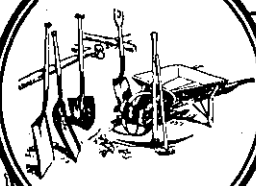
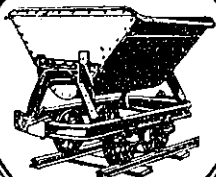
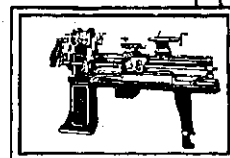
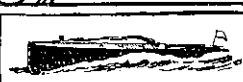
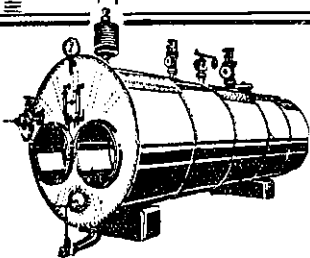
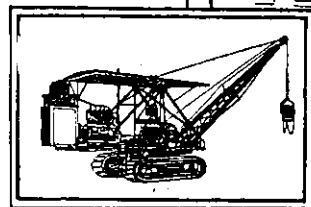
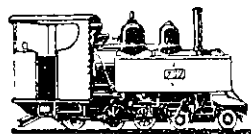
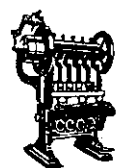
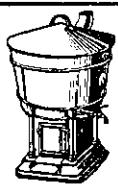


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# N.Z. BUILDING PROGRESS

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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## THE END OF THE YEAR.

This is an opportunity of extending to all readers of "N.Z. Building Progress" the compliments of this festive season. Happily, festive greetings are not out of place to-day, although the world is still upset. Old theories have been tried, some of them have been found wanting, and the process of reconstruction after war is not altogether smooth. New Zealand seems to be fortunate in that our troubles, relatively, are not serious. We are faced with a prospect of mild financial stringency, and this might be for our own good. Apparently the usual income of fifteen millions or so for our wool clip will be very much depreciated, and to that extent we will run under short sail during 1921. One good point about the business is that the lesson will be taken to heart by all classes, and the riot of extravagance curbed. Prices of important articles of commerce seem to be weakening, though the promised slump is not with us. The real reason for the position now causing anxiety to traders seems to be an awakened sense of thrift among the peoples of the world, and a corresponding reduction in their expenditure. For nearly five years the world spent its best energies in destruction, and there is consequently a vast void to be filled with products. A lessened demand will speedily enable this gap to be filled, and normal conditions may arrive without the necessity for that economic blood-letting which is called a slump. Our hope for 1921 is that this is what will happen, and that the process, so far as this fortunate country is concerned, will not be accompanied by unemployment or distress.

\* \* \*

## THE SOLDIER'S LOAN.

The last day for voluntary subscriptions to the Discharged Soldiers' Settlement Loan is December 16th. We sincerely hope, for the sake of the credit of the Dominion's capitalists, that the full six millions sterling will be subscribed, and that there will be no occasion to put into force the power vested in the Finance Minister to enforce subscriptions in proportion to the taxpayer's land and

income tax payments. Strong criticism has been heard from some quarters in regard to this element of compulsion upon capital, but after the ready acceptance by the whole community of the principle of compelling able-bodied men to leave money-making occupations for military service at five shillings a day, we fail to see why the owners of large sums of money which are still intact—thanks to the voluntary and conscripted soldiers—should not be compelled to find enough to properly settle in civilian life those men who made something infinitely greater than a monetary sacrifice. The country asks the moneyed man not to give his wealth, but to let the Government have quite a small proportion of it for a term at 5½ per cent. We know that the general financial position is such that money is a dear commodity, and is going to be scarcer, but no consideration of £ s. d. should stand in the way of completing the splendid repatriation work which has settled the great majority of our men who were fortunate enough to come back able to work. We must keep faith with the remainder, and it would be vastly to our credit if it turns out on December 16th that the capitalists of New Zealand, disregarding the tempting future for their wealth, provide all that is needed to complete our obligations to those who placed at their country's disposal the greatest asset, health and life.

\* \* \*

## RAILWAY HOUSING ENTERPRISE.

We reproduce in this issue some plans of the dwellings which are being built in many parts of New Zealand for the employees of the Railway Department. Although our readers will not find in the designs anything startlingly novel, they will at once realise that the Department's architect has given a ground plan which makes for a convenient house on one floor, and that the rooms are reasonable in size, and well arranged. The Department's new houses near Wellington were inspected by the Women's Committee of the Town Planning Association, and we understand that their verdict was favourable. The Committee set out in a special report (which will be valuable to any architect as the

viewpoint of those who have to live and work in a dwelling) what they consider to be the essentials of a worker's home, and, in our opinion, the railway dwellings come up fairly to the standard set by this Committee. There is no possibility of reaching the ideal when a strict monetary limitation has to be placed on these schemes, but the Department is certainly liberal in its rent-fixing policy. The railway employee is expected to pay, as a weekly rent, one day's wages. If he has a large family, and requires the largest house built by the Department, he is so much the better off in value of house accommodation for his day's pay. Thus the Department is doing in a practical way what statesmen talk about—it is assisting the large family. Under this system the highest rents would be much less than those charged for privately owned dwellings. The General Manager of Railways, Mr. R. McVilly, who has taken a direct personal interest in the Department's housing scheme, deserves credit for adopting a liberal policy, which will have a far-reaching effect in promoting content among those of his employees who are fortunate enough to secure a railway dwelling for their accommodation.

