

Arrowhead



timber issue

march 1957

FLETCHER

Arrowhead

**VOLUME THREE
NUMBER TWO
MARCH 1957**

**PUBLISHED EVERY
TWO MONTHS BY**

**FLETCHER
HOLDINGS
LIMITED**

**GREAT SOUTH ROAD
PENROSE, AUCKLAND
NEW ZEALAND**

OUR COVER photograph, taken in the Ruatahuna section of Fletcher Timber's native forest holdings, shows a giant Kahikatea (white pine) tree on the point of falling. This tree was 85 feet in height and 14 feet in girth. Its log measure was 12,495 feet.

. . . the Timber Game

This issue of ARROWHEAD is dedicated to one of the youngest members of the Fletcher Industrial Group. It is young only in the sense that The Fletcher Timber Company Limited was established by name as recently as 1954 when separate timber milling and merchandising subsidiaries, entwined for many years with the history of Fletcher Construction, were merged. It is young in spirit too, though old in experience, and the youthfulness of the Company's managers on all levels imparts to it a vigour and enterprise not always evident in what is perhaps New Zealand's oldest industry—the timber game.

In its maturity, Fletcher Timber is aware of the serious responsibility that goes with having some of the nation's most extensive holdings and cutting rights of native forests. Judicious milling is the Company's policy and in Fletcher Timber's hands the forests are in safe keeping. Dwindling resources of native species must be conserved—but not embalmed. Enough native timbers must be produced for use when Radiata pine is not suitable or not permitted by the rigid specifications of the institutions that finance house-building.

The prudent path through our forests is pointed out by Judge Harvey, recently retired after long service with the Maori Land Courts. Opening our new mill at Ruatahuna (see page 12), he spoke of the desirability of allowing the Maori people to enjoy the benefits of their forest wealth as long as these resources are not thriftlessly exploited.

Fletcher Timber is promoting the use of Radiata pine for building purposes and buys large quantities of graded exotic timber for distribution through city yards to the builders of New Zealand. New uses for it are under examination and the Company's research into the fabrication of laminated beams is now moving into the production of Lamwood (see page 12).

The urge of progress underlies the planned revolution through which Fletcher Timber is passing. Rationalisation has been slow to reach the building and woodworking trades, but the Company is systematically replacing obsolete plant with improved mechanised processes. Waste and handling charges will be minimised by planing and pre-cutting timber near sources of supply.

Big changes are under way and, in time, the thought and effort—the planning and the fulfilment of plans—should be reflected in greatly improved service to customers.

The Editors.

TALL TIMBER

BIG BUSINESS

When in 1952 the environs of Te Puke were suggested as a possible site for the plant of the Tasman Pulp and Paper Company Limited, some unfriendly critics hinted that Fletchers wanted it there so as to sell some of their vast land holdings disguised under the title of the Te Puke Sawmills Company Limited.

We couldn't help smiling to ourselves at the time, for the name Te Puke Sawmills had been an anomaly for a number of years. True, in 1940, Fletchers certainly purchased outright a company by that name, but just as truly, within months of the purchase, it did not own a stick of timber or an inch of land in or near Te Puke. In fact it operated from a modest set of offices in Tutanekai Street, Rotorua.

But the seeds of "Fletcher Timber" were sown way back in Edwardian times and thereby hangs the tale we tell in these next few pages.

Thank goodness we don't have to go back to the Ancient Greeks or Egyptians to locate the origins of what we now know as The Fletcher Timber Company Limited. It began in 1910 when James Fletcher and his partner Bert Morris built a joinery factory in Cameron Street, Dunedin. Apart from a small bush purchased at Catlins River during the 1914-18 War, for 30 years the Fletcher Organisation continued to grow without owning or controlling any bush at all. Agreed, those may have been the good old days (or bad old days) when an expanding building and joinery business could rely on adequate supplies of timber, but, from 1910 till 1940 the pre-history of Fletcher Timber was largely the history of Fletcher joinery factories.

While Cameron Street, Dunedin was still operating, Fletchers, in 1916, purchased the business of the W. E. Hutchinson Estate in Nelson Street, Auckland and the Nelson Street Factory has borne the name of Fletchers for over 40 years. In Wellington in 1917, the Cable Street Factory

was established and kept on going until late 1941 when it was moved to its present site on the Hutt Road near Kaiwarra (now Kaiwharawhara, according to the purists).

Back in Dunedin, in 1920 the Cameron Street Factory was sold and a new one built in King Street and this was subsequently sold to Love Construction in 1926, after the Dunedin and South Seas Exhibition. Dunedin did not have a Fletcher joinery factory again until 1946.

With the inauguration of the State-housing programme in 1937 were set up the two big mass-production units at Penrose and Kaiwarra operated by the Housing Division of Fletcher Construction.

All this was history when, in 1940, Fletchers' Residential Construction Company (formed expressly to contract for building State-houses) purchased outright the old Te Puke Sawmills Company Limited from Mr. R. H. Phelan. In the same period a small block of native bush at Ongaroto, near Atiamuri, was bought from Messrs. Scott and McCallum. This was Fletchers' first real venture into the heart of the timber business—the ownership or control of trees. Later, Te Puke Sawmills was taken over by Fletcher Holdings Limited, its capital increased to £40,000 and Fletchers were really in the timber business.

Other landmarks in the post-war period were the purchase of the box and cooperage business of William Cook & Sons in Palmerston North and Petone, and also the joinery factory of J. Hammett & Sons of Christchurch in 1948. On St. Patrick's Day in 1950, the joinery business of Hamilton Furnishers at Claudelands, Hamilton, was taken over, marking Fletchers' debut into the Land of the Mooloo. All this then was the genealogy of Fletcher Timber—a mixture of joinery and box factories, some dedicated to the individual craftsmen's art, others to the mass production of mundane things like kitchen units; a few sawmills, some scattered bush holdings; merchandising yards with stocks not only of native and exotics but from Australia, Western America and the tropical zones.

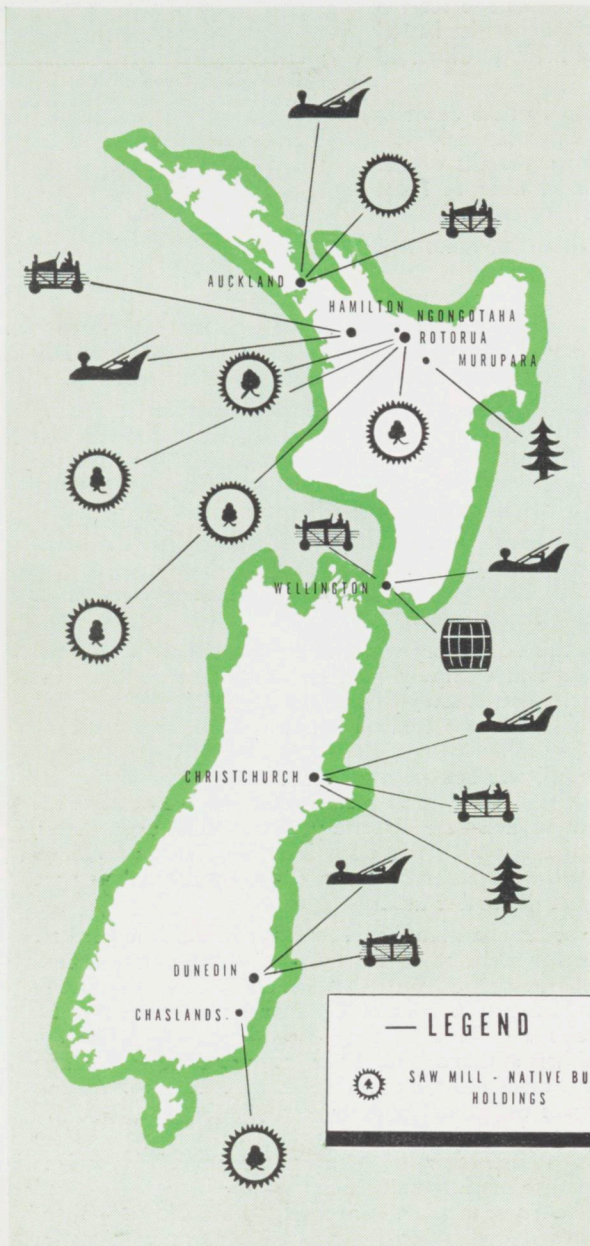
(Continued on next page)



