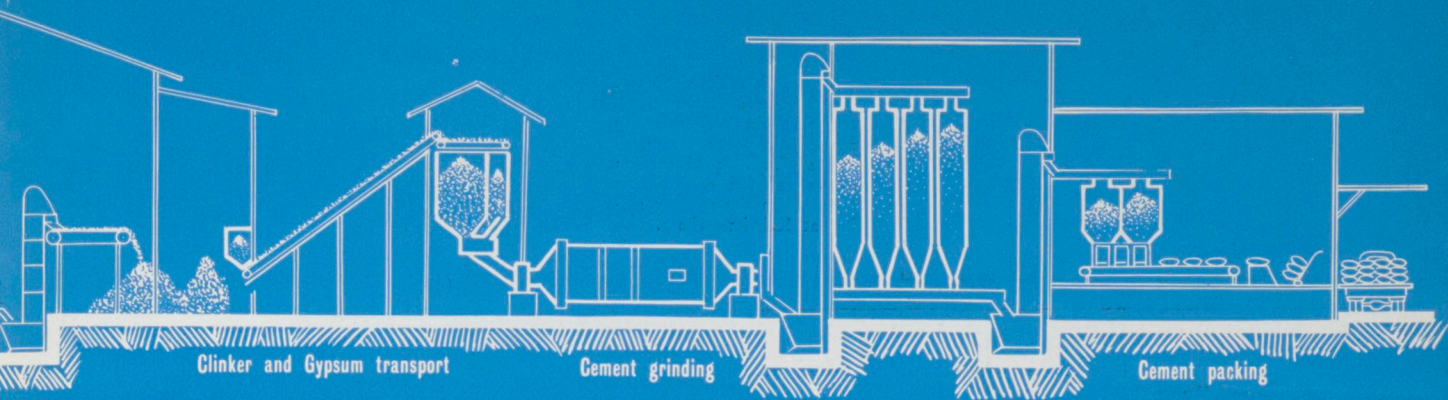
The raw materials for cement manufacture comprise limestone and a source of alumina and silica, such as clay or marl, and a small percentage of gypsum which is ground with the clinker to form the finished cement. Of these materials only gypsum is not found in New Zealand and this can be obtained from Australia.

Limestone and clay or marl are received from the local quarries and the raw material is crushed, and then dried and ground in a mill which does these things in one operation. A battery of four silos (seen in the diagram on this page) blends the raw meal to the required chemical composition. The meal is conveyed to the raw mix feeder where it is proportioned with the necessary amount of fuel before going into the kiln for burning. The burnt product, known as clinker, is discharged from the kiln through a series of specially designed hydraulically operated valves. From this stage onwards the operations are exactly the same as in the conventional process. It is transported to the cement grinding process where gypsum is introduced. The finished product is hoisted by elevator and tipped into cement silos for storage. From there it is drawn off and bagged for distribution.

Use of vertical kilns for manufacture of cement is not new—actually, they were the first kilns used by the industry. These shaft kilns, as they were called at the time, were very difficult to operate and the quality of cement produced was far from satisfactory. For this reason they were discarded as obsolete and replaced by rotary kilns.

Heat transfer and conservation are better in the shaft kiln, even in the crudest type, than in the rotary kiln, and much research was carried out prior to and during World War II to improve this process. As a result, the modern vertical kiln has been developed with its operation fully mechanised.

There are some distinct advantages over the rotary kiln process. Fine grinding of coal is not necessary and labour requirement is low. Centralised pushbutton control enables production of the kiln to be supervised by one man per shift. The kiln can be stopped under fire on Sundays and holidays without damage to the kiln shell, as against the necessity of continuous operation of rotary kilns.



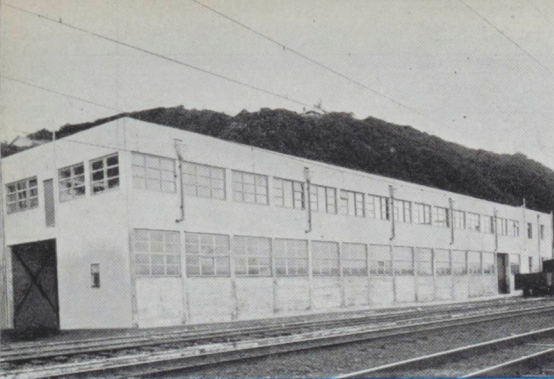
An aerial photograph of the Portland works of Wilson's (N.Z.) Portland Cement Ltd. taken after extensions. On the left can be seen the 500-ft. by 100-ft. gantry building. In the foreground is the new crusher house and behind it the cement silos. The circular slurry basin appears at the extreme right.