#### TOWN PLANNING AND HOUSING.

The adoption of large schemes of housing by the Labour Department and the Railway Department gives scope for planning on lines superior to the usual checker-board system, and we are glad to notice that the opportunity has been taken, both by Mr. G. A. Troup, the Railway architect, and by Mr. P. H. Graham, the chief architect of the Labour Department's Housing Branch. Mr. Graham's scope is strictly limited by the exigencies of finance, for he has to turn out dwellings which are sold to the tenants. So that in planning a residential area, too liberal attention to the amenities might heavily load the dwellings with their proportion of the value of the land used for public purposes. However, he has done well with a twenty-five acre subdivision on the North Road at Papanui, Christchurch, and we will have the pleasure of publishing in our next issue a perspective view of this settlement. In this issue we reproduce the plans of the Railway Department's lay-out of two railway settlements, one at Marton Junction and the other at Frankton. In both cases, about one-third of the whole has been set aside for recreation or other public purpose, the reserves being so placed that they will add greatly to the general attractiveness of the residential district. In the Marton lay-out, rows of trees, and the bulk of the recreation areas are placed between the dwellings and the railway, so as to provide good shelter from the prevailing wind, and keep down the smoke nuisance. As the land is excellent for gardening, the sections are larger than usual, being mostly quarter acres. The Frankton area is eighty acres in extent, but thirty acres are reserved for the proposed house factory, where standard houses will be turned out in quantities by special machinery. The frontage to an existing road has been nicely modelled with a curved roadway fronting two small

plantations. The central recreation reserve is five and a half acres in extent. It will be noticed that on both plans the street corners are rounded so as to improve visibility for traffic. As the Department is happily independent of local by-laws or even the statute in regard to the width of roads, it has provided the statutory 66 feet wide road, but will macadamise only 20 feet in the centre. The curbing and channeling will be provided on the edges of this road, which will be quite wide enough for the traffic likely to use it. Then, on either side, are to be 15 feet grass stretches, planted with trees. On either edge of the lawn strips are paths, eight feet wide. We think that once the local administration see how pleasant are roads planned in this enlightened style they will agitate for power to authorise similar arrangements with private subdivisions. Frankton is fairly dusty in the summer, but we imagine that the Frankton railway settlement will not be troubled much with this nuisance, thanks to the foresight of the planners. It is with great pleasure that we are able to write of these actual designs, which are being carried out, for it means that good planning is at last being practised in New Zealand.

\* \* \*

#### BUILDING MATERIALS.

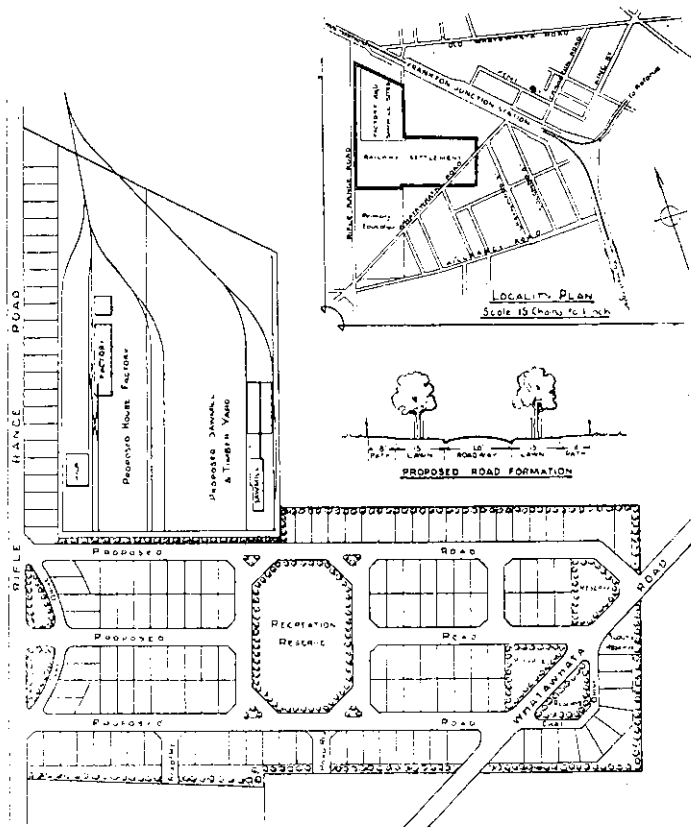
In the course of a very comprehensive survey of the position of the building industry's supplies, published in this issue, the Chairman of the Board of Trade, Mr. Macdonald, gives us some hope that the coming year will see a lessening of the troubles of short supplies which have so retarded work during the past year. Official control has operated beneficially in giving right-of-road to the more important buildings, enabling them to be pushed on with fair expedition. It has not prevented annoying delays, because the factors controlling supplies of cement, bricks, and timber have been outside the possibility of control by regulation. Orders in Council carry great weight in this country, but no Order in Council will secure sufficient tonnage to carry timber where it is wanted, or produce enough coal to keep the cement works going at full capacity. The Board of Trade is going to make a special effort to get enough coal, from inside or outside the country, to keep the cement works going at full capacity during 1921, and it will be seen from the details of production and capacity given by the Board of Trade Chairman, that this policy, if successful, will give us all the cement we require for ordinary purposes. It seems, however, that we are still going to be short of what the Dominion could readily absorb if more cement was available. Cement is coming into more extended use than ever, and if a big national roading policy is adopted it is certain that this material would figure in the requirements. But at present there is no room for great extensions of this kind. Evidently it will take many years before the Dominion fully recovers the full tide of development interrupted in August, 1914, but we are going to get nearer that pleasant prospect during the New Year.

# Railway Department's Housing Schemes.

## Interesting Developments at Marton and Frankton Junctions.

Through the courtesy of the General Manager of Railways and the Department's architect, we are able to reproduce some plans and elevations of houses the Department is building for the railway employees, together with some lay-outs of schemes for housing at some of the important railway junctions.

ous work is ensured for the men. The first house is quickly roofed over in fine weather, and the framing of the others gone on with in fine weather. When it comes on wet the men are employed inside. The scheme has been in operation seven months, during which time no man has lost a day's work.