Photograph above gives an impression of how tall a tall tree looked to the axemen who made the first cuts in it.

Below, a power chain saw is used to fell the tree.





To complicate things even further this mixed bag was multi-managed—some operations under the control of Fletcher Construction, some under Residential Construction, some under Te Puke Sawmills. Logically it had to be merged and put together under centralised control, and logically it all became The Fletcher Timber Company Limited.

So much for the basic historical facts about Fletcher Timber. What were some of the highlights of the period to 1954?

When Fletchers bought the log mill and bush holdings at Ongaroto it was with no intention of becoming timber merchants. The purchase followed the establishment in 1940 of the Auckland Plywood Factory, and the mill at Ongaroto (between Taupo and Putaruru) was able to supplement the supply of peeler logs. The Ongaroto bush has just been cut out, the mill has closed down and the old bush tracks, quaintly known as “The Burma Road”, “Snake Gully”, “Pig-sty” and “Panhandle”, are becoming overgrown.

FLETCHER TIMBER FACTS

- The Company Employs: 603.
- Operates: 6 sawmills; 15 logging operations; tractors and transport fleet; 6 timber yards; 5 joinery factories; cask and box factory; house pre-cutting mill; Handyman's Yard.
- Mills: 15 million board feet annually.
- Sells: 26 million board feet annually.
- Imports: 3 million board feet annually.
- Manufactures: 80,000 butter boxes and 20,000 hide and tallow casks annually.
- Holds: Long-term cutting rights over native forests (freehold, privately-owned and Maori-owned only) in central North Island and in Southland.
- Owns: Radiata pine forests (held in reserve) at Murupara and Canterbury.



TOP LEFT—A tractor hauls a log from the stump to the skids, where logs are piled up to await transportation to the sawmill.

TOP CENTRE—Loading a logging truck from the bush skids.

TOP RIGHT—A load of logs leaving the bush for the sawmill.

BOTTOM LEFT—Breaking down a log on the twin-saw breakdown bench at the mill.

BOTTOM RIGHT—Operating the deal frame in which square flitches of timber are sawn into boards.

Plywood manufacture was not the only reason for going into the milling business. In the immediate post-war period, State-housing started to come into its own again, and in Auckland alone Residential Construction was completing 15 units every week. Pre-cutting of frames and pre-fabrication of joinery in the Penrose and Kaiwarra factories were large-scale operations needing an uninterrupted supply of native timbers. Te Puke Sawmills, while never meeting the total demand for sawn timber or peeler logs, made an increasing contribution to the supply.

First causes soon get left behind when events move at a high speed and as the growing child depends less and less on its parents, so the subsidiary activities of the milling and joinery operations looked further afield for orders than the Company that fathered them. Today the pre-cut mill in Penrose is turning out frames for outside customers only, mostly small builders. The joinery factories at Auckland, Wellington, Hamilton, Dunedin and Christchurch are not "tied houses" but tender for and carry out joinery contracts for Fletcher Construction's competitors in the building industry.

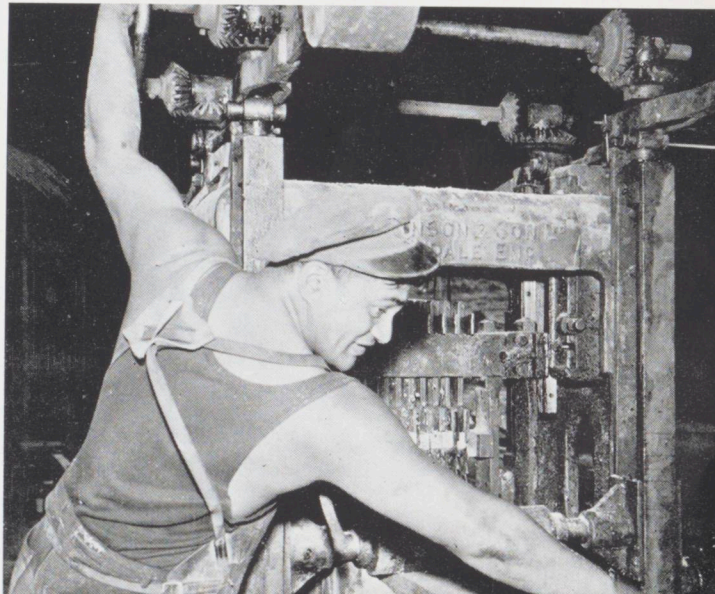
Today, Fletcher Timber is one of the country's largest timber merchants, producing 15,000,000 board feet of indigenous timber a year from six mills—Te Rimu, Ngongotaha, Kinleith, Kopaki and Ruatahuna in the North Island and Chaslands in the South.

The output of these mills is far beyond what is required for Fletcher Construction and in fact 75 per cent. of the timber sold in Fletcher's yards and processed in their joinery factories goes to outside contractors and builders.

Fletcher Timber is not at present milling exotic timber but its trade in Radiata pine amounts to about 10,000,000 feet a year.

Fletcher Timber has also gone ahead energetically as an importer and has taken the initiative in bringing in dressing-grade timbers from Borneo and Malaya. It is one of the largest importers of Oregon, Cedar and Redwood from the United States and has built up a New Zealand-wide business with power boards and harbour boards in whose maintenance and expansion programmes Australian hardwood poles and piles are indispensable.

When, in 1954, all subsidiaries were merged into The Fletcher Timber Company Limited, a start was made to weld these units together into a rational chain of operations from milling logs in the bush to supplying timber and joinery to thousands of users throughout the country. Construction has started on the large planing and pre-cut mills and treating plant at Ngongotaha, a central point of the vast bush areas in the Rotorua district, which will take in rough sawn timber from the surrounding mills. Pre-cut house lots will be made up and complete framings consigned to town and city builders.



The pre-cut mill under construction at Ngongotaha will supersede the existing Penrose unit which will be closed down in accordance with the policy of siting processing plants nearer the sources of supply.