• • • AND STILL MORE

Extensive additions to New Zealand's largest cement works have recently been completed by Fletcher Construction, more than doubling the productive capacity of Wilson's (N.Z.) Portland Cement Ltd. at Portland, Whangarei.

Prominent in the aerial photograph is the huge gantry building measuring 500 ft. by 100 ft. The steel framework was fabricated by Fletcher Steel, using 1500 tons of structural steel, and a further 2500 tons of reinforcing steel went into the extensions. This building can now store 17,000 tons of clinker and gypsum, 15,000 tons of limestone rock and 4,500 tons of coal.

Other new sections added to the plant were the crusher house where the cement rock and limestone are received by rail for processing. The 70-ft. high cement silos were built by the slip form method described in the December, 1954, issue of *Arrowhead*. The log washer and slurry basin were also included in the contract. The new kiln installed at the works is capable of adding 100,000 tons annually to output and the Company hopes to produce 200,000 tons this year. Don Blaikie, now our Whangarei Manager, was in charge of the job, assisted by Ron North.



EXTENSIONS TO WELLINGTON OFFICES

An additional 4,500 sq. ft. of office space has been completed in Wellington to make more room for growing staff. This illustration shows exterior of building taken from the railway siding at Kaiwharawhara.



QUOTE

(Jack Cutler, the author of this article had a few general comments to make about New Zealand before leaving for his native California after 16 months in this country.

As a specialist in communications, he was responsible for supervising the installation and smooth running of the system he describes opposite.)

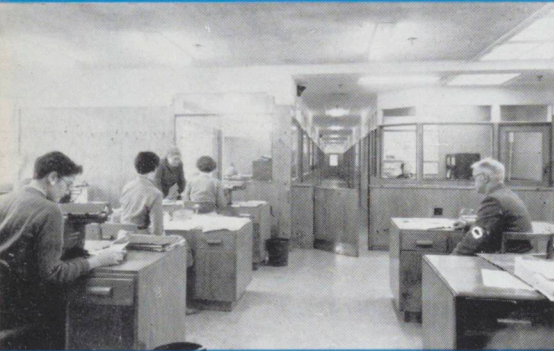
Says Jack: "It goes without saying that people here are undoubtedly the most sincere, honest and amiable of people anywhere. Values are in their right relation and the way of life is good.

"The fact that there are so many antiquated methods, customs and controls is relatively unimportant. The vital thing is the attitude and approach to the problem of changing them to maintain stature in an ever-improving society. It is encouraging that in some circles there is a definite and constructive attempt to improve and Fletchers seem to me to be pioneers in this respect. It is because New Zealand has such men as Sir James Fletcher who have vision, initiative and the courage to overcome formidable obstacles that the outlook for the future is so good."

The Accounts and Wages Section of the office is panelled in knotty pine. The ceiling is of Sprayed Limpet Asbestos which keeps down noise level, giving quiet atmosphere even in times of peak activity as illustrated.



View of corridor with private executive offices and communications centre. Appearing in photograph from left to right are: Christine Simon, Rae Barker, "Bud" Brown (standing), Barbara Nichol, Margaret Wiffin (telephone operator) and Ernest Coyle. Gladys Lambert (teleprinter operator) can be seen in photograph opposite.



Clean cut and well illuminated, the Purchasing Division office is conveniently placed for reception of callers. Shown at their desks (front to back) are: Jack Bentley, Donald Grigg and Alan Wilson with Susan Ashford in background.



GOOD LUCK, PETER

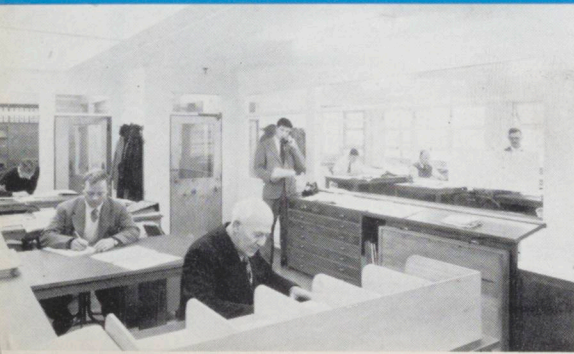


PETER BROOKFIELD

Peter Brookfield left us at the end of July to set up in business on his own account. Peter has been associated with us for a number of years, originally under an engineering service contract with the old 'Residential' and subsequently in a full-time capacity as Acting Manager of the Plant Hire Company.

His many friends all wish him and Eric Jarvie (who will be joining Peter) all the very best for the future.

Quantity Surveyors' offices have Perfortile ceilings and special desks for working on sets of plans alongside writing space. Seen in Housing Section are: "Mac" McKay-Campbell, Ron Coe, John Bishop and Roy Hans (standing). Through the glass partition in the Commercial Section are John Stewart (standing), George Pauley and Doug Catley.



