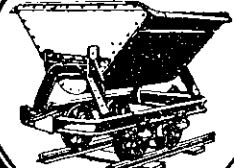
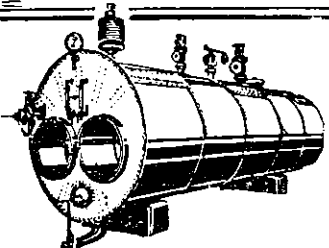
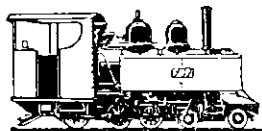
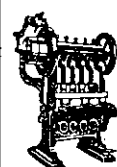
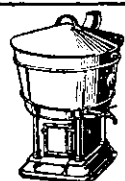


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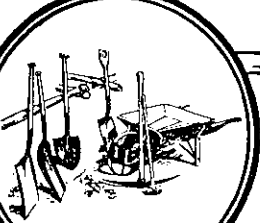
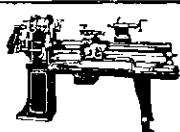
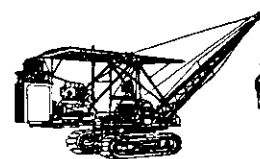
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# N.Z. BUILDING PROGRESS

CHAS. E. WHEELER, Editor.

*A Journal for Progressive men interested in the development of New Zealand's Architecture, Building, Engineering and Industries.*

*Official Journal of the Dominion Federated Sawmillers' Association (Incorp.).*

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Should subscribers continue to receive copies of this journal after expiry of current year, it will be accepted as an intimation that they are desirous of subscribing for a further period of twelve months.

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The Editor reserves the right of publishing any or all the designs submitted, and while every care will be taken of drawings, no responsibility is accepted should any loss or damage be sustained. Those desiring their designs returned must send postage to cover cost of same. No award will be made unless at least three designs are sent in for any one competition. Unless otherwise stated drawings are to be in black and white only.

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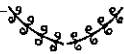
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1921



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Readers and Advertisers  
We extend  
Hearty Greetings  
for a  
Happy and Prosperous  
New Year!

at interest may now have their chance of the sunshine of prosperity, by way of higher interest, and an increased purchasing power. We are sorry that the Government, forced no doubt by circumstances, has permitted the banks to extend their note issue in line with their advances against wool, because this inflation of the currency by paper is one of the factors responsible for present troubles. Christmas, with its stimulus to business, is with us as we consider the economic position, but we fear that things during the coming year will not be as bright and prosperous as we would wish. Care and courage will be required if New Zealand is to get through 1921 without financial difficulties.

\* \* \*

## TRADING ETHICS.

The enormous increase in New Zealand's imports during the last nine months is now explained, and in a very unsatisfactory way indeed. To be frank New Zealand traders have performed for the English manufacturer, that Stock Exchange operation known familiarly as "carrying the baby." They had had stuff unloaded upon them at high prices, under a belief, strenuously upheld by all reports from the Old Country, that prices, instead of being likely to drop, were more likely to rise. Our traders, having been on short commons for years, were anxious to keep their trade going, and ordered really more goods than they could sell in the normal course, knowing that only a percentage would come promptly to hand. The fiction of high prices, etc., was well maintained by reports which came to New Zealand, the buyers for New Zealand firms apparently sharing in the misapprehension which was so suddenly cultivated. Then suddenly the goods came to hand, and many traders had difficulty in meeting the drafts, for with the arrival of the goods came the painful realisation that these orders, stimulated by reports of shortage and higher prices, had been the means of prolonging the Eng-

## THE INDUSTRIAL SITUATION.

Wage workers will be disappointed over the decision of the Arbitration Court to rescind its nine shillings bonus, and substitute three shillings, and we have sympathy with them. Wages follow rising prices, not create them, and it was some time after the inflation of the currency and other causes had diminished the purchasing power of the sovereign before the wages of the workers were increased to make up the gap. Now, at the first sign of weakening, the wage worker feels the pinch, and we do not see how it is to be avoided, in spite of the fact that it is hard for some classes. The worst sufferers through the rapid advance in prices after war broke out were those who received a fixed income. They found their money scarcely able to go half as far in the shops as before the war, and there was no recourse to the Arbitration Court, for this "new poor," as they have been aptly called in England. Some of these fixed incomes come from investments, and it looks as if the "new poor" with money out

lish manufacturing boom. Prices have dropped, and large quantities of the millions' worth of recent imports will have to be sacrificed at a loss in New Zealand. Quite recently, the British Trade Commissioner in New Zealand declared that the trade depression in England was only temporary—a passing phase. Yet we find the *Monthly Review*, issued by Barclay's Bank, in October last dealing frankly with what it calls in a large heading, "The Trade Depression," and later refers to quite frequently as "the slump." New Zealanders have learned an expensive lesson, and they have not yet got over its effects. Australians are speaking quite frankly about the same experience. Possibly there would have been no growl coming from this end but for the reiterated assurances from English manufacturers that things would be more expensive if their colonial clients waited. Orders were placed, delay occurred in delivery at the original price, and clients were advised that as the price had gone up in the meantime, the orders would have to be shipped at an advanced rate. British manufacturers are talking about a "black list" of firms which have cancelled orders. Our opinion is that a rather formidable "black list" of English manufacturers is being made up among the badly bitten merchants of New Zealand. This sort of thing has given many enthusiastic imperialists a bad taste in the mouth, and it is just as well to let our kith and kin on the other side of the world know what we are thinking about some of them.

\* \* \*

#### ENGLISH TRADE CONDITIONS.

To show the position as it existed in England in October we quote from *Barclay's Monthly Review* of that date, as it deals with the reasons for the slump. "During the past month," it remarks, "there have, unfortunately, been further indications of the approach of a period of industrial depression. Unemployment is increasing and many firms are either considering or have actually adopted short time. In the shipbuilding industry contracts are being cancelled, while there is a falling off in the demand for textiles. In the iron and steel trade, foreign competition is becoming more evident, while the motor industry is in the doldrums. In the ready-made clothing, linen, gloves, leather goods and boot and shoe trades also, there is a distinct reaction from the recent activity. This slump appears to be caused partly by the fact that, their most urgent needs being supplied, wholesalers, retailers, and consumers are abstaining from buying at present prices in the hope that goods will be cheaper. There is also the fact that prices are now so high that in some directions they have killed demand by compelling people to curtail their expenditures. The possibility of a coal strike is also an adverse feature. . . . Exports to the Continent are checked in two directions. In the first place prices have, in twelve months, risen approximately 19 per cent. This is bad enough,

but in addition there is the high cost of sterling. One pound now costs a French importer 52 francs compared with 38 francs a year ago, while the Italian importer has to pay 83 lire against 41 lire in September, 1919. This position must, to some extent, affect both the willingness and the ability to buy. In these circumstances business men are faced with the problem of reducing prices and cutting losses on stocks."

\* \* \*

#### FORESTRY POLICY—WHERE?

The Forestry Department is advertising for twenty rangers and an impressive list of experts who will commence to draw salaries early in the new year. So it is evident that the Government intends to get to work on an active policy of conversion of our remaining forest resources. Meanwhile, the same Government is also anxious to keep up the building of dwellings at a good pace, but it does not tell the country what it is going to do in the way of ensuring a constant supply of timber for future requirements. New Zealanders accept the advice to conserve their forests, but they will not readily swallow any expensive Department which exists to give posterity great advantages by reason of enforced self-sacrifice by the people of to-day. Like the village councillor, we are tempted to ask, "What has posterity done for us?" So we hope that the Minister in Charge of State Forests will soon enlighten the country regarding his policy. Having set up a fairly large Department, he might let us know if it is to be solely responsible for State forests, or if the time-wasting and expensive policy of dual control over these areas is to be perpetuated. At present the dominant factor in connection with the forests of New Zealand is the Lands Department, but the time seems ripe for placing the whole administration into the hands of the Forestry Department. But the most important question is what is going to be done to keep up the supply of timber for the people of to-day, and on what terms? It seems a pity that Parliament took so little interest in the large votes for the Forestry Department which were put through last session at the rate of about ten thousand pounds sterling a minute.