The case for Ngongotaha instead of Penrose as a pre-cut mill location is unarguable, but among the older hands there must be feelings of sentimental regret over shutting down of a factory which has come through three major fires, each time with its head blackened but unbowed; but its production record is sufficient to commemorate it. It contributed notably to the defence construction programme, pre-cut frames for 6,000 State-houses, and at the same time coped with the requirements of Fletcher Construction and other contractors.

The re-organisation has caused some casualties. With the falling off in the State-housing contracts, the Penrose joinery factory was closed and the staff absorbed in the Nelson Street Factory. In Palmerston North, William Cook's cask and box making works were closed down and operations transferred to Petone. This factory continues to supply casks to freezing works for packing tallow and hides for export. The entire output of butter boxes is bought by the New Zealand Dairy Marketing Board.

Big as Fletcher Timber has grown, it has not overlooked the fact that the small, occasional customer is entitled to consideration and the Company set up New Zealand's first Handyman's Yard in Auckland. The service is unique, advice is free and the yard highly popular—particularly on Saturday mornings.



Roy Butland operating the steam cage at the Petone cask and box factory.



FIRE AT PENROSE

The sign-board shown at left was historic in that it recalled Fletcher's early association with State housing. The Housing Construction Company was renamed the Residential Construction Company and finally was merged with Fletcher Construction. In 1954, the joinery factory was taken over by Fletcher Timber, but last year the Company centralised its joinery operations at its city premises in Nelson Street. After that the only operations carried on in the Penrose building were those of the planing mill. But through all these changes the sign remained on the building until the one was burnt with the other.

BELOW—All that remained of the planing mill on the morning after the fire. Fletcher Timber's pre-cut mill at Penrose was not damaged, though close enough to the planing mill to be in danger while the fire was at its height.

On Friday evening, March 1, 1957, the planing mill at our Penrose premises, Auckland, was razed by fire. Wood-working machinery and timber stocks were destroyed, together with machinery and stocks in F.C.C.'s Insulation and Acoustic division's store. All this property was insured.

To the executives concerned, I offer congratulations on the prompt, resourceful arrangements made to enable both Fletcher Timber and the I. & A. division to carry on their full range of services without interruption.

My profoundest thanks are due to the many staff members of all departments who hastened to Penrose on hearing of the fire and who moved vehicles and office records to safety and helped in various ways to minimise the possibility of further damage and loss.

I also wish to express appreciation to the State Forest Service, to members of the Timber Merchants' Federation and of the Sawmillers' Federation and to many more of our business friends for offers of assistance after the fire.

An expression of our thanks to the Fire Brigade and other public services has already been published in the Auckland newspapers, but I wish to repeat it here.

J. C. FLETCHER,
Managing Director.



MILLIONS OF FEET GO THROUGH THE YARDS

Trees must be felled, logs must be milled, timber must be sold. And selling is the business of Fletcher Timber's merchandising division. Selling is the culminating point of the series of operations that begins with the felling of a tree. Not necessarily a New Zealand tree: importing timber is another of the merchandising division's responsibilities. Without imports it would not be possible to give service over the whole range of timbers required in the building industry.

Fletcher Timber's annual total sales of 26 million board feet—15 million of native species—represents, in the main, the custom of contractors and builders. But there are other important sections of trade. There are specialty lines, big and small. Dunnage contractors to the shipping companies are supplied. Hardwood is indented for local bodies, power boards and harbour boards; and in this field the Company has carried out some notable operations.

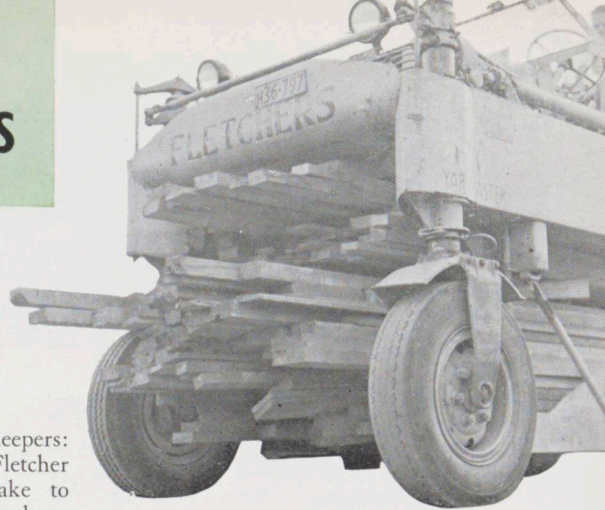
It was the first company to send a full shipload of hardwood piles and timber into Whangarei harbour. Its most recent success is a contract for a quarter-million feet of hardwood timber for New Zealand Railways. This is to be supplied in Keruing, a Malayan

wood of which Fletcher Timber pioneered imports in its search for timbers to complement the diminished home supply of species for which Radiata pine is not a suitable substitute.

The contract is not one for sleepers; and it may be added that Fletcher Timber had to be wide awake to secure it against exceptionally keen competition.

Efficiency in merchandising is largely and literally a matter of ability to deliver the goods. Years ago Fletcher Timber saw the need to mechanise in order to cope with its rapid expansion. It was the first New Zealand timber company to use straddle trucks and forklifts in its yards. Since mechanisation stepped up the yards' supply potentials enormously, the merchandising division was confronted with a challenge to increase sales proportionately. Figures over the years show how energetically this was met.

And sales have been maintained despite the recent hardening of finance and a slackening of building activity. It is to the merchandising division's credit that the changing trend of the market was anticipated. Additional sales staff



were appointed to ensure that, under the more competitive conditions which were foreseen, the volume of business should not fall away. The Company's sales representatives call regularly on builders both to seek orders and to check that orders already placed are being satisfactorily serviced.

The emphasis is on efficient service. There is continuous effort to improve it. Lately Fletcher Timber has enlarged the skid capacity at its sawmills and effected a closer liaison between mills and merchandising division. A stronger flow of supplies has resulted. With the newly-adopted practice of railing timber from the mills in truckloads of one grade and size, time-consuming sorting is eliminated at the yards and the despatch of orders is quicker.

It is a matter of audited fact that the bulk of the Company's timber goes outside of the Fletcher Organisation, alike to big contractors and smaller builders and manufacturers, and in this wide and varied field of custom the reputation of Fletcher Timber depends on the proved ability of the merchandising division to deliver the goods.

AT TOP—One of Fletcher Timber's fleet of straddle trucks. A truck of this type can carry loads of more than 2,000 superficial feet at a time.

BELOW—Australian hardwood poles being discharged from an inter-colonial ship.



NEW YARD AT HAMILTON

Last month Fletcher Timber opened a yard in Hamilton as an adjunct to its joinery factory.

With this addition to the Company's chain of yards, sawn timber lines are now available to the factory's customers.

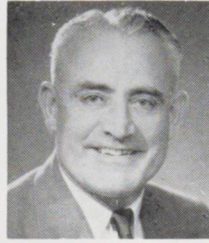
Hamilton's need for this service, obvious for some time, was met as soon as possible after the Ruatahuna sawmill came into production.

After 15 years with Fletcher Timber in Auckland, Keith Metcalfe has transferred to take charge of the new Claudelands yard.