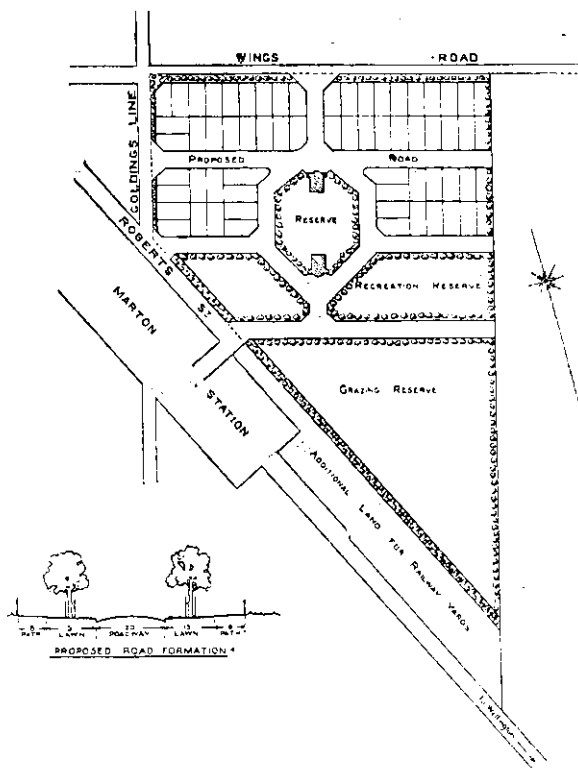
**RAILWAY DEPARTMENT'S SETTLEMENT AT FRANKTON JUNCTION**

The total area of the site is 80 acres, of which 50 acres are reserved for the proposed house factory and timber yard. We direct attention to the section of the proposed roads, showing an improvement on the usual practice of providing a wide expensive dusty stretch of Macadam.

### THE MARTON JUNCTION SCHEME.

An area of 48½ acres has been set aside at Marton Junction adjoining the railway station, and laid out on town-planning lines for the Department's new housing scheme for its employees. It is expected that some 50 houses will be erected here, and a start has already been made by the erection of the first ten houses.

The Department is letting in separate contracts carpentering, joinery, brickwork, plumbing, painting, and any other work required, each contractor undertaking a number of houses. By doing this continu-



**RAILWAY DEPARTMENT'S SETTLEMENT AT MARTON JUNCTION.**

There are sixty sections for dwellings, and at least one-third of the whole area is set apart as public reserves.

The contracts are for the whole of the labour and such material as can easily be obtained by the contractor, the Department undertaking to supply all materials which are difficult to procure. The timber is supplied from the Department's own sawmill at Mamaku, and Departmental contracts have been arranged for the other supplies. For the 85 houses at present under construction in various places none of the contractors has been kept waiting for any material whatever. It is in the interest of the contractor to use every expedient in completing his contract, and the result of the system has been that the Department is building houses at a much quicker

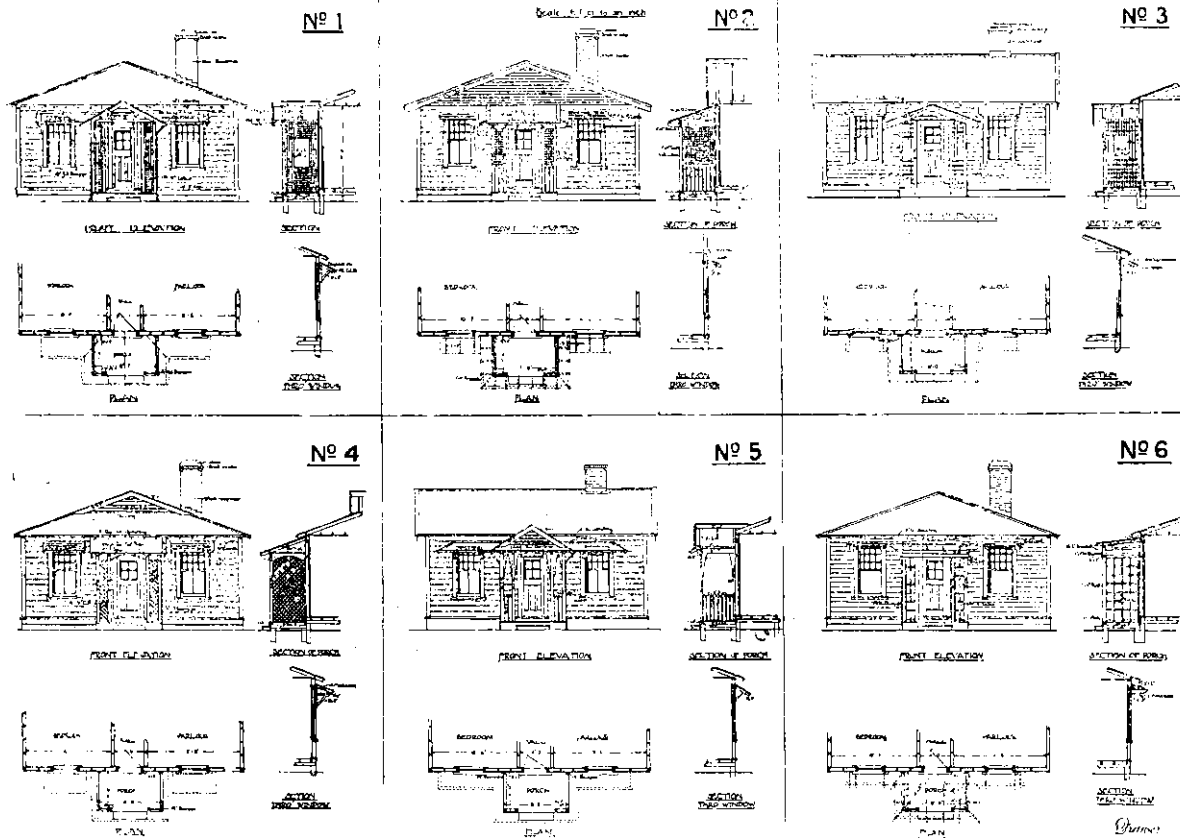
rate than was done in normal times. At Marton, for instance, a team of six men erected the complete framework of 5 houses in 7 days. These houses had 5 rooms, scullery, bathroom, wash-house, and outbuildings. Other contractors at Frankton, Mamaku, and Wellington are also erecting houses in record time, and relieving the congestion to a considerable extent, so far as railway employees are concerned.