\* \* \*

#### CEMENT SUPPLIES.

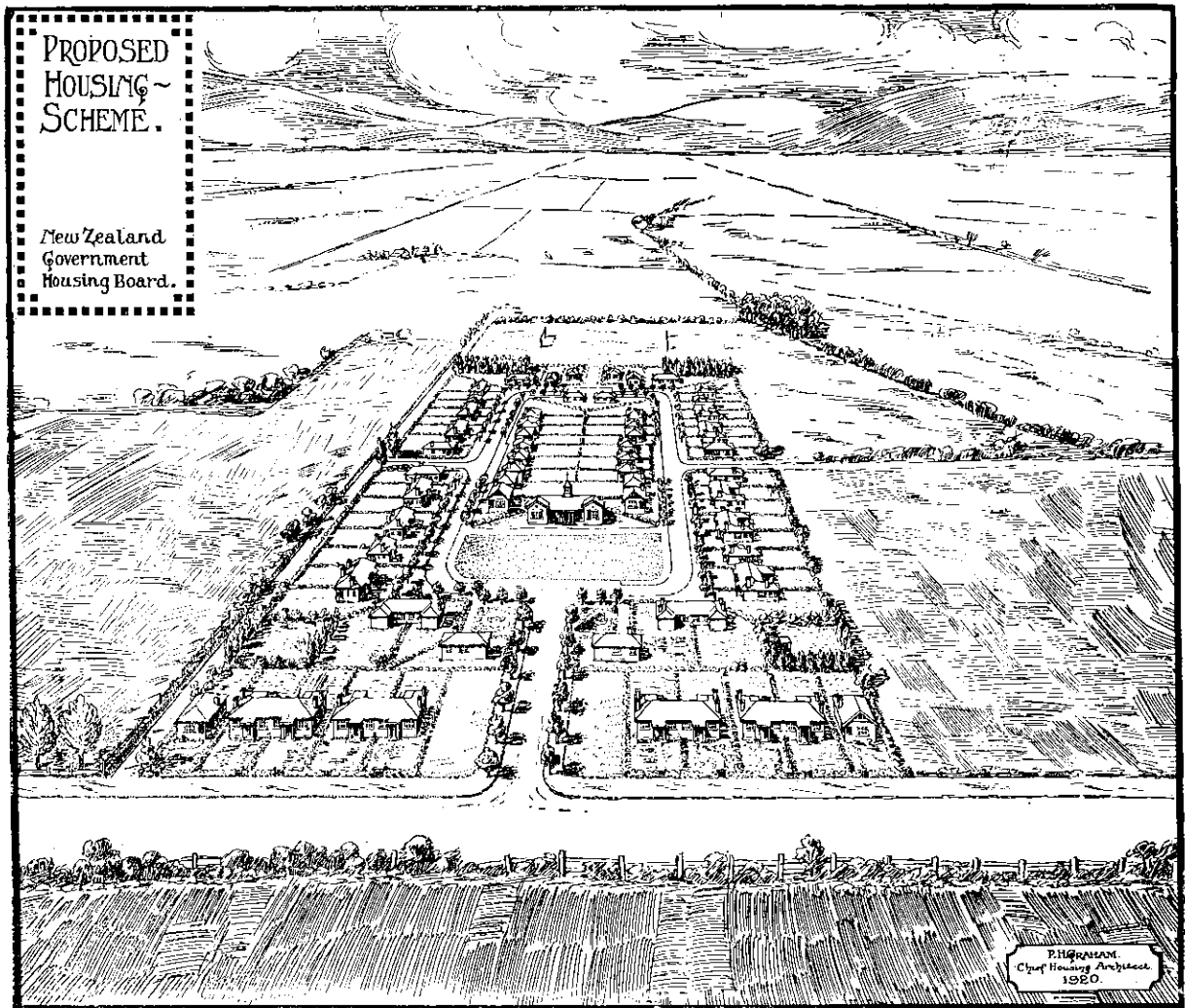
The high cost of New Zealand cement has greatly stimulated the importation of supplies from other countries, and we hear of big shipments to arrive at an early date from the United States. As the landed price is well in advance of what can be quoted by New Zealand works when they can get coal to produce supplies, we hope that the Board of Trade, in its praiseworthy endeavour to keep all the local works going during the new year, will be thoroughly supported by the official body having charge of the distribution of coal.

# Northcote Settlement.

## A New Housing Scheme at Papanui, Christchurch.

It is interesting to note that public bodies are taking such a keen interest in better housing, as the evidence about us shows. In our last issue we illustrated some plans of houses, and lay-outs of schemes

consists of an area of  $21\frac{1}{2}$  acres, situated in North Road, at the Papanui tram terminus. The land is level and the soil excellent for garden purposes. There is an abundant supply of artesian well water,



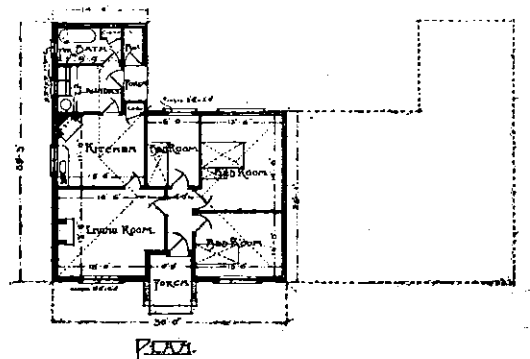
Perspective of Government Housing Board's Settlement, "Northcote," at Papanui, Christchurch.

that the Railway Department are carrying out at Marton and Frankton Junction for railway employees, and although the designs of the houses are not of the highest grade, they are no doubt controlled by the cost. A better class of design will no doubt follow in due course.

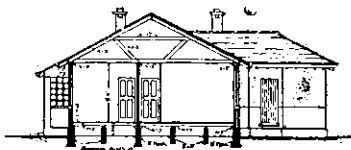
In this issue we are glad to be able to show the plans and lay-out of a scheme to be known as "Northcote Settlement" at Papanui, Christchurch, by the Government Housing Board. It is an effort to assist in the relief of the housing problem and

and the Lake Coleridge electric cables are on the North Road frontage. The lay-out, which is shown in this issue, is a rather narrow rectangle, simple and economical, and has been planned by the Board's architect, Mr. P. H. Graham, to make the best of the site.

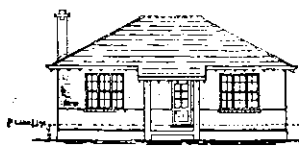
The scheme provides for 77 houses. At the entrance space has been reserved for a small shopping area. Facing the entrance is an open space for a reserve and gardens, and space has been provided for a recreation hall and club rooms for dancing and



PLAN.



SECTION.



FRONT ELEVATION.



FRONT ELEVATION AS SEMI-DETACHED.

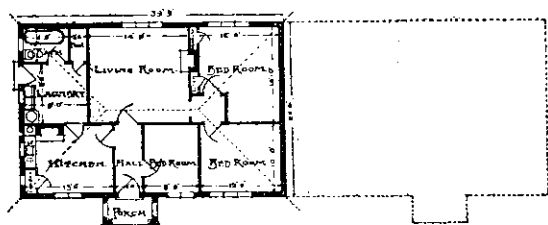


SIDE ELEVATION.



BACK ELEVATION.

Design No. 27—Type of Five-roomed House for "Northcote" Housing Scheme, Papanui, Christchurch.



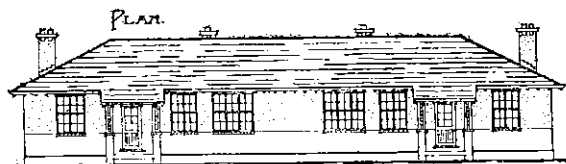
PLAN.



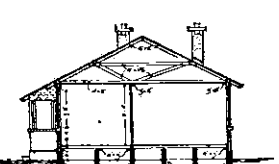
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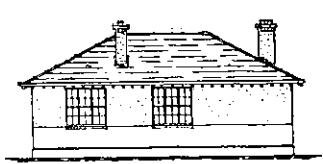
SIDE ELEVATION.



FRONT ELEVATION AS SEMI-DETACHED.



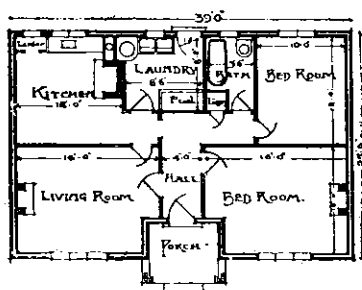
SECTION.



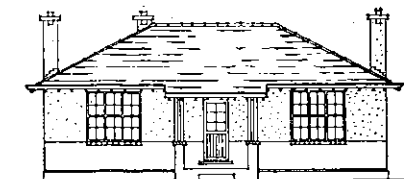
BACK ELEVATION.

Design No. 28—Type of Five-roomed House for "Northcote" Housing Scheme, Papanui, Christchurch.

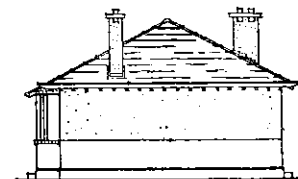
### DESIGN N° 29.



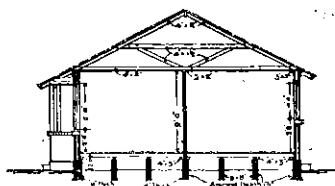
PLAN.



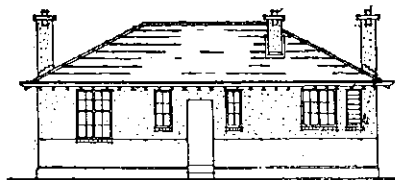
FRONT ELEVATION.



SIDE ELEVATION.



SECTION.



BACK ELEVATION.

Design No. 29—Type of Four-roomed House for "Northcote" Housing Scheme, Papanui, Christchurch.



games, an idea which has become so popular since the war. In addition, there are reserves for small gardens, pumping station, water supply and drainage.

The houses are grouped on the lines of the English town-planning schemes, and the roads will be laid out with narrow carriage-ways, bordered by broad green sward, and planted with trees and hedges. No living room or bedroom window will be within 90 feet of an opposite house wall, so that ample light will be admitted.

The houses are being constructed on the concrete slab method, with cavity walls, which system has

proved to be the most suitable and economical. The walls will be rough cast on the exterior, relieved here and there by brickwork, and the roofs are to be covered with terra cotta tiles.

Standardised plans for four different types are being built, mostly of five rooms, consisting of three bedrooms, living room, kitchen, separate bathroom, scullery and wash-house. Ample provision has been made for cupboards. Electric lighting will be installed, and hot and cold water supplied to all fixtures.

Messrs. Clark Bros., of Christchurch, have secured the contract for the erection of the houses, and are making good progress with the work. The average cost per house is under £800, and as the structures are being built of everlasting materials, the Housing Board are to be congratulated on being able to provide homes at a low cost for the workers.

### Competition for Municipal Buildings.

A competition for the proposed new municipal buildings at Christchurch has been advertised. Competitive designs are invited for the City Council's new building from registered architects only, to be erected in Manchester Street, Christchurch. Conditions of competition may be had from the Town Clerk, Christchurch.