SOME OF THE FLETC



1



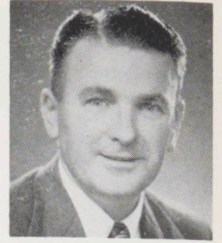
2



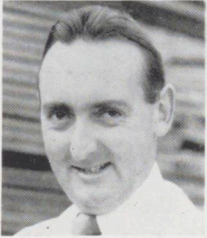
3



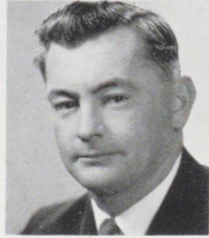
4



5



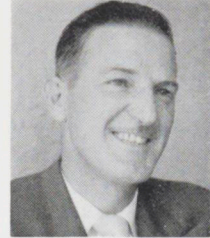
11



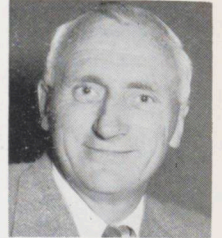
12



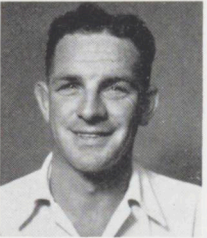
13



14



15



19



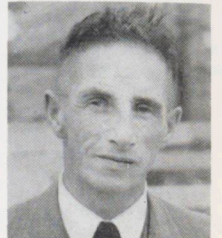
20



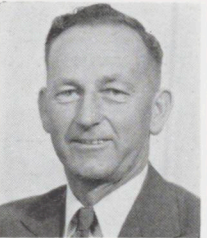
21



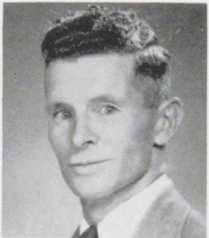
22



23



27



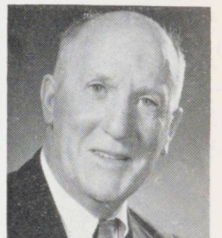
28



29



30



31



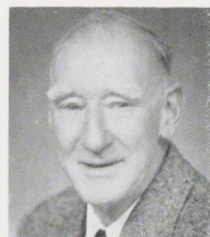
35



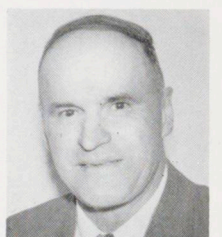
36



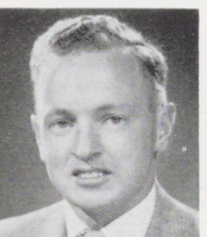
37



38



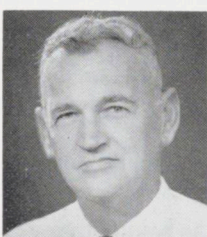
39



43



44



45



46



47

CHER TIMBER TEAM



6



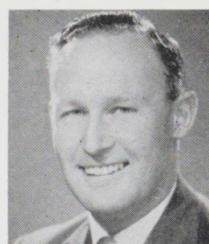
7



8



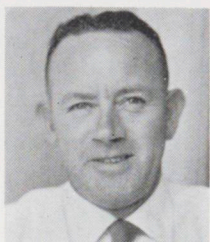
9



10



16



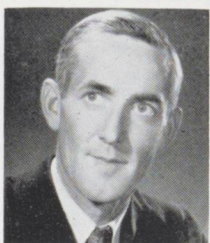
17



18



24



25



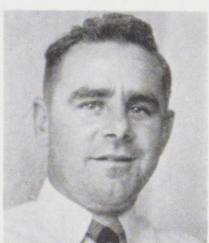
26



32



33



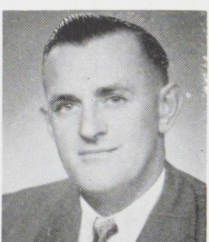
34



40



41



42



48



49



50

WHO'S WHO

HEAD OFFICE

1. W. A. Bourke, Managing Director.
2. J. L. Hahn, General Manager.
3. R. S. Kelly, Secretary.

AREA MANAGERS

4. D. B. G. Sutcliffe, Auckland.
5. A. T. Jewell, Rotorua.
6. R. S. Shirley, Ngongotaha.
7. K. R. Goddard, Wellington.
8. N. A. Dalley, South Island.

AREA ACCOUNTANTS

9. J. A. Batchelor, Auckland.
10. W. N. Rowe, Rotorua.
11. W. A. Scott, Wellington.
12. L. A. Clark, Christchurch.
13. B. Ellis, Dunedin.

SALES STAFF

14. C. E. McCleary (Manager), Auckland.
15. Malcolm McGregor, Auckland.
16. Colin Campbell, Auckland.
17. Bill Simmonds, Auckland.
18. Terry Brett, Auckland.
19. Noel Crowley, Wellington.
20. Athol McSweeney, Wellington.

JOINERY FOREMEN

21. Tom Solomon, Auckland.
22. Roy Clapham, Hamilton.
23. Bob Paxton, Wellington.
24. Ern. Burford, Christchurch.
25. Lionel Gillions, Dunedin.

YARD FOREMEN

26. Don Whale, Auckland.
27. Keith Metcalfe, Hamilton.
28. Jim Walsh, Ngongotaha.
29. Jim Campbell, Wellington.
30. Roy Ellis, Christchurch.
31. Bill Pearson, Dunedin.

DEPARTMENT MANAGERS

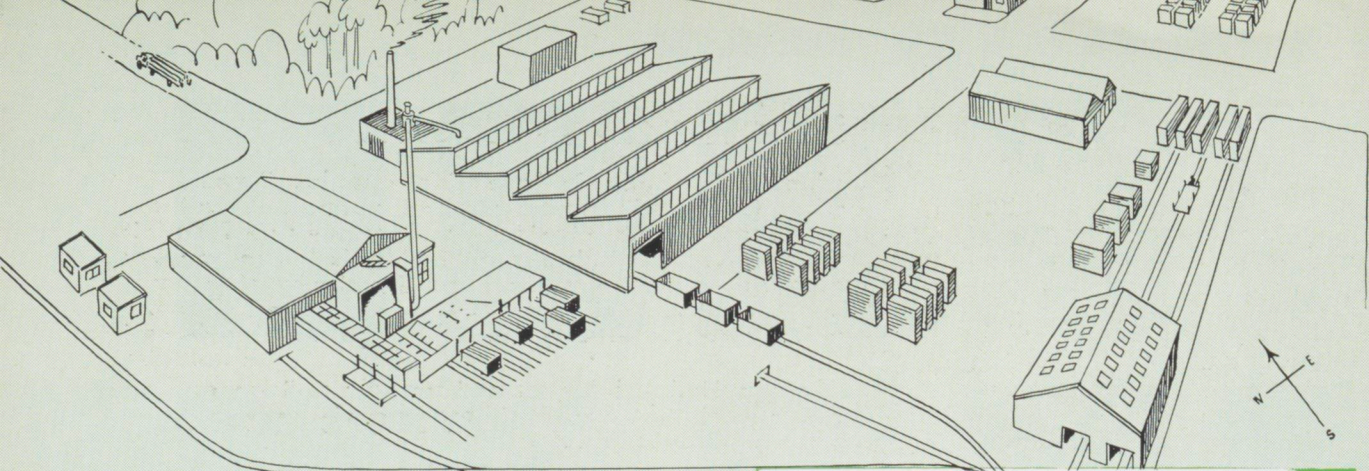
32. Phil Cook, Pre-cut Mill, Auckland.
33. Bill Coxhead, Petone Yard.
34. Geoff. Gilchrist, Handyman's Yard, Auckland.
35. Tom Kane, Timber Engineering, Auckland.