+++ USING THE TELEPRINTER ++

BY JACK CUTLER



Rapid and efficient communication with branches and departments is vital to a large organisation such as Fletchers. While the telephone may still be the best instrument for short distances, it is too costly where long distances are involved or when frequent contact is wanted. It is also restricted—and has been for some years—by shortages of labour and material. The Post and Telegraph Department simply cannot keep up with the demands of business and residential expansion.

To speed up communications between the various Fletcher interests throughout the Dominion a Teleprinter service was installed last year to encompass the following circuits:—

Auckland to Wellington.
Wellington to Christchurch.
Christchurch to Dunedin.

There is also a direct hook-up between head office in Auckland and Fletcher Timber in Rotorua, and by the time this goes to press a new circuit between Auckland and Hamilton offices will have been installed. In the not too distant future links may be made between Rotorua and Kawerau and between Dunedin and Invercargill.

The system is not new to this country and has been used by the press for many years. The old "tape machine" used by the stock exchange is well known and is basically the same instrument. The modern teleprinter looks like an electric typewriter and messages are typed on to the keyboard.

The message is transmitted automatically from the keyboard in one location, through the ordinary tele-

phone wires and is reproduced in type-written form in the location to which it is sent on a similar instrument. Messages can be relayed, as for example in the case of Auckland office wanting to communicate with Dunedin. The message is transmitted through Wellington office where a switching mechanism instantaneously sends it on to Christchurch from where it is again relayed to its destination. The time taken is infinitesimal and in less than one minute the Auckland message is

DO'S AND DONT'S

1. Be as concise as possible, yet give complete detail. People are not mind readers.
2. Avoid lengthy messages. They are subject to more errors and they jam the circuits.
3. Print or type your messages to the operator. If you insist on long-hand, don't blame the operator for mistakes.
4. When replying to someone's previous message, refer to his message number plus a very brief reference to its content.
5. If you see there may be some delay in answering a message, at least acknowledge it promptly with some indication as to when an answer will be forthcoming.
6. Confine each message to one item.

typed out in Dunedin without any physical operation other than the original typing on to the transmitting keyboard.

Apart from the sending of single messages, it is possible for two people standing next to their instruments in different towns to carry on a "conversation" with each other. Both incoming and outgoing messages are reproduced on a duplicate roll of paper going through the machine, one copy for the sender or recipient and the other for filing.

Evidence of the popularity of the system is told by facts. Last year over 40,000 messages were transmitted from Fletcher offices throughout the country. That means one message every three minutes. While not all of these messages were vitally important, the use of such a convenient means of communication allowed people to work faster and better. Purchasing Division, for example, frequently receive offers of material from overseas with only an hour in some cases in which to reply. It would be impossible to make telephone calls to all centres in order to gather information for a reply within that time.

Telegrams and cables too can be transmitted straight to and from the office by teleprinter as the instruments are in contact with machines in the telegraph rooms of main Post Offices. This saves time and avoids the inconvenience of phoning telegrams through to the local post office. Errors that might arise from phoning a message do not arise as the message is visibly spelt out in the office where it originates. So far this service which is known as "Printergram" is used only in the Auckland and Wellington offices of Fletchers but later on it may be installed in other centres where the teleprinter service now operates.