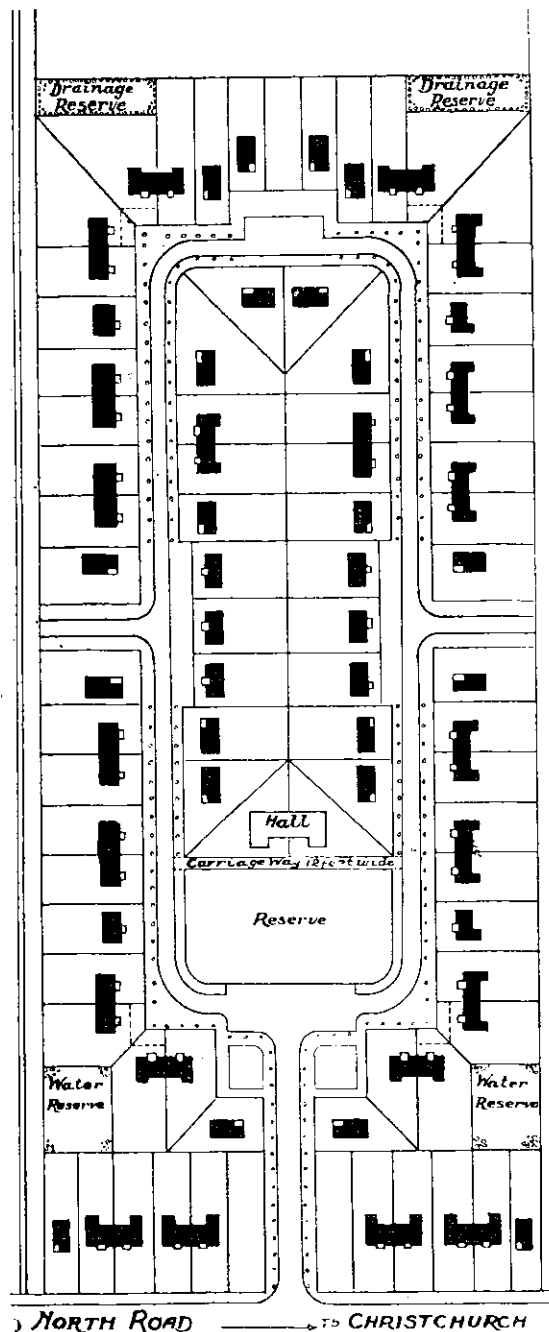
### A New Zealander's Ideals.

#### Reply to "Progress Criticism."

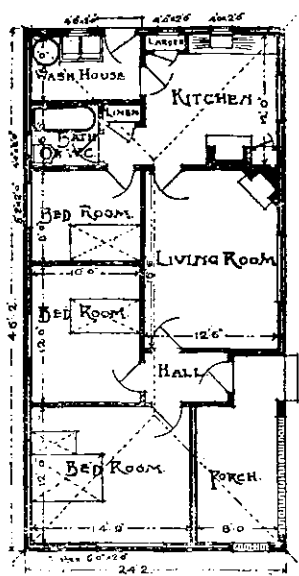
Offices of the New Zealand Government,  
415, Strand, London, W.C.2,  
September 20th, 1920.

TO THE EDITOR.

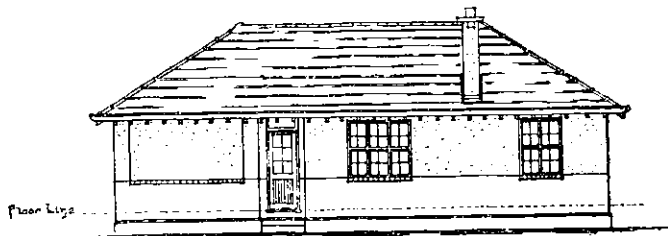
Dear Sir,—In your June issue you publish a leading article under the title of "A New Zealander's Ideals." This was evidently based on cabled news of which I have no knowledge. While thanking you for your continued kindly interest in the town-planning movement, might I suggest that it would perhaps have been better to have awaited the receipt of the full account of the Conference, which Sir Thomas Mackenzie forwarded to the Government, and which was also forwarded to "The Evening Post," as well as to other New Zealand papers. I forward you herewith an extract from that report referring to the motion I brought before the Conference, by which you will see that your article was written on insufficient information. I trust you will do me the justice of publishing this extract, for I have always held firmly to the view that town-planning and "good business" should be synonymous terms, and that anything in the nature of a "fad" should find no place in town-planning schemes. Although the Conference was held in London it was not considering London's problems, nor the problem of "crowded centres." It was



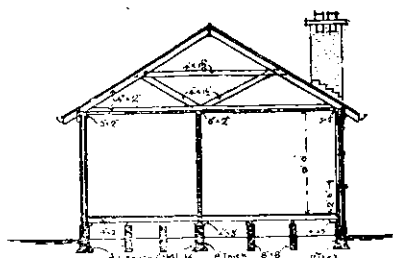
"Northcote"—Proposed Housing Scheme at Papanui, Christchurch.



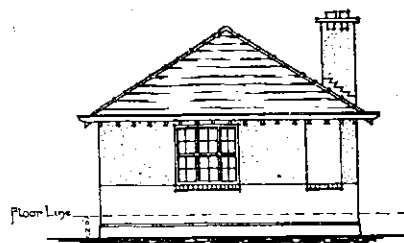
PLAN.



FRONT ELEVATION.



SECTION.



SIDE ELEVATION.

Design No. 26—Type of Five-roomed House for the Government Housing Board's new scheme, "Northcote," Papanui, Christchurch.

considering what should be done to create ideal conditions of life in the towns and cities of the future—the towns which are now being formed in country districts, where the town-planner has a perfectly free hand to carry out his ideals on virgin soil—large unoccupied areas: the conditions, in fact, under which town-planning can be carried out in New Zealand. For instance, at Welwyn—only 21 miles from London—a beautiful estate has been purchased for the surprisingly small sum of £40 an acre. It is nearly four square miles in extent, of good soil under cultivation, having many plantations of excellent timber—mostly oak, and included in the purchase are several farm houses.

You will see from the report that the venerable father of garden city development, Mr. Ebenezer Howard, thought my warning timely, and that at Welwyn certainly some space should be opened for children's playgrounds and places of rest.

Yours faithfully,

S. HURST SEAGER.

The report shows that the subject of the session was town-planning, and the official resolution was submitted by Mr. Thompson (Dundee), the president-elect of the Municipal and County Engineers' Institution, as follows:

#### NATIONAL AND REGIONAL TOWN AND RURAL PLANNING DEVELOPMENTS.

"That this Congress is convinced of the importance of exercising wise governmental control and guidance with regard to town-planning both regional and local.

"Further, this Congress desires to place on record its recognition of the importance of the following principles:

- (a) That in order to secure adequate provision of air and light in and around the homes of the people there should be definite limitation of the number of dwellings per hectare, and for space adjacent to dwellings, such limitation being a matter of Governmental determination in each country.
- (b) That the policy of decentralisation of industries and the building of new garden cities should be encouraged by legislative provisions and by all other means, both public and private.
- (c) That each Government, acting in partnership with local authorities, should prepare in advance and carry into effect a regional survey, followed by planning schemes, a view to putting an end to wasteful and chaotic developments and securing that the lines of future growth shall be well ordered and scientific.
- (d) That in view of the acknowledged necessity of such action, the Government should, acting in co-operation with local authorities, control the direction and assist in the upkeep of main and arterial roads.

"This Congress is also of opinion that the necessary legislative measures should be taken in order to provide cheap land for housing purposes.

Mr. Hurst Seager moved that an additional clause should be added asking that in all garden suburbs and garden cities there should be provided properly

equipped children's playgrounds and proper shopping centres within easy distance of all residences and that spaces well planted should be provided as places of rest in all factory areas. "I moved this," he explained, "because proper attention has not been devoted to this extremely important feature, which I regard, and which is regarded by many, as fundamental in all town-planning schemes. On looking through hundreds of lay-outs for garden suburbs I found that in many cases, among the thousands of houses which were being erected, there was very rarely provided either a shopping centre or children's playground, while in the factory areas of the Garden City at Letchworth there is no space set aside where the operatives can rest before or after work or during meal-times. I found that the factory area was likely to become congested and sordid and in no way calculated to cheer the operatives in their work.

It will be noticed in the copy of the "Times" of the 5th that the resolution was lost by 8 votes. This was not because the overwhelming majority of delegates did not agree with it, but all those who had been responsible for framing resolutions did not want anything added for fear of overloading them, while others thought it was a matter of detail which town-planners would naturally provide. When this was expressed by one of the speakers several at once protested that while they lived in garden suburbs such necessary features had not been provided.

Mr. Ebenezer Howard spoke in support of my motion and wrote me afterwards the following letter:

"I am glad that you brought the important matters of children's playgrounds and shops, other than those in the central part of the town, before the attention of the Inter-Allied Congress. At Welwyn we certainly ought to move in this direction."

Welwyn, it should be noted, is the second garden city now being formed to the North of London, not far from the first garden city of Letchworth. Several other delegates expressed their satisfaction that attention had been drawn to this important matter.

Lord Astor, in acknowledging the receipt of the transactions of the New Zealand First Town-Planning Conference, said:

"I note the importance that you attach to the provision in town-planning schemes of convenient playgrounds, shopping centres, and of planted open spaces in the midst of factory areas and agree that they are matters worthy of the most careful consideration and attention."

Mr. Alridge, the Secretary of the National Housing and Town-Planning Council, wrote to me, saying that:

"I ought not to refrain from writing to you regard to the amendment you brought forward at the recent Inter-Allied Conference,