MILL MANAGERS

36. Bill Blenkinsop, Te Rimu.
37. Syd. Brown, Kopaki.
38. Fred Thompson, Ngongotaha.
39. Ernie Beckett, Kinleith.
40. Ivar Tansey, Chaslans.
41. J. W. (Bunny) Ormsby, Ruatahuna.

ROTORUA AND BUSH PERSONALITIES

42. Jack Wylie, Bush Superintendent.
43. Len Thompson, Plant Superintendent.
44. Des Beckett, Workshops Field Supervisor.
45. Bill Waller, Assistant Distribution Officer.
46. Laurie Donaldson, Purchasing Officer.
47. Roy Baigent, Millwright.
48. "Darkie" Agnew, Roading Foreman.
49. Peter Heta, Bush Boss, Te Rimu.
50. Roger Holten, Bush Contractor.



NGONGOTAHA

Centre of Development

At Ngongotaha, on the shore of Lake Rotorua, a good start has been made on Fletcher Timber's ambitious plan to round out its re-organisation by concentrating its widespread activities at central points. An area of nine acres has been cleared and roading for it nearly completed. The first building on it, a diffusion shed for boric treatment of timber, is ready.

What is taking shape is an extensive modern timber-processing establishment comprising planing and pre-cutting mills, kilns, treatment plants, dry storage facilities and a plant workshop.

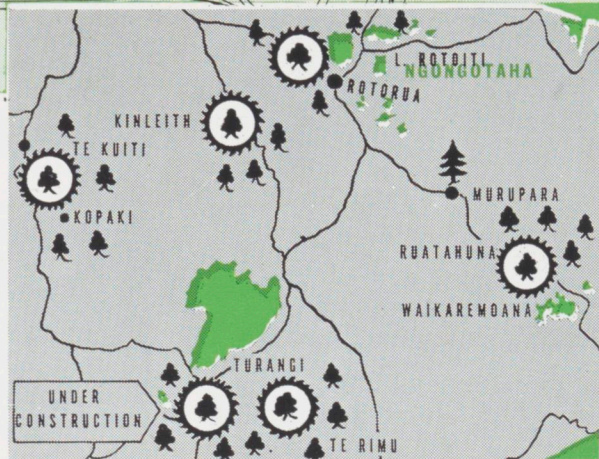
The project is the main part of a larger over-all plan through which Fletcher Timber aims to maximise the efficiency of its merchandising services. Greater production will be possible and delivery schedules speeded up.

At this central plant, the dressing-grade outputs of the Ngongotaha, Kinleith and Ruatahuna sawmills will be processed. The timber will be dried, dressed, treated and pre-cut where necessary, and will be delivered direct to the market in the form of weatherboards, flooring, run lines, joinery stock and other wood products.

Under existing arrangements, timber from the mills is consigned in random lengths, rough sawn, to Fletcher Timber's city yards where it may go through all the processes of drying, treating and dressing before defects and degrade in it are discovered. In other words, freight is paid on a proportion of useless timber—an expense that will be eliminated when the Ngongotaha plant comes into operation.

A further advantage of the Ngongotaha set-up will be direct railing to joinery factories or joinery stock cut to finished length, straightened and dressed. Here again freight on end waste will be saved. Dressed joinery stock will of course, be available not only to Fletchers' factories but to outside users.

The same will apply to pre-cutting. Moreover, with this service more centrally located at Ngongotaha it will be available to many more builders than are able to make use of the present mill at Penrose.



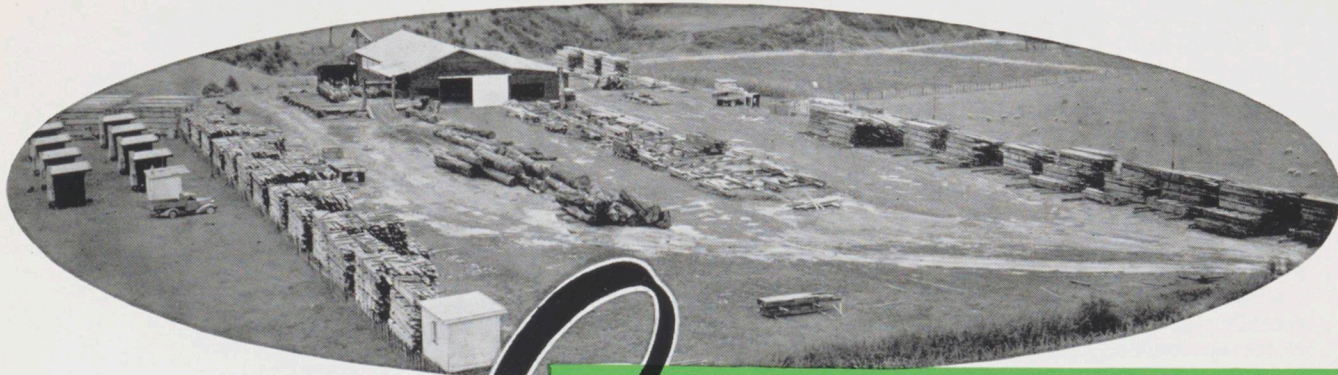
An artist's perspective of the Ngongotaha plant. Map details Fletcher Timber's interests in the Rotorua-Taupo area; the legend is the same as for the map accompanying the article, "Tall Timber".

Centralisation will undoubtedly increase efficiency. It is intended, for example, to transfer a battery of five planing machines to Ngongotaha to cope with the bulk of the work which is now being put through machines at Auckland, Hamilton and Wellington. Consequently only one machine, for servicing urgent or special orders, will be needed at each of Fletcher Timber's city yards. The number of planers operated by the Company in the North Island will be reduced from 17 to eight; but the eight will be working at optimum capacity. Ngongotaha will make possible the streamlining of the organisation generally.

This concentration of processes at a strategically ideal point sets the pattern for future re-organisation in the various areas in which Fletcher Timber operates throughout New Zealand. As a next step, a smaller counterpart to Ngongotaha is planned for the Taupo area. There will be a sawmill at Turangi—to handle the output from the newly-acquired Hautu forest block—with a processing plant nearby. Here also timber from the Te Rimu sawmill will be treated and processed for the market as far south as Wellington.



Colin Woodward (left) who is supervising construction at Ngongotaha, with Jim Foothead who is now in charge of the pre-cut mill there.



The Ruatahuna sawmill which is now in production.

Our newest mill opens

The opening of Fletcher Timber's new sawmill at Ruatahuna on November 24, 1956, recalled old pictures of historic meetings between feather-cloaked Maori personages and frock-coated British officials. For although ceremonial trappings had given place to two-tone cardigans and lounge suits, the formalities on the *marae* were conducted with the same eloquence and dignity.