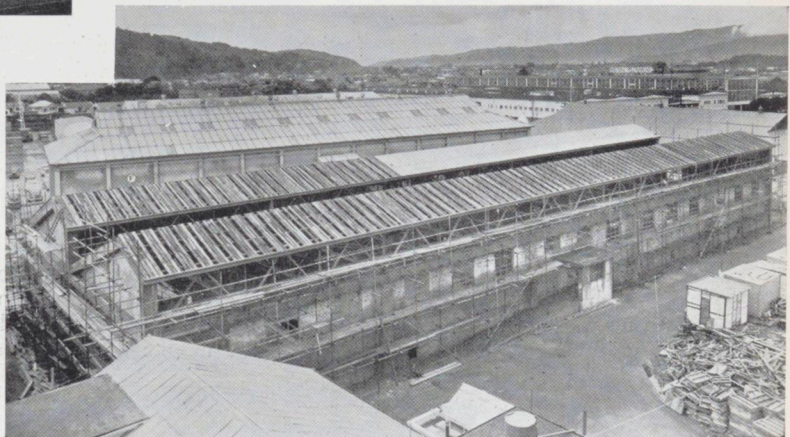


Going up in Wellington

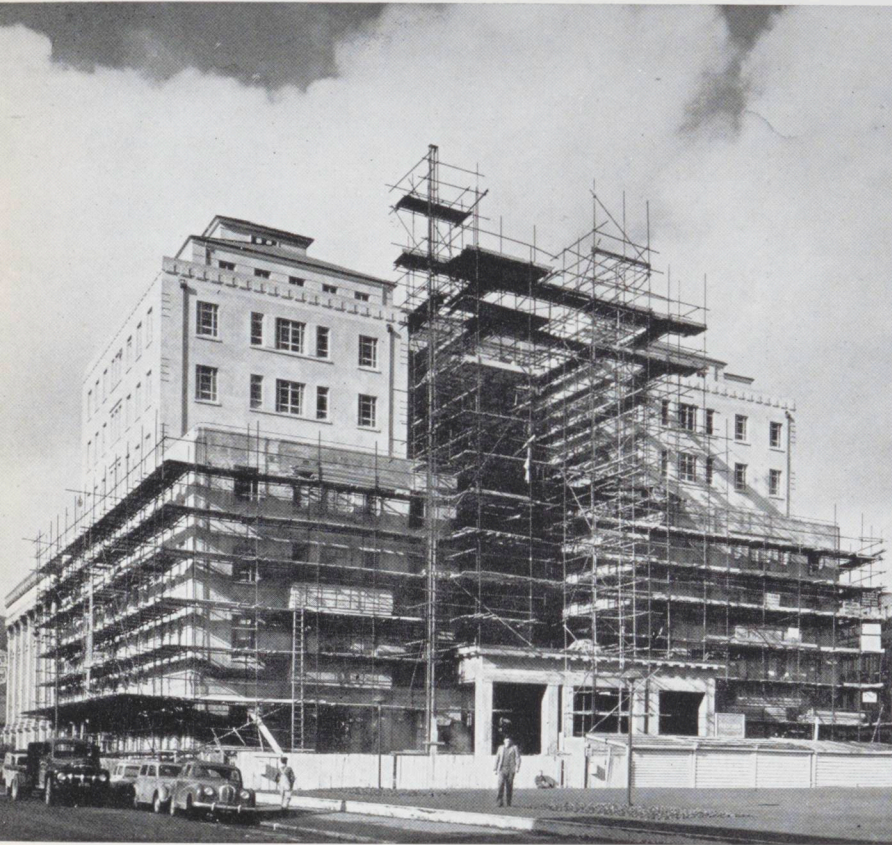
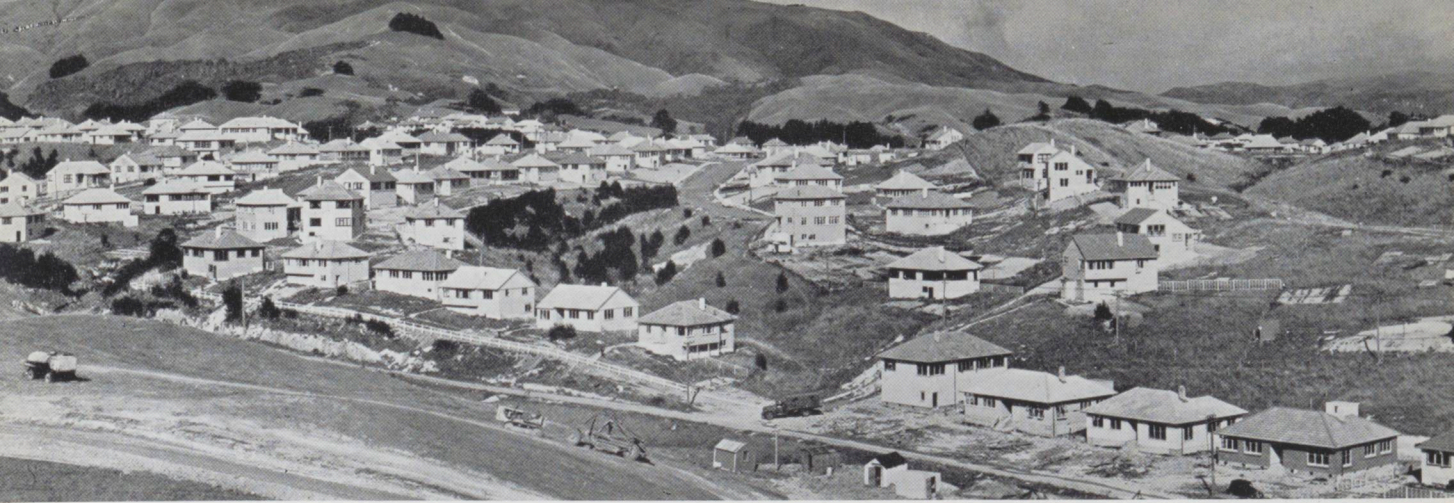
ANVIL HOUSE: This seven-storey building in the heart of Wellington was under the foremanship of "Blue" Jamieson. Structural and reinforcing steel were supplied and fabricated by Fletcher Steel. Messrs. Smith & Smith Ltd. have created a new fashion in exterior colour by having the whole building finished in Terracotta with white window frames. The overall effect is a pleasing addition to the Capital City's prominent buildings.