At Marton, about half the area is laid out in reserves, one reserve of considerable area being for

Extensive planting will be done on the reserves, and a double belt of trees, suitable to the locality, along the boundary to prevent as far as possible any smoke reaching the settlement. Water will be laid on, and hot and cold provided for in each house. It is hoped to have electric light and sewerage at an early period.

The houses are costing the Department, roughly, about £800, which, for a five-roomed house is extremely cheap at the present time. The rent charged to the occupants is a day's wages for a week's rent.

**STANDARD HOUSE**  
**No 2, CLASS B, 5 ROOMS.**  
— AMENDED DESIGN —  
ALTERNATIVE ELEVATIONS FOR PLAN No 13, 14, 15



Railway Dwellings—Standard Elevations.

grazing purposes, where the men in the settlement can combine to graze a few cows to supply milk. The buildings are being erected on the portion of the settlement furthest away from the railway, to avoid any smoke nuisance. Each section will be from a quarter to a fifth of an acre, providing ample space in addition to gardening for the growing of vegetables, etc. Recreation reserves will also be provided, on which the men can lay out tennis courts, bowling greens, or cricket or football grounds. The roads in all cases are 66 feet wide, and in addition to the two footpaths, two rows of trees are being planted on each side of the central road formation.

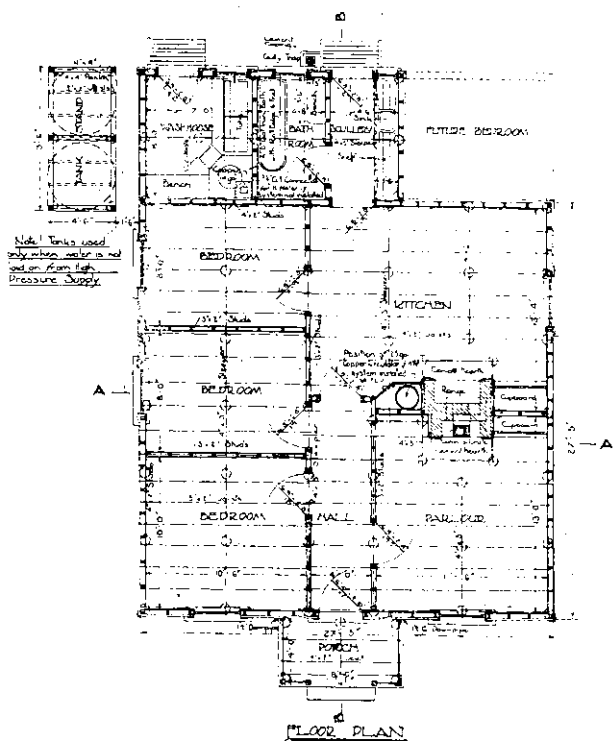
This will mean that one man will pay 15s., while another will pay 18s., according to the wages received.

**THE FRANKTON JUNCTION SCHEME.**

At Frankton Junction there is an area of 80 acres which has been acquired adjoining the railway station. Thirty acres of this land will be used for the erection of a new band-sawmill and a factory, in which the houses will be constructed on the "cut-to-fit" principle. It is proposed to cut all timber and fit the parts before transporting for erection. The fifty-acre block furthest away from



the railway will be divided up for settlement purposes on the plan illustrated. Ample garden space and recreation grounds and other reserves have been provided. The centre of the block will be taken up with an octagonal recreation reserve, large enough for football or cricket grounds. Crescent cart drives are introduced with small planted areas fronting the two main roads. These and other tree-planting areas should give the settlement quite a garden-like appearance. The roads will also have trees planted down both sides, and each section of land will occupy about a quarter of an acre. Altogether accommodation will be provided for about 180 dwellings. The Department has under consideration the erection of institutes and shops in



RAILWAY DWELLINGS.

Plan of five-roomed house, with provision for extension of one room. Where water and gas are available from town supplies, they are laid on, and hot water is made available at the bath and wash tubs. Electric points for ironing are provided where current is obtainable. The kitchen is large, as this is the main living room.

the settlement, which will be run by the men on co-operative lines.

While the Department is not claiming to build garden cities, it is pleasing to note that every effort has been made to make the conditions as pleasant as possible for the railway employees. This opens up a new field in housing possibilities, and is one of the first fruits of the new arrangement made by the Department in opening an independent architectural branch of the New Zealand Railways. Formerly this section was under the Engineer's Department. The General Manager of Railways, Mr. McVilly, is to be congratulated on this arrangement which should have far-reaching results.

## New School Buildings for Auckland.

The amount of building in progress at schools in the Auckland district at present is greater than it has ever been, says the "Herald." The number of new primary schools being constructed is exceptionally large, and many alterations are being made. A great deal of work is also being done at secondary schools, while in regard to the Auckland University College the erection of an arts building will be an important work, and the competition for designs will be finally decided in February.

A considerable number of the new primary schools are being erected in brick. One of the chief of these is the school at Curran Street, Ponsonby, where a main building and an infant school are being built. The contract price for the work is £21,345. A technical high school has nearly been completed at Pukekohe, the work costing about £10,000. A brick school at Green Lane, the contract price for which was £5467, is also nearing completion. The erection in brick of infants' schools, consisting of two rooms, is in progress at Remuera, Grey Lynn, and Mount Roskill. Plans are being prepared for a new brick school at Kowhai Road, Kingsland, the site for which was acquired some time ago. The grant for the building is £31,500. A brick school is to be built at Tuakau and wooden schools at Kohimarama and Wairanga Farm, Te Kauwhata.

Other new schools are in course of construction in other parts of the province, and additions are being made to numerous schools. In several other cases tenders have been called for school work, but no satisfactory ones received. The difficulty of obtaining material and labour is interfering with the carrying out of the building programme.