More than 300 of the Tuhoe people from towns and settlements as far afield as Opotiki and Ruatoki gathered at Ruatahuna pah, in the centre of the rugged Urewera country, to welcome visitors from the Department of Maori Affairs and from The Fletcher Timber Company Limited.

Ruatahuna is in the largest area of virgin bush remaining in the North Island. The forests and mountains of these parts still belong to the tribes whose lore is bound up with them immemorially. The only other owner-

ship in the territory is vested in the Crown and extends over half a million acres of forest reserves, protecting the timber and keeping the beauty of Waikaremoana unspoiled for future generations.

Among the official party at the opening ceremony were Judge J. Harvey, who retired recently from the Maori Land Court; Mr. Harris Martin, of the Department of Maori Affairs; Messrs. W. A. Bourke (Managing Director of The Fletcher Timber Company Ltd.), J. L. Hahn (General Manager), A. T. Jewell (Manager, Sawmilling & Logging Division), and Mesdames Bourke, Hahn and Jewell.

In a speech of welcome, Mr. Rawiri Paraki, a chief of the Tuhoe tribe at Ruatahuna, said that the establishment of the mill was another step toward bringing Maori and pakeha together. The Rev. Puke Tari, chief of the Tuhoe tribe at Ruatoki and a minister of the Ringatu Maori church, spoke of the benefits which the Ruatahuna

Maoris would derive from bringing their timber into production.

Mr. Jewell reviewed the five years of negotiation and planning which led to the establishment of the mill. In building the mill, he said, his company had honoured its agreement to provide employment for the Maoris in their tribal community. He added that Fletchers had agreed to buy cutting rights over 17 blocks of bush and that the approval of the Maori Lands Court had already been secured to work 13 of the blocks.

Mr. Harris Martin commended the Tuhoe people for their wise investment of the money paid in royalties by the timber company. With the guidance of the Department of Maori Affairs it would be used to develop farms as the land was cleared of timber, to improve the standard of housing in the locality, and to educate the children. In selling their trees, he said, the Tuhoe people were disposing of their heritage, but this could result in lasting benefit to them as a community.

Mr. Bourke said that the log mill would be one of several supplying timber to the planer mill which was under construction at Ngongotaha as part of his company's development plan.

Judge Harvey then declared the mill open.

After a dedication service conducted in the Maori language by the Rev. Tari, Mrs. Bourke cut a ribbon to set the first log rolling on to the saws.

Ruatahuna mill will produce 12,000 board feet a day, mainly Rimu. Totara and Kahikatea (white pine) will be milled in smaller quantities.



The Rev. Puke Tari (left) making a speech of welcome on the marae.

TREES, TIMBER . . . or Both?

Conservation of our remaining stands of native bush is a complex question. Does conservation mean not exploiting bush at all for timber? There are areas of it under Maori ownership. Does conservation mean disallowing Maori tribes the right to sell cutting rights over bush in order to gain land for farms and to finance farming ventures? Does it mean leaving untouched the whole of the remaining bush, or just those parts of it essential for the protection of river catchments?

These questions were considered by Judge J. Harvey, who recently retired as judge of the Maori Land Court, in his speech at the opening of Fletcher Timber's new sawmill at Ruatahuna.

Among those present at the opening ceremony were members of the Tuhoë tribe, owners of the bush over which Fletcher Timber has secured cutting rights. Judge Harvey addressed his remarks expressly to the Tuhoë people. The views he expressed on bush (and soil) conservation are those of a learned and respected Pakeha who has spent a lifetime among the Maoris, who as bush and sawmill workers, as well as tribal owners of native timber stands, have always been closely associated with the timber industry. We are grateful to him for permission to publish an excerpt from his speech.

The establishment of this modern sawmill at Ruatahuna opens a doorway at this Kakanui Marae which could lead to boundless possibilities for good. Do not grieve that the life of this sawmill must necessarily be determined by the small quantity of bush trees still remaining in Maori ownership. If one wishes to predict the future, one should study the past—how, just after the turn of the century, the land-jobbers clamoured for the Government to open up the Urewera to the axe of the pioneer and the march of progress.

As a result, the Land Purchase Officers with their cheque books appeared among you and for over 20 years whittled away at the Tuhoë patrimony. In the year 1921, when emphasis was placed upon finding land upon which to settle returned servicemen, the Urewera Commission was set up for the purpose of consolidating the scattered interests of both Crown and Maori non-sellers into holdings suitable for settlement and, in the case of Maori interests, into titles with community of ownership; that is to say, family ownership. The Crown secured titles to the best part of a half-million acres. The politicians and Press of the day made a feature of this great stride in the progress of the Dominion. It was stressed that the benefits would be immediate. A leading Auckland newspaper wrote glowingly of "350 smiling homesteads" that would grace what had been a monument of Maori inertia.

But we find that not one acre of the Urewera Crown award has contributed towards a smiling homestead: not one Crown tree in this Ruatahuna area has helped to provide shelter for two house-hungry generations. By contrast, much of the Maori land has been farmed successfully and Maori timber trees have been ministering to the housing needs of both Maori and pakeha for some time. Truly the plans and dogma of yesterday become the lumber of the morrow!

Today you are restrained from dealing with your remaining lands as you may wish (and as you would be entitled to if you were not Maoris) because of the alleged necessity to create a gigantic national park dedicated to the riroriro (which mothers the cuckoo in her nest) and that new band waggon—Soil Conservation—which, when over-emphasised and over-done, becomes just another cuckoo in the nest.

It is probable that the sharp outline of this picture of stagnated wealth and opportunity will mellow and fade if only because the timber will be used of necessity, when the necessity arises, under methods known to us even today that will in no way endanger this reserve; and, again, because later authorities may look past the conservation experts of yesterday and notice that after experiencing in the year 1956 the wettest autumn, winter, spring and early summer for 90 years, the grassed lands in this valley (even the steepest) have not eroded or suffered to any extent at all. This, incidentally is in marked contrast to the damage done in other places through a quick and unchecked run-off of flood waters rampaging from areas grassed in recent years by the Crown.

No one can gainsay the importance of soil conservation but it should not become a stalking horse either for careerists or those rabid or gentle fanatics who can see more virtue in decay than in accomplishment. They do not agree that "Nature's coin must not be hoarded, but must be current."

I thank the Maori people and Mr. Bourke and his Company for inviting me here today to witness this dawning of a new day for the worthy people of this remote outpost. I hope and trust that I may see a trebling of the "smiling homesteads" we see dotted about today.



sticking

WO

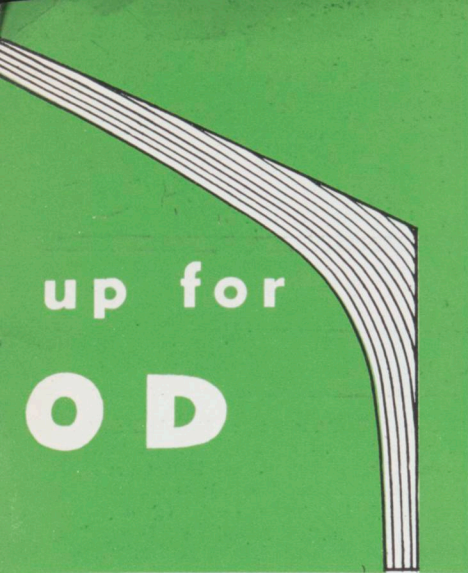
With the help of glue scientists, timber technologists have evolved the remarkable new techniques in timber usage which Fletcher Timber is investigating at present. Colin Woodward, who wrote this article for us, carried out some of the early experiments to test the suitability of exotic pine for "Lamwood" fabrication.*

In the nature of things, we in New Zealand are bound to make use of proved new techniques in the use of timber—of techniques, especially, that extend the range of usefulness of the exotic trees on which we shall have to rely more and more for timber.