W.D. & H.O. WILLS N.Z. LTD.: This contract was started in the middle of 1954, under the foremanship of "Arch" Currie. The building will provide 18,570 sq. ft. of additional factory and storage space for Messrs. W.D. & H.O. Wills N.Z. Ltd, and is proceeding to schedule. Steel fabrication on this job was done by Fletcher Steel under the supervision of Gordon Davies (reinforcing) and Len Terry (structural).

GENERAL MOTORS N.Z. LTD.: The new premises in Lower Hutt showing the 18,000 sq. ft. air-conditioned office block and part of the 68,000 sq. ft. warehouse. Bill Lafrentz was general foreman, assisted by "Blucy" Lane and Joe Feickert. Construction was supervised by John Irwin, Building Supervisor for General Motors in U.S.A. The building was erected in 15 months.



MARTIN LUCKIE PARK PAVILION: This fine Pavilion built to serve the interests of all sports on the Martin Luckie Sports Ground was started in December, 1954, under the foremanship of Bill Lafrentz. The contract was then taken over by "Blucy" Lane when Bill was placed in charge of the new Victoria University Science Block contract. Interior arrangements are designed to provide every comfort for sportsmen in all seasons.

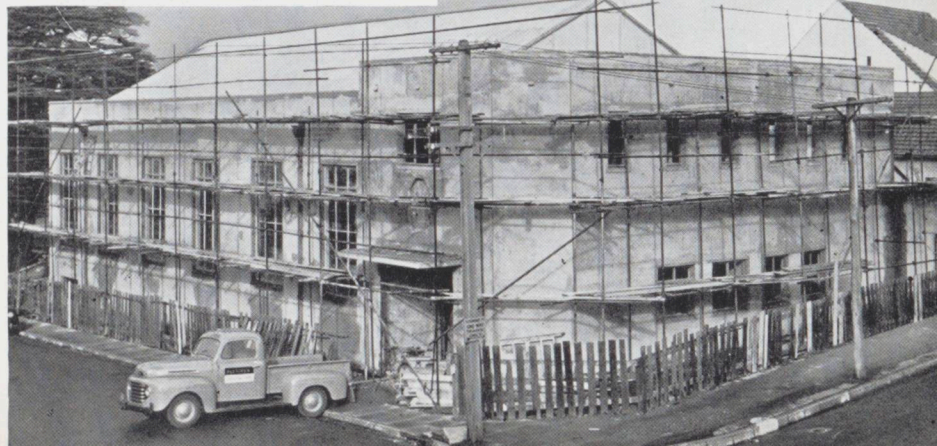


HOUSING: Housing contracts in the Hutt Valley, Upper Hutt and Titahi Bay areas are keeping this Division very busy under Supervisor Keith Kenwood. A total of approximately 60 to 70 units are in the course of erection in these areas. Multi-unit flats are also in construction.

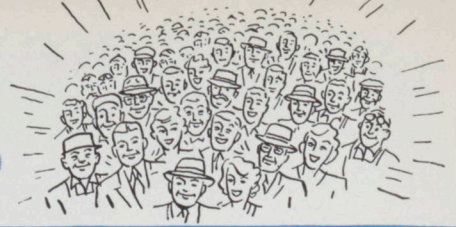
WELLINGTON CITY COUNCIL new administrative block: Another seven-storey building built on to the existing Civic Block in the heart of Wellington, under the foremanship of Jimmy Dawson, with steel work by Fletcher Steel. This job has a bright cream-coloured exterior. Expected to be completed later in the year, the interior finishing will be in keeping with the dignity of its purpose.

QUEEN MARGARET COLLEGE ASSEMBLY HALL: This contract under the foremanship of Joe Dunne will provide a magnificent hall for pupils of one of the oldest-established girls' colleges in Wellington. Finishing work only remains to be done. Fletcher Steel supplied and fabricated reinforcing and structural steel.

This is the second of a series of job photographs. Buildings with FLETCHER signs are going up all over New Zealand. There will be photographs of jobs in other towns in later issues.



Personalalia



AUCKLAND

Congratulations: To John Batchelor (Fletcher Timber) on the birth of a daughter; to Warwick Mayer (Plywood) on the birth of son; to Dick Dunn and Doug MacKay (both of Vulcan) on the birth of daughters; to Mr. and Mrs. Ken Lazenby (Vulcan) on their recent marriage. Best wishes to Doug Laughton and June Irvine (Head Office) who announced their engagement on June's 21st birthday, and to Ron Evans (Plywood) who has become engaged to Miss Carole O'Gara.