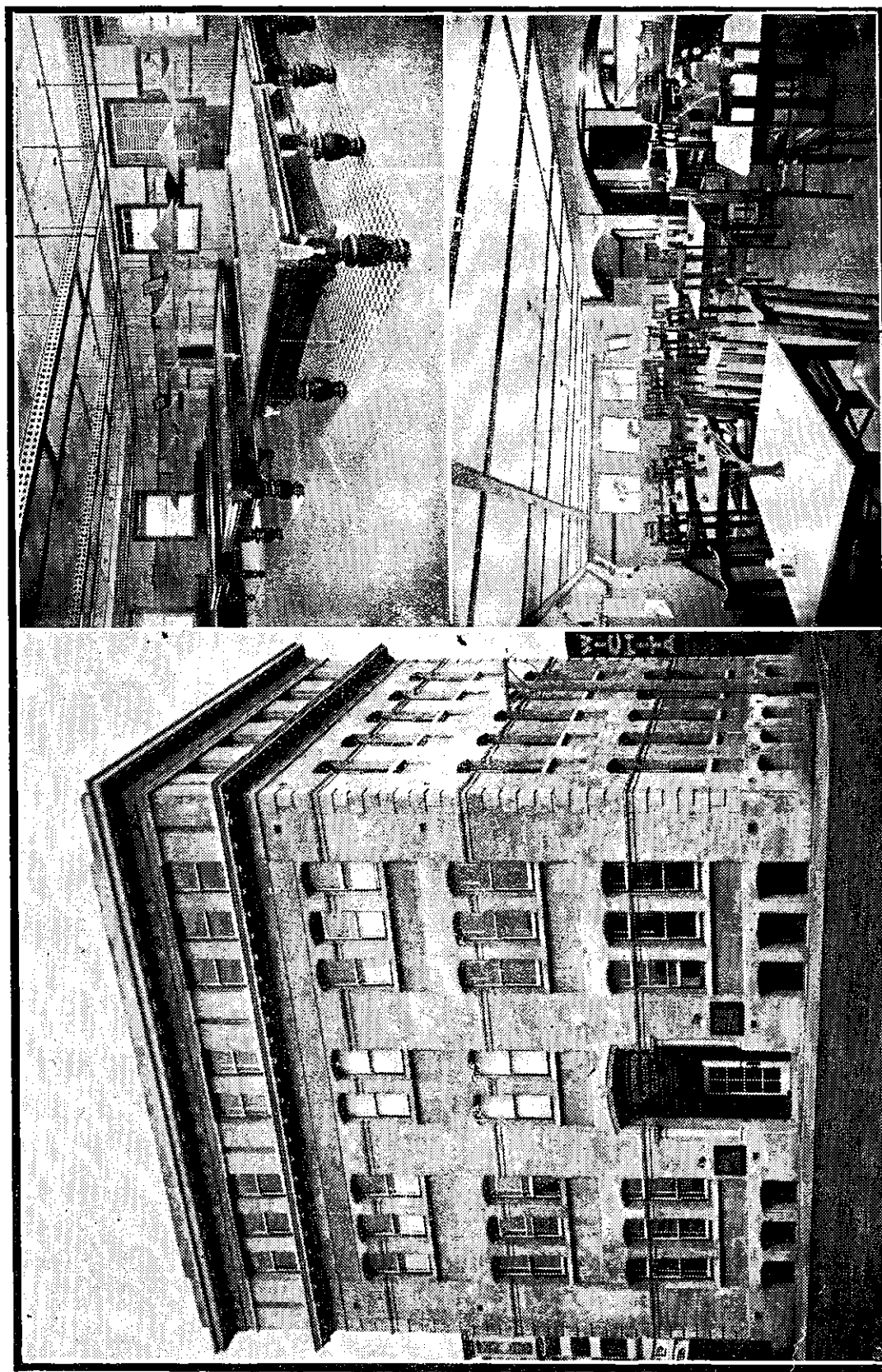
making clear the reason why many ardent town-planners thought that they should support the resolutions as against the amendment. The reason was quite simple and, I believe, thoroughly sound, viz.: that we wish the words town-planning should be definitely and clearly understood to cover the amenities for which you plead. I most earnestly hope that it will not be felt for a single moment that we were out of sympathy with your appeal."

#### THE BRISTOL HOUSING SCHEMES.

In illustration of what I have said about the provision of small playing grounds and shopping centres, I may note that this place, although they are accommodating such a large number of houses, makes no provision either for the one or the other. There are in each, it is true, a large recreation ground and village greens, but no small vacant space is left for the playgrounds in the centre of each block. On this housing estate, although it is providing for nearly 1,600 houses and assuming an average of only two children per house, we should have 3,200 children, and yet there is only one small space set aside as a playground at one end of the estate. There should, on an estate of this kind, at least be about 20 small playgrounds spread evenly over the estate, and as many small shopping stores or centres. These two schemes and all the other schemes being arranged by the Bristol Council, have, unfortunately, no relation to industry. There is not in any of them any provision for carrying on home or small industries in relation to agriculture which must be the basis of any solution of the industrial troubles.

It is true that this Sea Mills Estate is only about three miles from the docks where a large amount of labour will be annually employed, but in addition to the labour of one kind there should be provision for all the varied industries which are necessary to make up a complete social and industrial city life.

[We are glad to notice from the extended report furnished by Mr. Hurst Seager that he was misrepresented by the cabled summary of the Inter-Allied Housing Conference. Our criticism was based on the assumption—obvious enough from the cable, but not supported by the fuller detail now available—that in his enthusiasm for good planning Mr. Hurst Seager had counselled something so ideal and impracticable that the movement was more likely to be further prejudiced than benefited by the old sneer of "faddism." It is clear that the New Zealander was dealing with planning of virgin areas, and not re-planning of old settled districts. However, we think that no harm can be done by constantly reiterating that town-planning is essentially a good business proposition, which will save local bodies many millions in this country if they take the trouble to follow its precepts.—Editor, "N.Z. Building Progress."]



**AUCKLAND RETURNED SOLDIERS' CLUB.**

The alterations for this building were designed and supervised by Messrs. Grierson & Aimer, Architects, of Auckland. A top story has been added to the original building, in which the Billiard Room, shown above, is situated. The lower picture shows the Restaurant on the ground floor.

## Auckland Returned Soldiers' Club.

The original building was a substantial warehouse and factory, three storeys high, with a half-buried basement; situated at the corner of Albert Street and Swanson Street, and occupied by Buchanan and Co., manufacturing jewellers.

The whole interior of the building was remodelled and renovated and another storey added. As now completed, the building, which is entirely devoted to the activities of returned soldiers, has four storeys and a basement. It is lighted and warmed throughout by electricity, and an electric dual-control passenger elevator serves all floors, so that disabled soldiers can arrive at any level of the building they require, without the necessity of negotiating the stairs.

The main staircase is built round the elevator enclosure, and for fire resisting purposes is constructed of very heavy jarrah timbers.

The main exit from the building has thus been rendered as fire resisting as the nature of the original structure would permit. Each upper floor also has direct communication to outside fire escape galleries at the back of the building.

The basement is entirely devoted to a large restaurant capable of accommodating from 80 to 100 diners. Here the kitchen arrangements are most modern and complete with gas cookers, grillers, automatic water heaters, urns, etc., and a gas heated carving table.

The ground floor is mainly occupied by a large well-furnished lounge smoking room, with a reading and writing room adjoining.

The lounge has a panelled oak wainscoting and a white fibrous plaster ceiling.

The colour scheme is dark brown and white, with big comfortable chairs and chesterfields upholstered in black leather. The tan curtain hangings, blue-grey venetian blinds, and heavy rugs complete the cosy comfortable effect.

Space has been found on the ground floor to accommodate the office of the Returned Soldiers' Association.

The first floor accommodates the manager's private quarters, 4 single bedrooms, and a quiet rest room devoted to the special needs of limbless men. The remainder of this floor is occupied by a linen room, store rooms, and a large bathroom. This bathroom has two slipper baths and a range of showers. All the baths, lavatory basins, and showers are connected with an unlimited supply of hot water from three large automatic califonts.

A separate bathroom and lavatory is also provided on this floor for the use of the females of the staff; separate access being provided from the basement and ground floor by a small staircase.

The second floor is devoted entirely to cubicles—22 in number—and the necessary lavatory accommodation, each cubicle being furnished as a single bedroom. Special attention has been given to the ventilation and emergency exits from this

floor, which has windows on all four sides of the building.

The top floor is a large billiard room, with five full-sized tables and lavatory accommodation adjoining. From the windows of this room splendid views are obtained of the harbour and surrounding city.

The original building was bought by the Auckland Provincial Patriotic and War Relief Association for the sum of £12,500, and when the refitting, furnishing, etc., is paid for the club will have cost in all about £23,000.

The bulk of this money was provided by the Auckland Women's Patriotic League, augmented by the Auckland Provincial Patriotic and War Relief Association, and to a smaller extent by the Auckland Returned Soldiers' Association and the country branches of the Women's League.

Although the club has been open only recently, its popularity is already proved by the fact that its accommodation is regularly taxed to the full.

## Our 68th Competition.

Only two designs were sent in for this competition, viz.:—"Artemus," by M. W. Johns, with Mr. Wm. M. Page, architect, of Wellington, and "Panikau," by Bernard Rennell, with Buxton's Ltd., Tologa Bay.

The judge, Mr. H. Mandeno, of Dunedin, reports as follows:—

Editor, "Progress," Wellington.

Dear Sir,—I am returning you under separate cover the drawings in connection with your 68th competition.

It is disappointing that there have been so few entries, as the subject set should have been one to induce students to enter. The pooriness of the competition, however, is probably due to the fact that almost all the students have been busy preparing for their examinations.

Neither of the competitors has adhered to the rules laid down. The plans sent in by "Panikau" are decidedly weak, and the detail shown is apparently a copy of one in Mitchell's Building Construction.

The work submitted by "Artemus" is of considerably more merit, but the subject chosen can hardly be described as "an architectural feature to a building." The drawings are fairly well executed, although the elevation drawing of the cupola could be considerably improved upon. The detailing of the cornice is either not measured correctly, or else the subject chosen has not been executed quite in accordance with the rules laid down for this order of architecture.

The work by "Artemus" is much superior to that by "Panikau," but I do not consider it of sufficient merit to warrant awarding a prize.—I am,

Faithfully yours, H. MANDENO.

## American Timber.

### More Coming to New Zealand in the Future.

American timber will be in great demand in New Zealand during the present year, according to a despatch received by the American Department of Commerce from Mr. A. A. Winslow, Consul-General for New Zealand, says the *San Francisco Commercial News*. There is a great shortage of all kinds of building material in New Zealand, especially timber, says the despatch. It seems clear that large quantities must be procured from the West Coast of the United States and Canada if building construction is to be carried out as contemplated within the next few years. There is a great shortage of homes for the working people as well as office and other business structures, warehouses and schools. The accessible forests of the Dominion are exhausted, and little other than the rougher materials for construction work are available. A large corporation has been organised with headquarters in Auckland and has sent a representative to the West Coast of the United States and Canada to arrange for a supply of timber from there.

## Personal.

Mr. J. F. Munnings, of the firm of Collins, Harman and Munnings, Christchurch and Wellington, has been appointed architect for the proposed Masterton High School. Mr. Munnings is an Associate member of the Institute of British Architects, M.C.I., London, and A.I.A., N.Z., and Durbar Medallist of India, while the firm of which he is a member are architects to the Board of Governors of the Canterbury College and of the North Canterbury Hospital Board. Mr. Munnings is a native of Christchurch, where he practised till going to England, where he spent three and a half years with a London firm of school architects, after which he was selected to lay off the new town of Patna, the capital of Bihar and Orissa, in India, designing University Buildings and Governor's residence and all other public buildings. After a residence of nine years in India Mr. Munnings returned to his native land about two years since.