A tender of £44,300 was accepted recently for the erection in brick of a boys' grammar school at Mount Albert. It is hoped that portion of the building will be ready for occupation early in 1922. The Girls' Grammar School at Epsom is being enlarged in wood, the cost being about £4500. It is expected the work will be completed before the commencement of the first term next year.

A new building is being erected for King's College at Otahuhu. The cost is estimated at £40,000.

## Building in Dunedin.

Several causes are operating just now in the direction of limiting the building of ordinary-sized dwellings in and about Dunedin. Chief of these, probably, is a feeling that the proposals and the resolutions of the Government and corporations to erect cottages may lead to the possibility of getting residences at something below the current cost of buildings. Another retarding influence is the state of the money market. Lenders ask for bigger margins on securities than they were formerly satisfied with, and second mortgages are not easy to get. In these circumstances the building of dwellings "on spec" is not now brisk.



# The Control of Building Materials.

[This interview, specially written for the "N.Z. Building Progress," surveys the whole outlook for building supplies, and deals with the operation of the official control system.]

The constant shortage of building material, and the urgency of the demand for new dwellings forced the building trade into a large measure of Government control early in 1920, and sufficient time has elapsed to secure some idea of how the conditions have worked. In a chat with Mr. W. G. Macdonald, Chairman of the Board of Trade, the Editor of the "N.Z. Building Progress" secured a good deal of interesting information on these points. Mr. Macdonald showed a good general grasp of the outstanding features of the building business, and his views are well worth publication.

## GOOD TIMBER SUPPLIES.

"The key to the whole position," said Mr. Macdonald, "is cement. There are signs now that the production of timber is beginning to overtake the demand, although in some districts there are decided shortages. Take Canterbury, for instance. It is unfortunately situated because it has to depend on getting sufficient tonnage to lift the timber from Greymouth. Tonnage has been difficult to obtain, and the supply of timber is consequently short in Canterbury, though the timber is available on the West Coast. Auckland and other parts of New Zealand are more or less well provided, though it is clear that there are no large stocks.

"During the last six weeks the price of imported timber—Oregon, redwood, etc.—has receded considerably. Six weeks ago Oregon was quoted approximately at 60s. c.i.f., Auckland, but to-day quotations are coming to hand as low as 28s. This should have a steadying effect upon local timbers."

## THE BRICK SUPPLY.

"As for bricks, the shortages which occur are purely local, on account of the fact that bricks cannot be economically transported over long distances. The shortage from June till November was most noticeable in Auckland and Wellington. Since then the Wellington production has been increased to such an extent that it is now capable of coping with the local demand. Auckland still appears to be in the throes of shortage, but it is hoped that this will ease at an early date.

## NEW ZEALAND CEMENT SHORTAGE.

"As I have already said," continued Mr. Macdonald, "the cement shortage is the key to the trouble in the building industry. In round figures, there is a shortage to-day of approximately 50,000 tons, and this is due almost entirely to the difficulties in getting sufficient coal for the cement works. The Warkworth plant, in the Auckland district, has not produced a single ton of cement since September, 1919. This plant alone is capable of producing

50,000 tons per annum, and if it had been possible to have allocated this works sufficient coal you can see from what I have stated in regard to the general position that by this time we would have overcome the shortage. The other Northern works, at Onerahi, has not been producing to its full capacity, and in regard to this works it is no solution to secure coal from outside New Zealand, as the plant is so constructed that Newcastle coal is not suitable. The coal required has to come from the Whangarei mines.

## IMPORTATIONS.

"An attempt has been made to overcome the difficulty by importing cement. In September the price of the imported article on the average worked out at about £15 or £16 per ton, which is at least double the price of New Zealand cement. This allows for the rebate of duty, which is at the rate of 12s. 6d. per ton. Since then, quotations have been received for cement as low as £10 per ton from Europe, if sent by sailing vessel, and ordered in not less than 2,000 ton lots. But this quotation would not be a fair comparison to the New Zealand rate, for no purchaser would be able to take so much in one order, and it would be delivered at one port, whereas the New Zealand quotation covers delivery to the nearest port in the Dominion, and is thus inclusive of New Zealand coastal freight and wharfage. A Canadian cement has been coming in at £12 and upwards. Manifestly it is better to supply the New Zealand cement works with sufficient coal to enable them to run to capacity than to encourage the importation of foreign cement, which is not accompanied, as in the case of the New Zealand article, with a guarantee of quality. Cement is one of those articles which deteriorate when kept for any length of time, and most users consequently prefer to get regular supplies at frequent intervals than to take large quantities and keep it in stock.

"The Board of Trade hopes that early in 1921 arrangements will be made whereby the New Zealand cement companies will be supplied with their full requirements of coal, even though they may have, in some cases, to use the higher priced foreign coal in preference to New Zealand coals. Even then, the price at which cement can be turned out in New Zealand will be considerably lower than the cost of the imported cement.

"The shortage for the whole of New Zealand is about 50,000 tons, and it will give your readers an indication of the relative requirements if I quote the details of the outstanding orders in the Wellington district, for the proportions are about the same in all districts:

Class of Building.	Tons.
Local bodies' requirements ...	9,714
Schools and hospitals ...	751
Dwellings ...	1,151
Industrial and commercial ...	3,533
Other purposes ...	1,175
Total ...	16,324

"This does not include the requirements of the Government for public works purposes."

#### THE COAL FACTOR.

Just as cement is the key to the state of the building industry, so is coal the controlling factor in the supply of cement. Mr. Macdonald was therefore asked to enlighten the readers of "N.Z. Building Progress" regarding the requirements of coal for the cement industry. He replied that there are three works operating in New Zealand, which require 16cwts. of coal for every ton of cement produced. They utilise the fuel, not only for burning the clinker, but for power purposes. One plant is electrically driven, and needs coal only for burning the clinker, and it can operate on a supply of 9cwts. to the ton of cement produced. This gives a good indication of how much can be saved in fuel by the utilisation of hydro-electrical power, and is another argument in favour of pushing on speedily with the comprehensive plans for the development of the Dominion's water-power resources.