There was no need to concern ourselves with such matters a generation ago, when heart timbers were cheaper and more plentiful and when large cross-sections were easier to come by. But in recent years logging and milling costs have increased, the more durable timber species have become scarce, and we have had to turn to alternative structural materials.

To meet the challenge of new materials, however, overseas scientists and engineers have been perfecting techniques which fully utilise, as never before, the incomparable qualities of wood, and at the same time obviate certain defects which have limited its uses in the past.

* Tom Kane (see centre page photographs) has been appointed to take charge of the Lamwood section of Fletcher Timber, Auckland.



The outcome of this research and experiment has been a new material—glue-laminated timber—which already in some countries is having a spectacular impact on both architectural and engineering construction.

The development of Lamwood—to use the name that Fletcher Timber has coined for the new material—owes as much to the glue scientists as to the timber technologists.

A basic engineering principle is exploited in glue-laminated timber. This is that the main stresses of tension and compression induced in a beam subjected to bending are not uniform throughout the cross-section of the beam, but vary from a maximum at the outer surfaces to zero at the centre.

It follows that if, for example, a 12" x 4" beam was not a solid but was composed of 12 laminates of 4" x 1" all of varying quality, it could be assembled in a variety of ways, and each way would give a different load-bearing capacity according to the distribution of the 4" x 1" slices.

There are obvious and important advantages in this method of building up large members from smaller pieces. Longish seasoning periods are necessary for large bulks of timber, and during this process serious checks and splits may occur to limit the timber's range of usefulness. But in a glue-laminated beam the component parts are seasoned in sizes generally small enough to restrict defects in them to negligible proportions. And, moreover, since they occur in only one laminate, their effect on the over-all strength of the member is of no consequence.

In short, the internal stresses set up in heavy timbers by the seasoning process are avoided and, this being so, the glued product is stronger than its solid counterpart, for which design stresses must be chosen with consideration for a member already under some form of strain.

Another advantage is that a predetermined positioning of natural defects such as knots and shakes is possible in built-up members and has a very favourable effect on the structural grading; for the lower-grade laminates can be positioned near the centre where stresses are low, and the clear laminates

produced of varying cross-section, after the fashion of some concrete bridge girders. In addition, it is perfectly feasible to produce curved members, for the thin laminates are easily bent; it is a simple matter to assemble the beam or frame on a jig or template shaped to the architectural requirement. Structures of great beauty are created in this way.

Many engineering structures such as arches and portal frames can be designed with comparatively low stresses. Up to now, what mainly has prevented the use of timber in such work has been inability to achieve trustworthy



Top and bottom chords of glue-laminated timber are a feature of the bowstring trusses in this modern timber-drying shed built in England. The spans are 66 feet.

kept to the outside surfaces to sustain the maximum stresses. It is even possible to make outer laminates of a stronger species rather than build up a beam in the one kind of timber.

Taken together, these advantages result in a timber beam appreciably stronger and more rigid than the rational solid section—with, in fact, an up-grading as high as 1½ times according to the number of laminates used. The very real possibility of offering a laminated Radiata pine beam with an engineering specification the same as one in imported Oregon is surely something to strive for.

In construction work, glue-laminated timber serves many purposes. The variation of stress along the span of a beam can be allowed for in design and, by tailing off laminates, a beam can be

joined in contriving larger members from small timbers. With modern resin glues, faultless joints can be obtained and new possibilities in timber—far beyond the scope of a brief article—have been opened up. Today there are glues which are satisfactory for either internal or external use. Only the perfection of fabricating techniques is required before Lamwood enters upon the New Zealand scene as a structural material.

It has, in fact, a special significance for this country, where in Radiata pine we have a potentially excellent timber severely down-graded because of defects associated with rapid growth. Lamwood may well be an important means to helping us realise Radiata's full potential. At any rate, that is the belief in which we at Fletchers are carrying out our experiments in its applications in New Zealand.

Personalalia



DUNEDIN Diversions

WELCOME: To A. J. D. (Don) Rob who has returned from Christchurch to manage the Dunedin branch of Fletcher Industries; to Cecile Duncan, Bill Thomson, Graham Pierson and Cyril Evans who have joined Industries' staff with the re-opening of the linseed factory; to Norma Anderson and Dave Davidson who have joined the pay staff; and to Ken Briggs (Fletcher Steel Sales).

CONGRATULATIONS: To Snow Fearn (Fletcher Steel) on the birth of a son; Ian McLennan (Steel) on the birth of a son; and Bill Bannister (Steel) on the birth of a daughter.

FAREWELL: To Molly Smith (F.C.C.) who was with Fletchers for 14 years; to Rona Barr (F.C.C.); and to Frank Hollebon and Allan Jordan (Plumbing Division).

CHRISTCHURCH News

CONGRATULATIONS: To Joan Burt (F.C.C.) on her marriage; to Jack Fry on passing the "Clerk-of-Works" examination.

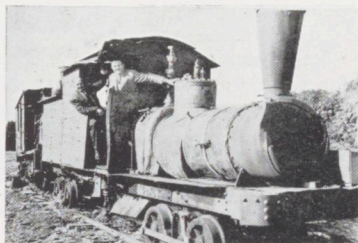
STORK HANDICAP: Congratulations to four new fathers: Peter Holliday (Industries), a son, I. C. Morris (Office), R. J. Clark (F.C.C.), Maitland Munro (Plywood), a daughter apiece.

FAREWELL: To Carol Bull (F.C.C.).

Annual Picnic

The annual Christmas party for children was an outstanding success. The additional attraction this time of a miniature railway made things a little easier for the team of long-suffering donkeys. After the party, parents were entertained at afternoon tea in the cafeteria. The Carnival dance held in the cafeteria was also a great success.

ROCK ISLAND LINE?



Not the Rock Island Line, but a vintage bush locomotive, tranquilly rusting away somewhere near Mamaku. The up-to-date crew (on a sort of bushmen's holiday) are W. A. Bourke and Colin Woodward, of Fletcher Timber.

WELLINGTON Wisdom

WELCOME: To Annette Hancock (telephonist), Arlene Godfrey (I. & A. Division), Mrs. Swan (teas); Peter Collins (F.C.C.) who is back from a working holiday overseas, Paul Bunge (F.C.C.) who has transferred from Kawerau, Sid Ward (Fletcher Steel) who has transferred from Auckland, M. Osborne (Fletcher Industries) who has also returned from a trip abroad; and Eileen Edwards and Pat Gaze (Sales & Services).