## Earthquakes and Architecture.

The recently recorded occurrence of severe earthquakes in various parts of the world lends a topical interest to an article on volcanic research contributed by Dr. T. A. Jaggar, the Hawaiian expert to the *New Zealand Journal of Science and Technology*. Dr. Jaggar says that in New Zealand great volcanic disasters, such as the earthquake at Wellington in 1855, and the Tarawera eruption in 1886, may be prepared for and expected at long intervals. New Zealand engineers, in his opinion, would do well to make exhaustive studies of what happened to

the various structures of wood and masonry in San Francisco, Guatemala, and Jamaica. He points out that Kingston has an excellent new construction law framed in 1907. It would be an interesting field for inquiry to learn to what extent the earthquake risk is affecting the present development of architecture in New Zealand. It is so many years since we had really severe shakes that it is doubtful whether the matter is much more present to the minds of architects than to those of most of their clients. Dr. Jaggar observes that as earthquake centres lie east and west of New Zealand tidal waves from off-shore earthquakes are to be expected from time to time. In the thermal district we have "rare treasures of nature's building—shafts many miles deep ready dug in this corner of the globe, and ready to yield priceless information when once they are harnessed for the benefit of humanity." The doctor adds also that no one can assert that they may not yet be harnessed to furnish power or light or heat.

## Report of Housing.

(By the Women's Committee of the Town Planning Assn.)

In view of the fact that hundreds of houses are to be built immediately in different parts of New Zealand, and in order to check the prevailing tendency to construct them in the old uncomfortable labour-creating style which gives rise to so much ill-health amongst mothers, and distaste for home life and its duties on the part of daughters, the Women's Housing Committee has deemed it advisable to draw up a short emergency report embodying those details which it unanimously considers to be the *minimum standard* essential for the health, convenience, comfort and decency of the *average family*, where the mother does her own housework and brings up the children.

We believe that by concentrating upon well-planned interior arrangements and simplicity of style, rather than upon exterior decorative effects, which only make a cheap house look cheaper, the initial cost of building would not be increased.

It is frequently said that women are willing to sacrifice everything for the sake of outside show; but there is sufficient evidence to enable us to state emphatically that the great demand being made at the present time by women of experience all over the civilised world is for convenience, for labour saving, and for house comfort; and because the Committee feels that this demand is not being fully met by the type of houses now in course of construction in large numbers throughout the Dominion, it has drawn up this preliminary statement of essentials. The Committee realises the scarcity of labour and materials, and is of opinion that only necessary interior fittings should be supplied at the present time. The urgent need of the moment is a roof over the heads of the homeless.

It may be said that the points mentioned by the Committee are those which would be included in the plans drawn by any skilled and conscientious

architect; but it must be remembered that the great majority of houses in New Zealand are planned not by architects but by builders, and often for purely speculative purposes. The fact of its being necessary to draw attention to many details shows how frequently they are neglected. The Committee is strongly of opinion that wherever public money is being spent the houses should be planned and the construction supervised by a skilled architect, and that if necessary, legislation be passed to that effect.

#### ESSENTIALS FOR THE HOME OF AN AVERAGE FAMILY.

1. Concrete or brick buildings are preferable to wood. Wood must be seasoned before using.

2. The house should be so planned and placed that every room has the maximum amount of light, sunshine and fresh air. The floor should be raised from the ground to allow of free ventilation beneath; and the section should be so arranged that no water can accumulate under the house.

3. All rooms and conveniences should be under one roof; if any part is detached (wash-house, lavatory, etc.), it should be reached by a covered way.

4. For suburban houses no section should be less than one eighth of an acre, and no frontage less than 40 feet.

5. A good water supply, and means for obtaining hot water quickly and economically as regards both labour and fuel.

6. Good drainage, however simple.

7. To meet reasonable requirements the house should contain three (3) bedrooms, sitting room, kitchen-living room, pantry, coalhouse or bin, bathroom with hot and cold water, wash-house, lavatory or water closet, and shed. All rooms should be conveniently arranged round an entrance hall or lobby, and the aspect so considered that the kitchen-living room shall be sunny and the pantry cool. The entrance doors should be sheltered from the prevailing winds, and the front door should be placed on one side of the hall, rather than in the centre, to allow room for a hall stand or table.

8. The kitchen-living room is usually the centre of home life, and should be warm and comfortable. Doors and windows should be so placed that the fireside is not spoilt by draughts—during the day the smaller children play, and in the evening lessons and sewing are done in this room.

If a range is used it should be raised on two or three layers of bricks, so that the housewife will not have to stoop so much when cooking; where small gas ranges are installed, these also should be raised on bricks. (The largest size of gas range has the top at about the right height without the bricks.) Either a good range, with rack for heating dishes and drying clothes; or gas or electric stove; sink, with draining board on either side, and hot and cold water taps (nickelled) conveniently arranged so that kettles may be filled with ease; cupboards; meat and milk safes, are all essentials. The height of the sink from the floor should be the best for the average woman. Open shelves are preferable to a cupboard beneath the sink.

The kitchen arrangements may take the form of a kitchenette, in which case the living room would have an open fireplace and safety screen; the latter with plenty of shelf room, meat and milk safe partitioned off and properly ventilated. The scullery free from draughts, well lighted and ventilated.

The most convenient arrangement is to have the pantry and scullery opening from the kitchen; or the sink may be in an alcove on one side of the kitchen, but should not be actually in the kitchen.

9. There should be no steps between any of the rooms, nor between kitchen and scullery or pantry.

10. The sitting room—generally used in the evenings when quiet is needed, or for visitors, or as a bedroom in case of sickness—must not be a passage room; must have a fireplace; no built-in cupboard should be placed between the fireplace and the wall on the "cosy" side—an easy chair or sofa here would be free from draughts. The door should be so placed as to cause no draughts, and give the maximum amount of wall space. Picture beadings should surround every room to save destruction of papers and walls.

11. A special place should be provided for fuel, under cover and large enough to contain at least half a ton of coal or its equivalent in coke and wood. A large bin filled from outside but communicating with kitchenette or scullery is advised.

12. The bathroom should have hot and cold water, and hand basin.

13. The lavatory must be separate from bathroom. An outside w.c. should be under cover, well ventilated, well lighted, and under present circumstances, where neither gas nor electricity is freely available for radiators, one bedroom should have a fireplace. No bedrooms should be less than 8ft. x 10ft., with doors and windows so arranged that if necessary the room will contain two single beds, chest of drawers, and wardrobe.

14. Fixed cupboards in connection with the kitchen; a linen press, not in the bathroom, and preferably with hot water pipe through it; and hanging wardrobe or shelf in each bedroom are essentials.

15. The wash-house should have a copper, and at least two tubs, preferably two on each side of the copper, all with hot and cold taps, so placed that in emptying the water runs freely towards the plugs, the taps being at the right hand and the plugs at the opposite end of the tubs. There should be good light and ventilation.

16. The wash-house should be large enough to contain a bicycle and pram; otherwise a shed is needed.

17. All houses should be prepared for being served with electricity as soon as power is available. This means simply leaving the necessary openings in the concrete or brick to allow of the entrance of the main wire.

Chairwoman, D. E. PLATTS-MILLS, M.B.Ch.B.  
Secretary, MARY SEATON,  
MRS. A. D. CRAWFORD,  
MRS. P. C. CORLISS,

Members of Housing Committee.  
Wellington, 24th September, 1920.

# Sawmilling Section.

[This Section is published by arrangement with the Dominion Federated Sawmillers' Association (Incorp.) in the interests of the Sawmilling Industry of N.Z.]

Acting Editor: ARTHUR SEED.

## Forestry Department.

A distinct forward move in the organisation of the Forestry Department has now been made by the calling for applications for several important positions in the Department. Applications closed on 10th January, and the positions to be filled are Conservators of Forests for Southland, Canterbury-Otago, and Rotorua; also Westland and Auckland Districts; an Assistant Land Surveyor; a Special Officer for Head Office versed in forest exploitation from the stump to the consumer; an Engineer in Forest Products and Forest Rangers for Wellington, Auckland, Rotorua, Wellington (B Class), Nelson, Westland, Canterbury-Otago, and Southland. It will thus be seen that the active organisation and activities of the Forestry Department are about to be brought into effect, and as the activities will very largely affect the sawmilling industry in the future it is to be hoped that the men chosen for these positions will have a thorough knowledge of the industry, and if they have such knowledge there will surely be harmony between the Department and the industry, and such harmony is certainly to be desired.

\* \* \*

The following paragraph from the "Post" of 17th December last bears also on matters pertaining to the Forestry Department:—"Sawmillers complain that they are hampered in their arrangements for future operations and commitments, owing to the fact that the Commissioner of State Forests has not defined his policy as to timber sales in regard to large areas (including 1,600,000 acres on the West Coast); which have been dedicated State forests. The millers and persons financially interested state that they are anxious to know what policy the Government intends to adopt." It is probable that the Department is awaiting completion of organisation and the appointment of principal officers before making a general statement of policy. There is to be a meeting of the Executive of the Sawmillers' Federation during January, and it is expected that this matter will be dealt with then and a statement of policy obtained from the Commissioner of Forests, Sir Francis Bell.

\* \* \*

A brief message has been received from Mr. W. T. Irvine from Sydney, to the effect that he is feeling a gradual improvement in health, but that the heat in Sydney was very great, and that he was shortly moving further afield, probably to Adelaide and Fremantle.

## Companies Registered.

The Mair Development Co., Ltd., registered as a private company, November 24th, 1920. Office: Wellington Road, Marton. Capital: £5000 in £1 shares. Subscribers: Bulls—R. A. Wilson, 4951; Marton—Z. E. A. Snellgrove, L. Gordon, G. Denbow, L. R. Denbow, S. and M. E. Hartley, F. and L. M. Hutchins, F. and L. C. Purnell, M. Purnell, H. G. and E. C. James; Rangataua—J. G. and C. E. Tait; Horopito—A. D. Sims, J. S. and H. Huntly, all 1 share each; Marton—R. and C. P. Wilson, 15 shares each. Objects: Timber merchants, sawmillers, cabinetmakers, joiners, etc.