Welcome Back: To Des Sutcliffe (Fletcher Timber) after two months' illness and to Roy Cole (Sales & Services) who has also been on the sick list.

Farewell: To Jack Cutler (Purchasing Division) who has returned to the U.S.A.; to Stuart Robertson who leaves the position of Assistant Branch Manager of Fletcher Timber to join Hickson's Timber Impregnation Co. N.Z. Ltd. as Commercial Manager; to Bill Gilbert (Sales & Services) who has been appointed Auckland Manager of Mair & Co. Ltd. To Mrs. Elizabeth Thomson; to Peter Brookfield who is going into a business of his own, with Eric Jarvic.

HAMILTON Hearsay

Congratulations: To Fay Moore (Sales & Services) on her recent marriage. She is now Mrs. McKay.

Welcome: To Dawn Newman who replaces Fay in the office.

WELLINGTON Wisdom

Congratulations: To Gordon Bloomfield and Rae Barker on their engagement.

Welcome: To Ron Coe (Quantity Surveyor) recently arrived from England; to Miss R. Stewart now back at the office.

Farewell: To Bill Clayton (Quantity Surveyor) who has left after long service to try new fields, and to Wilf Cranmer (Cartage Manager) who is going into construction business. Both received presentations at farewell functions. Len Burgess (Sales Division) has also left to go into insurance.

Thousands of theatre-goers flocked to the Plaza last month to see Bill Kirkbeck and Andrew Kafalas in *Do It Yourself*, presented by Pacific Films. (Also screenings were Yvonne De Carlo and David Niven.) Salesmen in business life, Bill and Andrew appeared to Wellington audiences as carpenters, dapper in their H-line overalls, fixing Durock Sidings.

Entertainment: The Annual Ball is to be held at the Majestic Cabaret on 24th September.



June Irvine and Doug Laughton, both of Auckland Office, who have announced their engagement. June comes from a village near Kirkintilloch in Scotland and Doug comes from Johannesburg.

CHRISTCHURCH News

Congratulations: To six new fathers—C. J. McKay (Transport), Colin Bryce (Plywood), J. Brown (Fletcher Industries), and R. J. Dixon, R. V. Dixon and J. Taylor all of Fletcher Construction; to Joan McEntee on her recent engagement; to F. B. Aldous, janitor for Durock who celebrated his Golden Wedding on 20th July. His 23 grandchildren and four great-grandchildren gathered in Christchurch to join the celebrations.

Farewell: To Harry Boyd, Bob Riley, Neil Currie and John Cann (Fletcher Industries); to June MacDonald (Main Office); to Mrs. E. Barlow (Plywood).

Social Activities: The Annual Ball, held in the Mayfair Lounge was a brilliant success and thanks are due to those who organised the function. A concert was held in the Cafeteria on Sunday, 24th July, in aid of the "Appeal for the Aged" fund.

OBITUARY

It is with regret that we record the death of Mr. Frank Throssel, Wellington carpenter, who was prominent in Union affairs. He lost his life while rescuing a child from a burning house.

With extreme regret we record the sudden death of Mr. Alfred Irving who was employed at the Christchurch Branch of Fletcher Steel.

The tragic death occurred on 2nd July of Mr. Leslie Stiles, late of the Nelson Street Joinery, Auckland, and previously of Wellington.

DUNEDIN Diversions

Congratulations: To Sylvia and John McDonald on the birth of a son; to Shirley Walker on her engagement to James Sullivan and to Bruce Thomas on his engagement to Jo Douglas; to Ken Wilden on receiving his A.M.I.Struc.E.

Farewell: To Bill Kearney (Fletcher Steel) who, after 25 years' service, was presented with a canteen of cutlery; to Alex Rogers and Jack Wilson (Fletcher Steel) on their departure for a trip abroad.

INVERCARGILL Intelligence

Congratulations: To Jack Mulholland on the birth of a son; to Bob Walkinshaw on his 20th Wedding Anniversary.

Welcome: To Miss D. Doherty.

The Ball: 9th July was a night of frivolity at the Third Annual Ball and a just reward for the Social Committee to whose efforts its success was due. Greenery and coloured lights were used in the decorations and novelty was provided by Pinex replicas of tools of the trade suspended from the ceiling. There was also an eight-foot-square mural of one of the jobs.

Not Guilty: Sandy Robertson of Invercargill wants it to be known that the Sandy Robertson whose marriage was announced in the July issue of *Arrowhead* is not to be mistaken for himself.



Slings & Arrows

Roy Shirley, making Rotorua's first contribution to Personalia, writes: "Up till now we have just been sitting back enjoying *Arrowhead* but, after carefully removing the arrow that was fired at us in the last issue, we decided we had better lick our wounds and knock some words into shape just to prove that we also live who only chop and saw."