FAREWELL: To Ron Coe (F.C.C.), Mrs. Margaret Ritchie (Sales & Services), S. Kemp (Fletcher Industries), and Mrs. Val Gibson (Fletcher Timber) after six years as a book-keeping machinist.

CONGRATULATIONS: To Bob and Mrs. Stanbrook on the birth of a son; Colin and Mrs. Chapman, a daughter; Eric and Mrs. Williams, a daughter; Boydie and Mrs. Ellison, a son. To Marie Jones (Fletcher Timber) on her engagement to Des Gardner.

OFF SICK LIST: Noel Crowley's many friends will be glad to know that he is back on the job with Fletcher Timber after his spell in hospital.

BON VOYAGE: David Gray has just retired from Fletcher Steel and left for a holiday in England. "Davey" began with Fletchers as a boilermaker in January, 1927, and so qualified for his gold 30-year service pin; he will be wearing it with pride overseas.

FUN AND GAMES

Those who involve themselves in controversy over climates may make use of the fact that while Fletchers' annual picnic in Auckland had to be postponed, the Wellington picnic was held at Maidstone Park on December 15 in weather so fine that the youngsters set an all-time record in the consumption of soft drinks and ice cream.

The annual smoke concert for foremen and leading hands, also held in December, was a decided success, thanks largely to Ernie Dean who looked after the musical side of the evening. It was a pleasure to have at this function Fletcher Holdings' Secretary, Harry Molony, and Alex Marks, of the London Office.

AUCKLAND

WELCOME: To Anne Harper, June Hill and Elizabeth Ligvoet (F.C.C.); to Mrs. Jean Graham, Lorna Wendon, Jessie McGrath and Bob Avery (Fletcher Timber); to Margaret Partridge and Pauline Reece (Sales & Services); to Mrs. Merle Fields (Penrose Office) and Yvonne Spencer (teleprinter operator).

FAREWELL: To Robin Hartley (teleprinter operator); to Mrs. Nita Christensen and Bob Wyatt (Fletcher Timber); to Una Tomlinson and Ian Matthews (Sales & Services); to Ron North and Ron Fitzgerald (F.C.C.). Also to Jack Bourke, who is leaving after many years with F.C.C.

TRANSFERS: Ron Mace and Eddie Cropp are now with Sales and Services, having transferred from Fletcher Timber and F.C.C. respectively.

CONGRATULATIONS: To Les Sunde (Sales & Services), Ted Harnett (O. & M.) and Alick Trenwith (Duroid), each on the birth of a daughter.

Alick comes in for further congratulations: in December he qualified for his Diploma of Industrial General Management.

MARRIAGES: Two of Plywood's staff, Nola Smithson and Maureen Williams have been recently married and so congratulations are due to Mrs. Bushell and Mrs. Day. Now that Nola has left, Plywood has lost a popular staff member who was also a most efficient first aid girl.

ENGAGEMENT: Congratulations on their engagement to Barbara Hall (F.C.C.) and Lou Howells (Insulation & Acoustic Division).



Paul Lothian finishes strongly in his race at the Auckland staff picnic, for which there was a record attendance — 300 adults, 225 children — at Redwood Park on February 24.

SYDNEY Section



Eight Belles. Left to right, these girls who are the distaff side of the joint office staff of Fletchers and Howie Moffat in Sydney, are: Judy Preston, Joyce Henwood, Peggy Brown, Margaret Webb, Val Swadling, Elsie Tambling, Barbara Buecker and Beverley Meizer . . .

WELCOME: To Beverley Meizer.

FAREWELL: To Arthur McGreal, one of our senior men, whom we farewelled on January 18 at a gathering at which Manager Jim Espie, on behalf of the management and staff, presented him with gifts for himself and Mrs. McGreal. To Charlie Fox and Jim Rawlings who had been with us five and four years respectively—old hands though only youngsters. The boys are off on a world tour and we wish them luck.

SERVICE PIN: Norm Bartholomew is the latest one of the staff to be wearing a five-year badge.

VISITOR: Nice to have Bob Fallek call on us again. He usually manages to do so during his annual vacation from the Auckland Drawing Office, combining business with holidays.

CHRISTMAS PARTY: Bob Beeforth and willing helpers decorated the office for the first combined Christmas staff party of Howie Moffat and Fletcher. Principal entertainment was provided by Jack Rodgers.



. . . And these are the Howie Moffat men of the joint staff: Jack Rodgers, Clive Colyer, Dick Bridger, Eric Bates, Jack Arkins and Bob Beeforth.

ROTORUA

WELCOME: To Nellie Curtis and Jack Smith who have joined the office staff; and J. W. (Bunny) Ormsby, mill manager at Ruatahuna.

WELCOME BACK: To Roy Baigent (mill engineer), Bill Waller (timber supply officer) and Gerrard Ward (mill clerk, Kinleith) who have been on the sick list.

CONGRATULATIONS: To Roy and June Shirley on the birth of a son.

FAREWELL: To Park Horne and Jean Wall.

BACK NUMBERS

A limited number of back copies of "Arrowhead" is available to readers who have incomplete sets of the magazine and wish to fill the gaps.

From time to time we receive requests for copies of one or another of our previous issues and although some are not on hand—especially the earlier numbers—we are glad to meet these requests where possible.

Enquiries should be addressed to:

"Arrowhead", Fletcher Holdings Limited,

Private Bag, Auckland.

SOUTHERN REVELRY

Obviously not minding it in the least, these groups lined up to be shot at Fletchers' staff party held at Elizabeth House, Christchurch, on December 21.



Fletcher Steel. Bert Panter, Vince O'Connor, Ted Oborn, Ross King, Doug. Foster; sitting, Charlie Mayo, John Matheson.



Sales and Services. From left, Jill Uren, Ernie Buckner, Joan McEntel, Eileen Flanagan.



Plumbing Department. D. Lulham, Jim Taylor, Merv. Burton.



Fletcher Industries. Arthur and Mrs. Collett, Pat Craighead, Mac MacGregor, Norman Mahoney, Brian and Mrs. Cooper.



Office. Dawn Buist, Marjorie Heron, Joan Burt, Carol Bull.

75% OF THIS TIMBER IS YOURS

BUILDERS - here's proof that
you are our best customers . . .

29th January, 1957

The Managing Director,
Fletcher Timber Co. Limited,
Private Bag,
AUCKLAND. C.I.

Dear Sir,

We have examined the sales statistical records of
Fletcher Timber Co. Limited, Auckland Branch, for the twelve
months ended 30th November, 1956.

From various tests we have made and from information
which we have obtained we are of the opinion that of the total
super feet of timber sold by the branch for the period, not less
than 75% was sold to customers beyond the Fletcher Organisation
and that this fairly represents the trend of sales of the branch.

Yours faithfully,

Geoffrey Gentry & Swan

Public Accountants

More and more builders are finding that the enormous
stocks of native, exotic and imported timbers in the
six strategically located yards of The Fletcher Timber
Company Limited are their assurance at all times of
WHAT THEY WANT — WHEN THEY WANT IT.

FLETCHER

timber

THE FLETCHER TIMBER COMPANY LIMITED
AUCKLAND HAMILTON ROTORUA WELLINGTON CHRISTCHURCH DUNEDIN