Te Kowhai Development Co., Ltd., registered as a private company, November 24th, 1920. Office: Wellington Road, Marton. Capital: £5000 in £1 shares. Subscribers: Bulls—R. A. Wilson, 4951; Marton—Z. E. Snellgrove, L. Gordon, G. and L. R. Denbow, S. and M. E. Hartley, E. and L. M. Hutchins, M. F. and L. C. Purnell, H. G. R. James; Horopito—A. D. Sims, J. S. and H. Huntly; Rangataua—J. G. and C. E. Tait, all 1 share each; Marton—R. and C. P. Wilson, 15 shares each. Objects: Timber merchants, sawmill proprietors, cabinetmakers, builders, etc.

## Universal Classification.

A general desire appears now to be manifest in several districts to get closer to a general universal classification of timber for the whole Dominion, which, to our mind, is a thing very much to be desired. In the "bad old days" when the sawmiller was at the mercy of the merchant, timber was sold from the mills practically at one price for "the cut of the log," and the price was generally based on the lowest quality, but through organisation the millers have been gradually educated to the benefit of strict classification. The classification, however, in the different districts still varies considerably, and when millers from several districts are supplying any one market this variation is liable to lead to confusion and disputes. Consequently if one classification could be fixed for the whole Dominion for each timber it would be a benefit all round, and any move in this direction should be fostered. There is now some form of classification in every sawmilling district in New Zealand except Nelson—and this is but another illustration of the generally accepted opinion of the backwardness of that province—but it is pleasing to note that even there the millers are beginning to talk classification.



## "Oregon."

The following paragraph from the "Dominion" of 13th December will be of interest to sawmillers, but in considering the figures mentioned therein it may be borne in mind that the total output of all timbers in New Zealand for the year ended March, 1920, was close upon 300,000,000 sup. feet. There certainly appears to be more Pacific Coast lumber reaching New Zealand at present than has been the case for some time past, and some very low figures have been mentioned as to cost, even as low as 27s. per 100 New Zealand ports, but it is difficult to obtain definite information in this matter: "American timber will be in great demand in New Zealand during the coming year, according to a dispatch received by the American Department of Commerce from Mr. A. A. Winslow, Consul-General for New Zealand, says the San Francisco 'Commercial News.' There is a great shortage of all kinds of building material in New Zealand, especially timber, says the dispatch. It seems clear that large quantities must be procured from the West Coast of the United States and Canada if building construction is to be carried out as contemplated within the next few years. There is a great shortage of homes for the working people as well as office and other business structures, warehouses, and schools. The accessible forests of the Dominion are exhausted, and little other than the rougher material for construction work are available. A large corporation has been organised, with headquarters in Auckland, and has sent a representative to the West Coast of the United States and Canada to arrange for a supply of timber from there. It is claimed that New Zealand within the next two or three years could consume 40,000,000 or 50,000,000 feet of timber from America."

## Dispute at Ohutu Box Mill.

### MEN'S FINAL DEMANDS REFUSED.

Members of the King Country Sawmill and Timber Workers' Union at the Ohutu Box Mill submitted their final demands to the owners recently. They were willing to resume work on the following conditions: (1) That the employers recognise their union. (2) That the employers' representatives agree to meet the union's representatives to discuss and draw up a scale of wages and conditions for the ensuing twelve months. (3) The conference to sit not later than the seventh day from the resumption of work. These demands were not acceded to by the company, and the mill is closed indefinitely.

The employers contend that as an award was made as recently as August 23rd last, and as the union is not constitutionally registered and will not register under the Arbitration and Conciliation Act,

no lasting good would result from any further conference. The mill has been closed and the men have received notice to quit.

### STRIKE SETTLED.

As the result of a further conference between the managing director and the men, the strike of the Egmont Box Company's employees at Ohutu has been settled. Work was resumed on January 6th. It will be interesting to learn the final terms of settlement.

## New York's House Famine.

The fact that the United States emerged richer from the war than she was when it began has not prevented her from suffering from many of the problems that plague other parts of the world. She has a housing question almost as acute as London's. In some ways it is even more acute.

New York, with a population of over 6,000,000, is estimated to lack quarters for something like 500,000. The shortage has been accompanied by the grossest sort of profiteering, facilitated by yearly leases. The plight of the miserable home-seeker in the great flat districts, whose gaunt streets gridiron the upper part of New York, has been accentuated by threats of strikes by the drivers of moving vans, by plumbers, painters, and others. His regrets for the good old days of a few years ago, when there were 50,000 too many flats in the town, and a month's free occupation was the rule, are the stock-in-trade of the comic papers.

The price and scarcity of wood and steel have been a major factor in the problem. Labour troubles come next, and then, perhaps, the restriction of credit in the interests of deflation.

## Forestry in France.

### NEW ZEALAND STUDENT'S LETTER.

In a letter to Mr. E. Mackintosh Ellis, Director of Forestry, one of the New Zealand students in forestry in England, Mr. W. M. E. Martin, describes a visit which he made to some of the French forests under the guidance of Professor Troup, late Inspector General of the Indian Forest Service. They visited the Foret de Lyons in Normandy, Montague, Loubray, Louviers, Alencon, Foret de Belleme, Tours, Bordeaux, and Mimizan, and Capbreton in the Landes.

Mr. Martin says that he was much struck with the maritime pine forests in the Landes. The establishment of these dense belts of trees was, in his opinion, the greatest victory in the annals of afforestation. He had also visited a resin factory, and had seen the various processes. The officer in charge had said that the whole scheme of resin extraction and manufacture had cost the

French Government about 13,000,000 francs, but that he himself last year had sold 5,000,000 francs per month of the product. At Capbreton Mr. Martin saw the cork oak and maritime pine in mixed forest. A bottle-cork factory was visited, a factory run by a man and his family. On an average 4000 corks a day were turned out at that place by hand.

In the course of his journey Mr. Martin passed through the battle-scarred area of the Somme. "The remains of all our brave fellows," he writes, "are now gathered together in beautifully laid-out cemeteries, under the auspices of the Imperial War Graves Commission. Several of the cemeteries which I visited were completed, and on walking round the neat gravel paths, lined with flowers, I saw names of those whom I shall never forget. The whole is surrounded by a massive Portland stone wall. The masonry of the cemeteries can only be characterised as sublimely beautiful. Before such a scene one felt humbled, and yet proud, that our Imperial Government, once again, had not looked to the cost first, but had acted 'on the square,' even with the dead."

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From that excellent little trade journal, *Yates Quality*, we cull the following articles:—

### Forests will be Exhausted Unless Remedy is Adopted.

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RATE OF DEPLETION PROBABLY IS THREE TIMES  
ANNUAL GROWTH.

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The rate of depletion of the forests of this country is more than twice, probably three times, what is actually being produced by growth in a form serviceable for products other than firewood. Consequently, high prices of lumber are not wholly due to increased costs of production. An important factor is the ever-retreating sources of timber supply. Already the supplies of all the great eastern centres of production are approaching exhaustion, with the exception of the South, and even there most of the mills have not over 10 to 15 years' supply of virgin timber. Already the Southern pine is being withdrawn from many points as a competitive factor and its place taken by western timbers. This inevitably results in added freight charges, which the consumer must pay.

These facts are called to public attention in the annual report of the forester of the United States Department of Agriculture, recently published. Their presentation is accompanied by a plea that the nation adopt an enlarged programme of public acquisition of forests by the Government, the States, and municipalities, and protection and perpetuation of forest growths on all privately owned lands

which may not better be used for agriculture and settlement.

In the early years of the present century it looked as though the management of forests as permanent, productive properties might be voluntarily undertaken by private owners on a large scale, but since then the situation has materially changed. The need for the adoption of an enlarged programme of acquisition, the United States Department of Agriculture points out, has become increasingly urgent. More than 20 years ago the Division of Forestry, as it was then called, offered to give advice and assistance to private timber owners who might wish to consider applying forest management to their properties. By the middle of 1905 requests had been received for the examination of private holdings, large and small, comprising in all 10,900,000 acres of land. Many of these requests were from large lumber companies and other owners of extensive timber tracts. On the strength of the showing made by the preliminary examinations, a number of these large owners entered into co-operative agreements for the preparation of working plans.

But private forest interests failed to follow up the beginning, and the Federal Government and the States, in the opinion of the Department of Agriculture, must join hands to work out a programme that will correlate public and private efforts looking to the protection and proper administration of forests. The function of the Federal Government, in addition to handling the national forests, it is suggested, would be to stimulate, guide, and co-ordinate State action, and conduct necessary investigations regarding the best methods of forestry, to assist the States in the classification of land, and to harmonise action between the different States. The States would also handle public property owned by them and they would have a further direct responsibility in connection with the protection and perpetuation of private forest lands.

With regard to the Federal attitude toward private forestry, it is suggested that the Government would work primarily through State agencies. To initiate the proposed policy, a Federal law would be necessary authorising the Government to co-operate with the States in bringing about the protection and right handling of forest lands within their borders and providing means for such co-operation.

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### Where the Lumber Industry Fails.

(By Robert G. Skerrett.)

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Sawmill waste in the United States alone totals annually about 4,000,000 cubic feet of wood, and a good deal less than one-half of the original tree reaches the final consumer of the lumber!

Eventually the people of this continent are going

to have a very bad row to hoe, and much of the difficulty will be found due to the well-nigh criminal wastefulness incidental to our uses of the abundant raw materials which Nature has placed within easy reach of us. For years we have been industrial spendthrifts and it is doubtful whether we have yet grasped the lesson which the war should have taught us.

During the war the public was asked, as a patriotic duty, to save the fruit pits normally cast away in order that we might have the basic material from which to make a superior grade of charcoal for the gas masks of our fighting men. What would we have thought of the authorities if they had urged us to throw away the juicy meat of our peaches, plums, apricots, etc., for the primary purpose of getting the stones? And yet, in short, we are doing pretty nearly this very thing in many of our great productive undertakings.