#### NEW ZEALAND PRODUCTION.

As it has been asserted that New Zealand is over-provided with cement plants, assuming that they could all secure enough coal to operate fully, Mr. Macdonald was asked for his view of the position, seeing that he has to take a general survey such as no other man in New Zealand has to do. He at once scouted the idea that New Zealand has too many cement works. "I do not think," he said, "that the capacity of the New Zealand plants is in excess of New Zealand requirements. The uses to which cement can be put are so numerous, and are extending so rapidly in range, that the greater the production the greater will be the consumption. The total capacity of the works at present established in New Zealand is approximately 170,000 tons per annum. When you take into consideration the demand for constructional work and the prospective use of cement for road surfaces when it becomes economically possible, it seems to me quite likely that the present cement companies will have to engage in further capital expenditure to increase their capacity."

#### THE CONTROL POLICY—ITS MAIN LINES.

Mr. Macdonald was asked to indicate for the benefit of the people engaged in the building industry the main lines of policy followed in the issue of building permits. He readily agreed, with a preliminary observation, that in spite of control, there is more building going on in New Zealand

to-day than ever before in its history. "In administering the building regulations," he said, "first preference is given to hospitals, sanitation, and dwellings. The next main preference is given to works connected with the development in any way of our primary products or in their handling. Then general industry is favoured in preference to trade. For instance, we would rather give supplies for the building of a factory than shops or offices if there is not sufficient material to construct both. We have allowed commercial firms to extend their premises, because they have had a great deal of leeway to make us as a result of suspended development during the war."

"I would not like to complete a survey of this phase of the Board's work," concluded Mr. Macdonald, "without very cordially expressing our appreciation of the work of the local committees. They have worked without pay, and done well for us in examining applications and investigating the relative merits of demands for building supplies. Without their work we would have been snowed under, because each individual application has to secure separate attention. In administering the regulations we have endeavoured to deal with each application as speedily as possible, and to do away with all red tape; and the disinterested services of the local committees have assisted us very materially in securing expedition in dealing with permits."

### Our 67th Competition.

#### Small House in the Suburbs of a Town.

Three designs were sent in for this competition, viz.: "Roughcast," by G. Drummond, with Mr. D. G. Mowatt, A.N.Z.I.A., architect, Dunedin; "Tiki," by B. W. Johns, with Mr. W. M. Page, Lic.R.I.B.A., architect, Wellington; and "Slab," by E. H. Smith, with Mr. Leslie Coombs, A.R.I.B.A., architect, Dunedin.

The assessor, Mr. Basil Hooper, A.R.I.B.A., of Dunedin, reports as follows:—

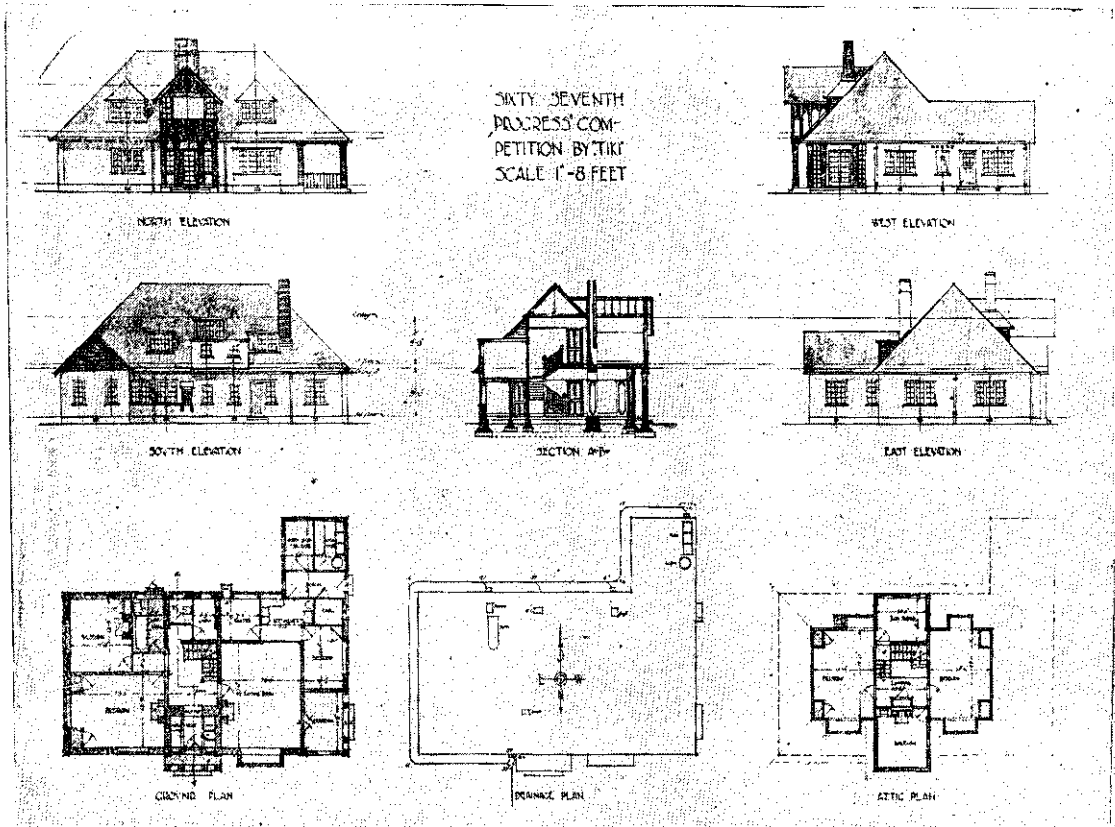
"My object, when setting this subject, was, as stated, to endeavour to obtain a plan of a house that would be easily worked, and cause the minimum amount of labour possible, consistent with comfort and aesthetic feelings of the family.