Arrowhead has an offspring in Invercargill. The Social Committee down there has decided to put out a weekly circular round the jobs informing the men of social and sports activities. They have called it *Saw Head*.

The Hamilton Rugby team claim space in this column to say that they are anxiously waiting for two promising young backs—Ray Tod and Eric Walkenden—to turn out for a Sunday game.

This English: A paragraph from an advertising agent's letter recently received in Wellington says: "Renovation and redecoration will be the theme, with a proportion of ads devoted to the 'Do it Yourself' aspect: ads to show people with beautiful interiors, but not so ultra that they appear beyond the means of the average home owner."

TIMBER Tattle

Congratulations: To Bill Hedges (Accountant) on his win in a lottery; to Neville Barnett (Accounts) who has won the hand of Daphne Grey (not in a lottery) and to Peter Anderson, one of the logging boys, on his marriage to Barbara Halcrow (Accounts). Peter and Barbara have since gone to Chaslans in the Deep South and together with Northerners Les Cann, Reo Beckett, Charlie Harris, George Redden, Tang Harris and Jordie Taylor are no doubt showing the mint julep boys how it should be done.

Welcome: To Leo Jackson (Office Manager), Ernie Becker (together with Ernie the Younger), Kinleith Mill Manager, and to Bill Morrison (Purchasing Agent) who has returned after a trip abroad. Among new faces at the mills are those of Gerard Ward, Joseph Smith, Charles Beer, Dawson Field, Jimmy Hou, Tunoa Kerei (at Ranga-tiki); Charles Hannah, Jim Newcombe, Ron Kotu and Bruce Manly (at Ngongotaha); George Henry, Ronald King and family (at Kopaki); Henry Heta, John Martell and John Ray (at Te Rimu).

BALL SNAPSHOTS

Those pictured below are Keith and Lauris Varney; Angela Pettit and Tony Speir; Iris and Bill Metcalfe; and on extreme left, Pamela Fielder and Peter Grant.

SYDNEY Section

Welcome: To Ken McMorine who joined the staff of The Fletcher Construction Co. Pty. Ltd. on 1st June as Purchasing Agent. Previously he was Australian representative for Fletcher-Merritt-Raymond.

Farewell: To Ray Le Wan, Carpenters' Superintendent for the Fletcher-Merritt-Raymond job at Kurnell who returned to the U.S.A. on 21st July.

SPORT

Rugby: In Hamilton, the Fletcher Construction fifteen organised by Johnnie Morgan and captained by Stan McDonald are getting into form. Last week the green and whites fought a well-earned draw against D. C. Street's fifteen.

Inter-job matches are in full swing in Invercargill and the Club has been given a cup weighing seventy-four pounds (sic) surmisably by the Plumbing Division.

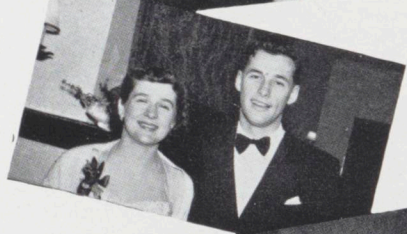
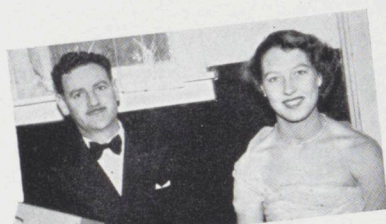
Cycling: Ross Lowes, the six-day cyclist, has transferred to Hamilton from Kawerau to complete his training under the management of John Foote. The big race in October will start in Wellington, covering a 650-mile route to Auckland. Since his arrival in Hamilton, Ross won the Hamilton Open 50 Miles with a great finishing sprint.



HEAD OFFICE BALL

The culmination of some weeks of quiet endeavour was seen on the evening of Friday, July 15, when around 400 people taxed the capacity of the Sorrento, One Tree Hill, to its limits. The occasion was the Head Office Ball, now an annual affair, and, with members of all companies well in evidence, perhaps the most representative of its kind.

Thanks for the success of the ball are due to Peter Grant of Quantities for wall drawings and table arrangement; to Tony Speir of Head Office who handled the bookings and to Johnnie Pettit for lighting decorations. Jack Thomas was Chairman of the Committee.



HOW TO GET A BADGE

On the back cover is illustrated a company lapel badge which has already been introduced on a very limited scale and distributed quite haphazardly, mainly in Auckland. The first distribution has been largely experimental, to test people's reaction—it's not unlikely that a storeman has one but not a foreman.

However, the response has been very good and if the demand warrants it we will have a larger quantity made and anyone with six month's service with the Company may have one. Just ask your foreman or manager and he will place an order which, incidentally, may take a few weeks to fulfill. Whether you are in the field, a factory, a steel yard or a carpeted office, you are entitled to wear a badge.