It hasn't yet dawned upon us that vast quantities of our so-called factory wastes are not, in truth, useless materials, but are deemed so simply because we have been deaf to the preachings of the chemist and blind to the profitable economies which the more progressive of the nations in Europe have been practicing for years. Merely because our mines, our forests, and other domestic sources of natural wealth have responded without stint to our increasing requirements, we have deluded ourselves in the belief that there would always be a plenty of these raw materials handy.

Just as we have learned during the war to be more mindful of our dollars—making the pennies count as they never did before, so, too, must we utilise hereafter more of our raw stuffs and call no substance waste until we have found that there is nothing to be gained in any way by some manner of utilisation. We cut down every year about 40,000,000 feet of lumber. There are losses in the forest, waste at the sawmill, and again, scrapping in the factory where the wood is worked into the forms familiar to most of us. The waste in the woods consists of tops and stumps and represents 13 per cent. The sawmill is the worst offender, showing an unproductive factor of 49.1 per cent. of the log. It is authoritatively asserted that an average of only 320 feet of lumber is used for each 1,000 feet that stood in the forest.

The mill waste has a wide field of possible employment. The slabs, edgings, trimmings and other solid wood cut from the log can be turned into laths, map and shade rollers, chair stock, matches, toothpicks, woodenware, boot and shoe findings, brushes, broom and tool handles, boxes, crates, toys, etc., not to mention wood pulp for the manufacture of artificial silk and paper. It has been declared by one of the foremost firms of chemists, engineers and industrial managers that only about one-third of each long-leaf pine tree cut is ever merchandised. And if the entire tree were used, as it could and

should be, the long-leaf pine industry alone would contribute every day to the estate of the American people, 40,000 tons of paper, 3,000 tons of resin, 300,000 gallons of turpentine, 600,000 gallons of ethyl or grain alcohol together, with the fuel of these industries in addition to the lumber we get now. According to these experts: "These figures are not idle guesses; they were reached after exhaustive study and experiment."

As wood, in its course from the forest tree to the finished commodity, is said to be subject to greater losses than any other important raw material, it behoves us to get busy and to stop this tremendous leakage. It is a matter of fact that many of our sawmills have been paying, annually, for years considerable sums of money to have their waste piles removed, despite the fact that all of that material can be employed in a variety of ways and made to show a goodly profit. From the cast-off bark, tanning extract can be obtained, some of the refuse can be used directly for fuel in the raising of steam, and sawdust and blocks can be fed to gas producers to furnish motive energy for operative machinery.

Alcohol from sawdust is chemically identical with grain alcohol and must not be mistaken for wood alcohol. By means of diluted sulphuric acid and metal digesters and other apparatus it is possible to get a high-grade alcohol from the so-called wood refuse—a yield of 20 gallons and more being realised from a ton of the dry material. Again, in the manufacture of sulphite pulp the spent liquor contains some sugar in solution. Sugar, as most of us know, is a prime source of alcohol. In three paper mills in Sweden the sugar content of the sulphite liquor give about a million and a quarter gallons of alcohol per year. Abroad, a number of characteristics commend it. With us, until comparatively recently, very little, indeed, has been done toward effecting the recovery of alcohol from wood waste, but we are correcting this to a modest extent. Alcohol has many fields of usefulness in the industrial arts, and it is our duty to conserve all.

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### Auction Sales of Timber.

Information that auction sales of timber have taken place in various parts of the Dominion has been received by the Board of Trade, states the "N.Z. Herald." Apparently this timber was delivered to the purchasers without the production of a permit in terms of the building regulations being demanded. It is explained by the board that this is a breach of the regulations, and any person receiving or delivering timber in such circumstances is liable to the penalties prescribed for such an offence. It is the intention of the board to institute proceedings against anyone found infringing the regulations in this or any other manner.

## Our 70th Competition.

We offer a prize of £1 is. for the design adjudged the best for a

### CHURCH

in accordance with the following conditions:—

A small religious body gathered in one of the cities of New Zealand desired to erect a church. The adherents of the sect are men and women of culture who have given up the Christian faith in its orthodox expression, but who have retained a belief in the Supreme Being, the object of their worship, and, in varying measure and with differing interpretations, in some of the Christian doctrines. They also have been much influenced by the religious faith of the East. Their service requires no ritual, and therefore the plan need not make any provision for this, but the committee particularly emphasises that the members desire something more than a meeting hall, unfortunately so common with many Nonconformist sects. The committee realises the great service which Architecture can perform in arousing the religious emotions, and feels that a church building which fails in this respect has failed completely in its purpose. Further, it is felt by the members that their faith is a natural evolution of orthodox Christianity, and that therefore the building should properly take the form of some adaptation of one of the forms traditionally associated with the Christian religion. At the same time they would like it to express in some way the Eastern influence upon their cult.

The building is required to seat in comfort 120 worshippers and a small choir. It is small, but is to be complete in all essentials, such as porch, accommodation for coats, disrobing rooms for the minister and choir.

The site is a corner one, with ample room for the building, which will be seen from all sides. There is no stone in the district, but excellent bricks of good texture are available; also good metal for concrete can be obtained. There is sufficient money available for a limited amount of stone to be used if so desired by the architect, but first consideration will be given in deciding the competition to those designs which make the most use of available material. Money is available to enrich some portion of the interior. The district is subject to earthquake shock.

Drawings required: (1) Plan. (2) Section. (3) Perspective, or, in place of (3) if competitor prefers, elevation of main front and part elevation of another. Drawings must be in Indian ink, shaded, but not coloured.

Mr. C. Reginald Ford, F.N.Z.I.A., M.S.A., of Wanganui, has kindly set this subject and will adjudicate.

Designs must be sent in finished as above under a *nom-de-plume*, addressed to the Editor "N.Z. Building Progress," 22, Wingfield Street, Wellington, and clearly marked "Seventieth" Competition on outside, with a covering letter giving competitor's name, and address of employer. Designs must be sent in by January 27th.

## Our 71st Competition.

We offer a prize of £1 is. for the design adjudged the best for a

### MEMORIAL WALL TABLET

suitable to be erected in a church or public building.

The material to be stone or wood and the general dimensions of the tablet to be somewhere about four feet by three feet, and it may be placed either vertically or horizontally. This is only to be taken as a rough indication of the size of the tablet.

The following inscription must be shown on the panel, "To the Glory of God and in memory of Charles J. Braid, Lieutenant, of this parish, who served and was killed in the Great War, 1914-1918. Aged 23 years."

The object of this competition is to endeavour to influence and improve the designs and lettering which are at present being carried out in erecting memorial tablets. Students, therefore, must show by their work that the subject has been given some study, and that they have gone to proper sources for examples and information. Unfortunately, the assessor knows of only one good example, viz., the Memorial Tablet in the entrance hall of the Wellington Technical College. This memorial was designed by Mr. Joseph Ellis, and both it and the lettering are worthy of study. Students are further referred to examples of tablets and lettering which have appeared from time to time in the "Architectural Review" and the "Architects' Journal." The lettering must be based on good Roman models, and Lewis F. Day's book may be consulted. The new title on "Progress" is also excellent.

The drawings to be to a scale of two inches to one foot, and to show an elevation, plan, and vertical section to wall-line and must be in black ink lines, without shading or colouring of any kind.

A complete alphabet must also be shown in black ink lines to half full size of the letters of the inscription. Mr. William M. Page, A.N.Z.I.A., of Wellington, will adjudicate.

Designs must be sent in under a *nom-de-plume*, addressed to the Editor, "N.Z. Building Progress," 22, Wingfield Street, Wellington, and clearly marked "Seventy-first" Competition on outside, with a covering letter giving competitor's name, and address of principal. Designs must be sent in on or before February 27th.

## Our 72nd Competition.

We offer a prize of £1 is. for the design adjudged the best for a

### TENNIS PAVILION

an ideal pavilion for a club with about fifty members. The total floor area of the building is not to exceed 1000 square feet. No limit is made in respect to cost, but the elevations are to show refinement and restraint.

Drawings required:—Floor plan or plans, three elevations, one section—all to scale of  $\frac{1}{4}$ -inch to 1 foot. Do not shade drawings nor use a wash of any kind.

Mr. Leslie D. Coombs, A.R.I.B.A., of Dunedin, has kindly set this subject.

Designs must be sent in finished as above under a *nom-de-plume*, addressed to the Editor "N.Z. Building Progress," 22, Wingfield Street, Wellington, and clearly marked "Seventy-second" Competition on outside, with a covering letter giving competitor's name, and address of employer. Designs must be sent in by March 27th, 1921.

## Modern Block House.

### GREAT BRITAIN'S EXPERIENCE.

"Sufficient time has now elapsed since the inauguration of the national housing schemes to consider the most economical and rapid system of house construction available," says the latest bulletin of the Department of Overseas Trade, "and in view of the similar housing difficulties in overseas countries the following will be of interest:—House construction on the concrete block system has made immense strides since the Ministry of Health altered the building bylaws in order to give freer scope to concrete construction in England, where the old bias in favour of 'brick and mortar' had prevented the full recognition of the greater strength of the new form of construction.

"The block system is totally different from that of the American type of cast or poured *en bloc* construction, which is largely responsible for the erroneous impressions which prevail as to the suitability of this form of building. 'Poured' units are cold in winter, hot in summer, and are liable to sweat on the inside.

"The continuous cavity block system, however, negates all these disadvantages through the possibility of the free passage of air in the walls; and such is its success that experts have now come to the conclusion that the concrete block system is the most satisfactory and economical solution of the housing question.

"Other factors are:—

"(1) In view of the fact that raw material, slag, breeze, etc., abounds in most localities, the blocks can be made on the site of the erection, thus obviating all transport.

"(2) First-class durability and rapidity of construction.

"(3) Improved hygienic conditions over other forms of construction.

"There are now several makes of concrete block-making machines on the market."

Building permits for Wanganui for the year ending 24th December, 1920, in the borough represented buildings valued at £231,453, about 50 per cent. above the previous year.