"On the whole 'Tiki' seems to conform to these requirements, and I therefore award his design first place. His elevations, too, are simple and yet effective, the massing being good and the design unaffected. The faults in his planning are very apparent, but are mostly ones of detail, which could be rectified without altering the disposition of the rooms. Shortly, they are follows:—The width of house would bring it rather close to the boundary on either side. The living room fireplace is not well placed, either for comfort or appearance,

which points should not be sacrificed for the sake of external effect. The flues also would be hard to sweep. The windows in the bay are not high enough to adequately light a room 20ft. deep. The windows on the south side of the bedrooms should all have been omitted, and dormers placed in the east and west ends. According to the plans, morning and afternoon sun is lost, and the cold south winds admitted. The whole of the south windows on ground floor should be placed higher up from the floor; they would then be far more convenient for work. The fireplace in balcony was not asked for, but evidently the omission of a semicolon has accounted for this mistake in all the competitors'

drawing would be much improved by showing the brick joints on the walls in watered ink, and indicating the roof tiles by trechand wavy lines, etc.

"'Roughcast' (placed second).—This design has many points in its favour, but the planning of the hall, passage, and landing is poor and the space wastefully great. A small compact hall looks much better than a long one, and saves a great deal of cleaning. The small bedroom off kitchenette should not be called a 'maid's' bedroom, as in such a house where no kitchen is provided it would not be possible to keep a maid. A ladyhelp or similar type would suffice, if possible to get one. The



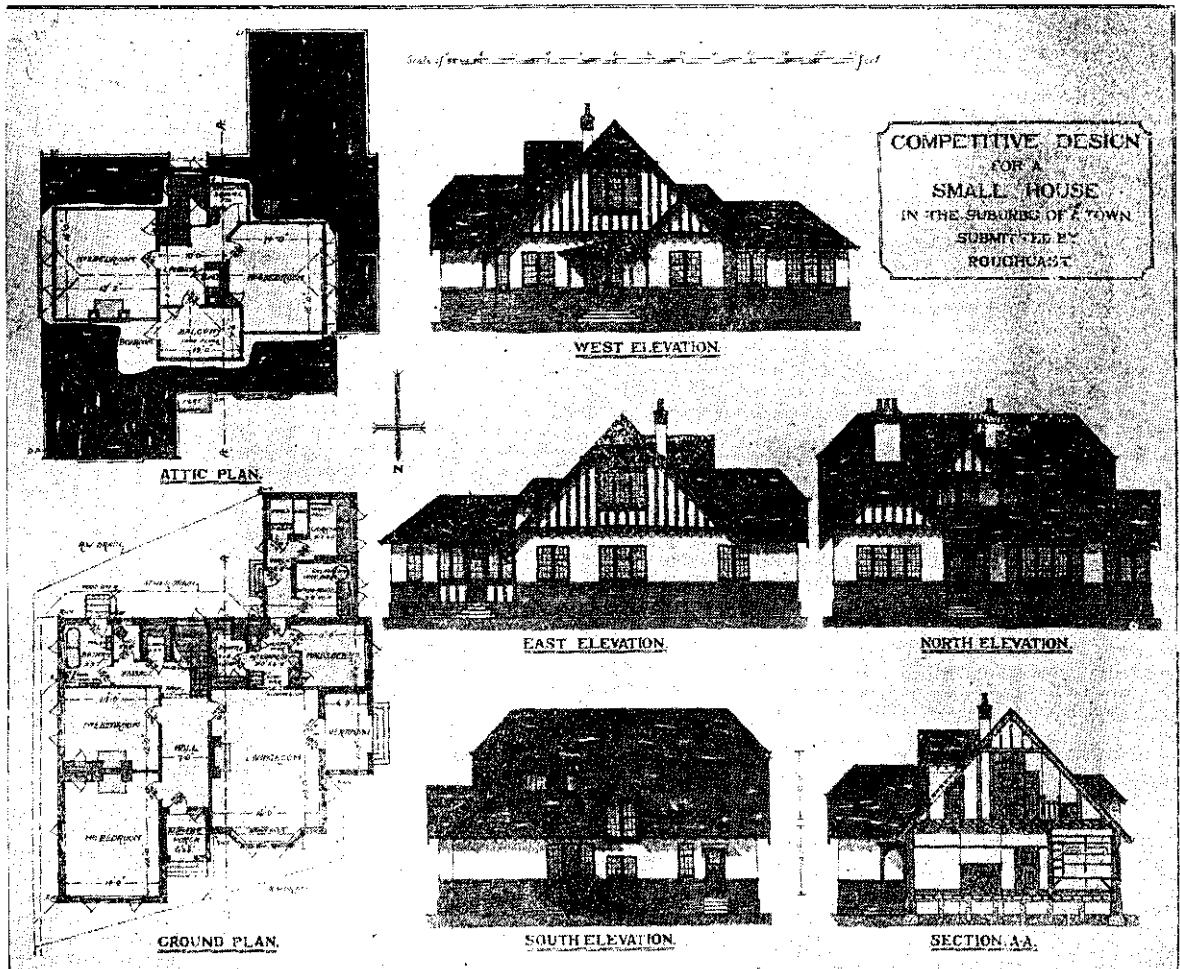
Winning design in our 67th Competition, "Tiki," by B. W. Johns, with Mr. Wm. M. Page, Lic.R.I.B.A., of Wellington

plans. The box room is much larger and higher than necessary, and has completely spoilt the back elevation. There was plenty of space in the roof, without breaking through at all. The sink asked for should have been on the landing, not the balcony. A very careless mistake has been in showing practically all the doors opening the wrong way. It is a universally accepted principle that the bed should be shielded, in place of which 'Tiki' exposes them all. It would be advisable to glaze part of the west side of the verandah, to give protection from the S.W. storms. Finally, the back porch is too wide, 3ft. 6in. being ample, and, in fact, a little ingenuity could have shortened it also. 'Tiki's'

pantry door should be close to the sliding door, or even opening off the living room, for convenience. The partition would be better in brick. The kitchenette would stand being rather larger than the condition suggested. The stair balustrade was meant to be 'close,' i.e., lined up close, with no openings for dust—(another mistake). No. 1 bedroom door is shown opening direct on to the front hall, which is not ideal, and No. 2 bedroom door is hinged so as to expose the bed. (It is advisable to show the position of all beds on the plans.) A 9 feet ceiling is quite high enough. Also the ground floor being raised 3 inches above the ground seems very unnecessary, unless floods are expected. The glazing

on the north side of the verandah would be better on the west, on account of the S.W. winds. The kitchenette and other windows on the south side are (like in 'Tiki's design) too low for convenience, the bench would be higher than the sill. There is no need for any skylights; they should be avoided wherever possible. With regard to the exterior, the conception is quite good, but the details are not quite happily worked out. For instance, the hips on the gables are not big enough—if their