The Company has also considered presenting special pins for long service and it has been decided to make the following divisions:—

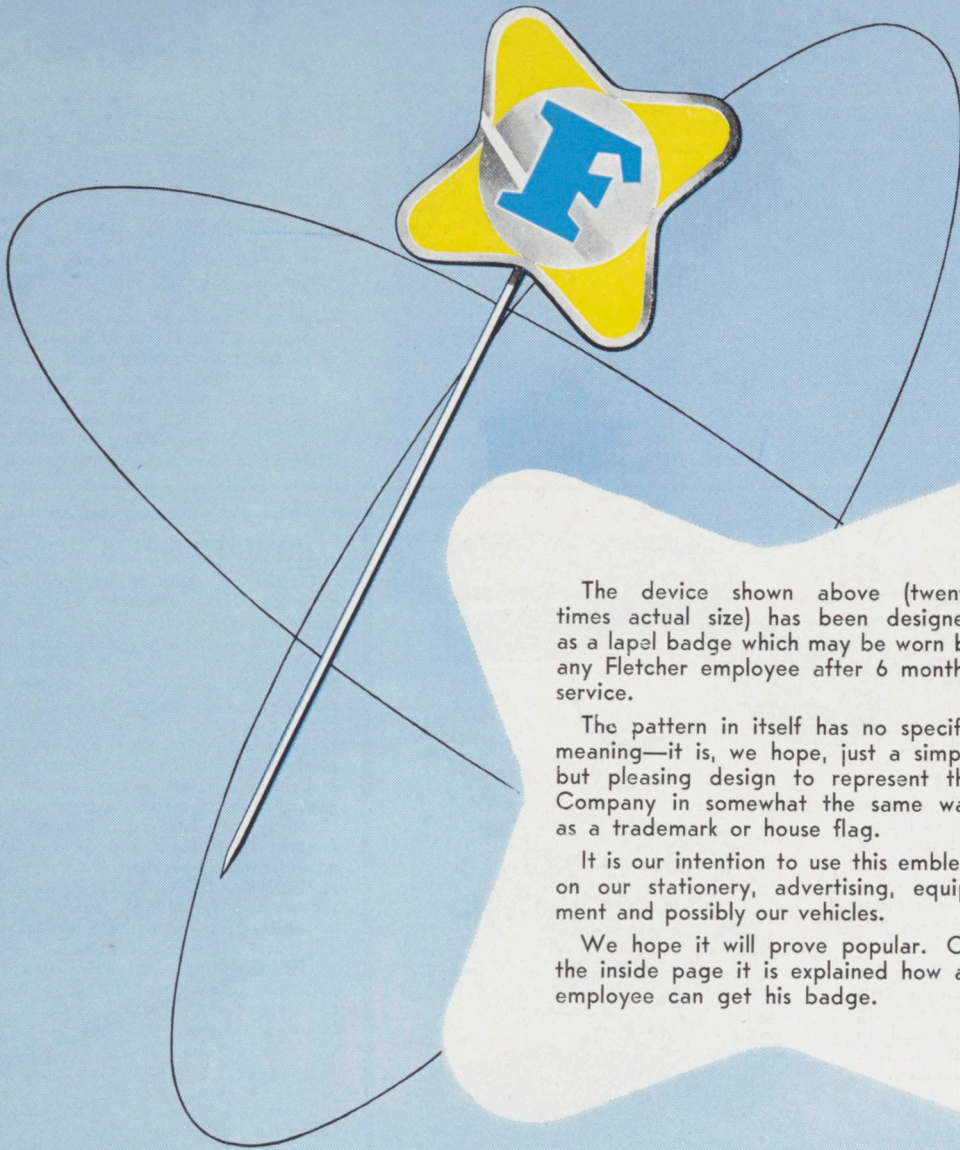
- 5 Years' Service.
- 10 Years' Service.
- 15 Years' Service.

These will be similar to the standard badge but in different colours.

For 20 years' service and more the pins will be of silver and gold and special pins will be made for those with extra long service.

We have got records of service, but not all are complete because of transfers from one Company to another, so if you have 5 years' service or more on November 30, 1955, please see your manager or foreman and fill in the brief details on the form which has been sent to him for this purpose.

Unless this form is filled in, we cannot guarantee you will get your correct pin.



The device shown above (twenty times actual size) has been designed as a lapel badge which may be worn by any Fletcher employee after 6 months' service.

The pattern in itself has no specific meaning—it is, we hope, just a simple but pleasing design to represent the Company in somewhat the same way as a trademark or house flag.

It is our intention to use this emblem on our stationery, advertising, equipment and possibly our vehicles.

We hope it will prove popular. On the inside page it is explained how an employee can get his badge.