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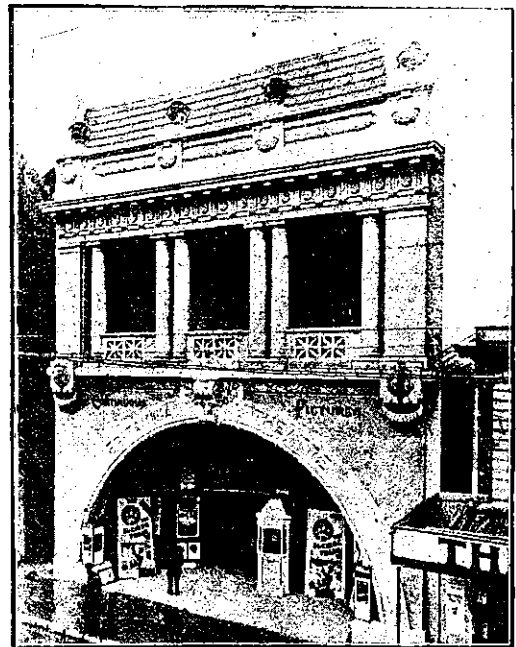
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DRAIN PIPES.

## Correspondence.

## A GREETING FROM ST. DUNSTAN'S.

(To the Editor.)

Sir, -This is the season of greetings and gifts.

May I send to your readers greetings and ask them to send to me gifts?

These greetings will, I hope, give real pleasure. They convey the gratitude of the soldiers blinded in the war for the sympathy and help which has come to them from all parts of the world. They carry the news that all we hoped for from the training given at St. Dunstan's is being justified by these blinded men in the very wonderful success that they are making of their lives.

I do not think that anyone would say it gets easier to be bravely blind as the years go on. It becomes easier to do things in the dark, but the demand on the will to keep pace with normal life grows greater rather than lessens. Constant effort is extraordinarily exacting, and it is really splendid how the men meet this demand on themselves, keep up their interest in everything and maintain their notable record as workers; some in offices, some practising as massours, some as poultryfarmers, and others as expert craftsmen.

There are still more than five hundred men learning to be blind in our classrooms and workshops.

Besides those actually blinded on the battlefields, 23,000 men were discharged from the Army with seriously damaged sight, and, unfortunately, many of these are finding it necessary to come to St. Dunstan's. We are dealing, too, with a number of men whose health does not enable them to make such quick progress as others. At the same time it becomes increasingly difficult to find for the men who are ready to start on their new life suitable homes; there is the universal shortage of houses and a great scarcity of such small properties as the poultryfarmers need. Thus the difficulty and expense of settling the men has increased, while we have to face enormously multiplied costs in providing for those who are our guests, in maintaining our convalescent and holiday homes, and in carrying on the ever-increasingly important work of the after-care of the blinded soldiers.

We have also now to meet the expense of moving our headquarters—the offices for the organisation required to look after nearly 2,000 men, and also the classrooms and workshops. The house, with its beautiful grounds, so generously lent by Mr. Otto Kahn as a hostel is no longer available: fortunately, however, we have been able to find for our new quarters another house in Regent's Park—a place which for several generations has been the London home of the Marquesses of Bute. The interior has been adapted for offices, and in the gardens the classrooms and workshops have been re-erected. The place is near the lake, on which the blinded soldiers have taken so much pleasure in rowing, and both from the point of view of fresh air and of opportunities for unimpeded exercise the situation is ideal.

This starting again in the creation of a new training centre for the blinded soldiers has, however, been no small matter, and it adds to the reasons already referred to which prompt this appeal for the generous help of your readers.

The blinded soldiers have created a magnificent record; the plans for helping them back to normal life have worked out better, I think, than anyone dreamed would be possible. I think, too, there is no one who realises what the gift of sight means, and what blindness must mean, who would not wish to help on this work which St. Dunstan's has undertaken.

I trust that any of your readers who are so generous as to respond to this appeal will forward their contributions to me at St. Dunstan's Headquarters, Regent's Park, London, N.W.1.—Yours faithfully,

ARTHUR PEARSON,  
Chairman,

Blinded Soldiers' and Sailors' Care Committee.  
St. Dunstan's, 18th November, 1920.

PHONE 1649

*F. de J. Clere*

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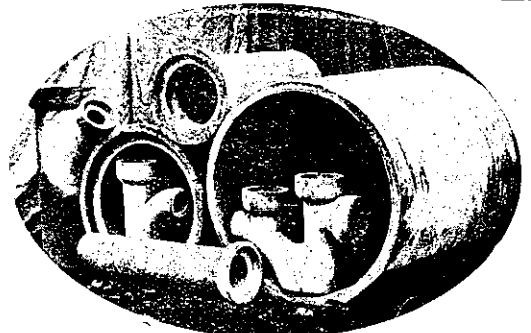
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## Electricity for Auckland.

Tenders for the material, etc., required by the Auckland City Council in connection with its electricity extension programme, under the £500,000 loan recently authorised, are to be called in London immediately. Financial arrangements have been made by which this has been rendered possible.

Referring to the matter recently, the Mayor, Mr. J. H. Gunson, stated that he had interviewed the Prime Minister in regard to the loan, and Mr. Massey had agreed to let the council sell its 5½ per cent. bonds at a discount, and to have the authority gazetted on his return to Wellington. In view of this, a cablegram had been despatched to the city electrical engineer, Mr. A. Wylie, in London, instructing him to at once invite tenders for the council's requirements, and to cable a report giving full details concerning those received.

The council would probably decide to go right ahead with the scheme, said the Mayor, on receipt of Mr. Wylie's report. The engineer had been in London awaiting instructions. The position would be fully reported upon to the council, and in the meantime he was going further into the matter with the chairman of the Public Services Committee, Mr. W. J. Holdsworth. The Prime Minister had been further communicated with, and investors could expect the £500,000 loan to be offered on favourable terms at a very early date. It should be borne in mind, added Mr. Gunson, that with the debenture tax at 2s. 6d. only, and higher rates of interest owing to the price at which the bonds were to be sold, this investment would be better than anything the council had offered yet.

Ten houses which the Auckland City Council is building at Grey Lynn will be completed early this month. The council has given instructions for the erection of ten more houses in the same area.

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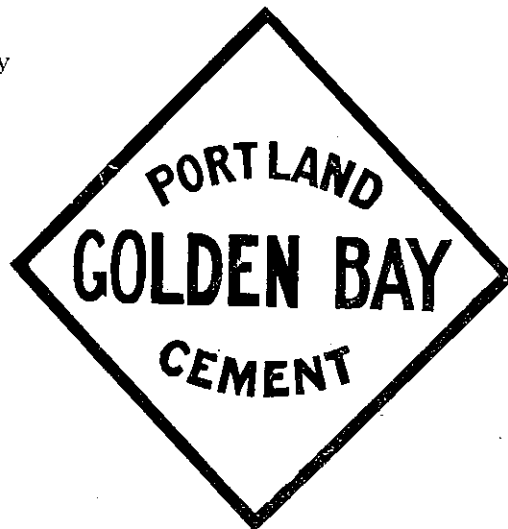
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## Engineering Tenders.

The Franklin County Council, Pukekohe, invite tenders up to January 20th as follows: Contract No. 479—For the supply and erection of a bridge over the Mangatangi Stream of one truss span of 64ft., on concrete piers and two plain spans of 20ft. The total length of bridge being 104ft. Contract No. 480—For the supply and erection of a 20ft. span bridge and construction of approaches, Hamilton Road, Buckland.

The Southland Electric Power Board invite tenders, closing on January 17th, for 48,000 round mild steel bars, 2in. diameter, minimum length 14ft. 9½in. A tender is also called for wood stave pipe shoes.

The Public Works Department invite tenders up to February 15th for the Waikato Power Scheme switch gear 55lb. rails; also Hamilton sub-station equipment.

The Railway Department invite tenders for supply and delivery of electric cranes for new goods shed at Christchurch.

Messrs. H. W. Climie and Sons, Hastings, invite tenders up to January 24th for: Contract No. 1 S.W.—Steel or cast iron water pipes, valves, etc.; contract No. 3 W.—Artesian bores; contract No. 10 D.—Sewer pipes; contract No. 12 D.—Manhole covers. And up to 4 p.m. on Monday, March 7th, 1921, for: Contract No. 5 W.—Centrifugal pumps; contract No. 6 W.—Gas engine for the Foxton water supply scheme.

A conference of representatives of local bodies held at Dargaville last month decided to accept Mr. G. M. Fraser's tender of £7,773, for the erection of a traffic bridge across the Wairoa River, at Dargaville. This does not include cost of approaches, machinery, etc. It will be the largest work of the kind in the North Island.

A poll was taken in Stratford recently on the question of raising a loan of £129,500 for improving and extending the waterworks, drainage, and streets in Stratford. It was carried by 378 votes to 89.

## Tenders Accepted.

Last month the following tenders were accepted by the Public Works Department:

Sixteen locomotives, comprising eight "Fowler," four "Davenport," and four "Barclay" type engines. The successful tenderer for the "Fowler" locomotives was Messrs. Vickers (N.Z.), Ltd., Wellington, the price being £1500 for each engine, or a total of £12,792. Messrs. Richardson, McCabe and Company, Wellington, secured the contract for the "Barclay" engines, the price being £1653 each, or £6620 for the four locomotives, while F. R. Perrott, of Sydney, obtained the order for "Davenport" machines at a total cost of £6140 (approximately). The locomotives are to be sent to different parts of New Zealand.

Eleven concrete mixers were required in connection with the hydro-electric power scheme at Mangahao, and the successful tenderer for eight of them was Messrs. Richardson, McCabe, and Company, Ltd., of Wellington, at a total price of £5142, while Messrs. Blair, Reid and Company have contracted to supply three at a total cost of £1641 18s.

The tender of the Lawrence and Hanson Electric Company was accepted for the supply of a water-wheel for the Hanmer Sanatorium, the cost being £928.

The Public Works Department will shortly call for tenders for 17,000 tons of 4½lb. steel rails for the Railway Department. There will be alternative tenders, one being for 7500 tons and the other for 10,000 tons.

In order to provide for the ultimate erection of a fourth storey for the proposed new workshops building at the Seldon Memorial Technical College at Auckland, an extra grant of £1000 was recently made. Notification of this was received by the Board of Managers of the college last month, and it was decided to instruct the architects to call for tenders for the erection of the building.

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