"Slab."—This design also shows a great waste of space in inner hall. The vestibule is also too large, and front porch not wanted. Towel cupboard not asked for. Washhouse too big. Back porches too big. Pantry too far from living room. The positions of the beds are shown, which is a good feature; also the fireplaces are well placed. But why is the attic fireplace asked for omitted, when it could so easily have been included? Attics should have had north windows. Fireplace not



Design placed 2nd in our 67th Competition, "Roughcast," by G. Drummond, with Mr. D. G. Mowatt, A.N.Z.I.A., of Dunedin.

soffits had been brought right down to the head of the windows a more pleasing result would have been obtained. The effect of this feature on the bedroom 1 gable is top-heavy and overdone—a proper hip or gable would have been more satisfactory, even though simpler. The balcony is affectedly one sided and looks as if the lopsided feature had been somewhat forced. A symmetrical gable would look better. The drawings themselves are very good—easily the best in every way—the only little points I would criticise being the tails of the "R's" in the printing.

wanted in balcony. Large amount of space in roof not utilised, caused by large area on ground floor. The drains do not show how the storm water is disposed of. The elevations are very undeveloped. Balcony would have been better with a hip or gable roof, pent roofs not being suitable for a main feature. The drawing is very poor, the lines being too thin, and the printing weak, but this is a fault that a little more practice will soon rectify."

(Signed) BASIL HOOPER, A.R.I.B.A.,  
A.M.P. Buildings, Dunedin.

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## **THURSDAY, 16th DECEMBER.**

# 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.

## EDITOR'S NOTES.

It is with deep regret that we record the death of Sir David Hutchins, at Khandallah, on 10th November last, for it was very largely due to his coming to New Zealand, and to his energetic labours, that the great importance of Forestry to the national welfare began to be fully realised by the people of New Zealand and the Legislature. At the time of his death he was occupied on the completion of his second volume on "New Zealand Forestry," and it will be undoubtedly a loss to the cause of Forestry in New Zealand if this work cannot now be published, for, whereas his first volume dealt principally with kauri, the second was to deal with rimu and other trees better known throughout the full length of New Zealand, and consequently in use by a greater body of sawmillers and workers than is kauri, which is confined entirely to the northern part of the North Island. Representations have been made to the Commissioner of Forests by the Forestry League and the Sawmillers' Federation with a view to having the late Sir David Hutchins' M.S. and notes collected and put together, in the hope that the publication may be taken in hand by the Forestry Department as soon as possible. We sincerely hope that this course will be adopted, for, in the mass of information so carefully and laboriously collected by the late Sir David, there is undoubtedly much that would be of high value to New Zealand Forestry and the future of the sawmilling industry.

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We extend our sympathy to Mr. W. T. Irvine, who is at present rather seriously ill, and has been confined to bed for the past few weeks at Sayes Court, Wellington, where he and Mrs. Irvine have been staying for some little time. Leave of absence for two months has been granted him by the Federation, and it is his intention to take a trip to Sydney immediately the doctors will permit, in the hope that a long sea trip may again set him up in his usual health. It is probable that the unceasing work he has performed for the sawmillers of New Zealand, from the North Cape to Bluff, has largely contributed to his illness, and it will be the wish of all of them that he will have a speedy recovery and be able to enjoy the visit to Australia and a well-earned rest. Many will recall that Mr. Irvine's last holiday was spent in visiting the "Far North," and successfully persuading the sawmillers in that district to join the Federation.

There seems a doubt whether the Government intends to print the report of the Director of Forestry, Captain L. M. Ellis, which was laid before Parliament last session, and the thanks of every member of the Federation—and, in fact, of all sawmillers in New Zealand, as well as those people interested in forestry—are due to our Federation President, Mr. W. J. Butler, for his able "Digest" of Captain Ellis' exhaustive and valuable report. It is the writer's privilege to know that Mr. Butler put in a great amount of time and able thought on the "Digest," which has now been printed and circulated among the members of the Federation. The Forestry League has also secured 200 copies of the "Digest," and propose to send it to members, so that the gist of the report will thus reach a wide circle, and be of great value to both institutions by enabling them to bring forward recommendations or suggestions to help forward the work of forestry in New Zealand. The organising and "getting under way" of the Forestry Department appears to be very slow. Is it that Cabinet does not yet realise the importance and urgency of the work in hand? If so, perhaps the circulation of the "Digest" and the resultant recommendations it is hoped will be put before the Ministry by the League and Federation, will give the necessary impetus to "start the log rolling."

\* \* \*

There has undoubtedly been a feeling among those interested in forestry in this country prior to the coming of the late Sir D. Hutchins and Captain Ellis, that the sawmiller is the "natural enemy" of forestry, and that "destructive sawmilling" was responsible for the deplorably vast waste of our timber resources. "Cheap timber," and consequently timber "held cheaply" by everybody in the land has been the root cause of all the past evils in this connection, and past sawmilling methods have been the direct result of this cause. It is only the more recent greatly increased costs of production and transit and consequent higher prices that have made people realise that standing timber has value; hence the greater public interest in forestry. It therefore behoves every sawmiller to realise that the time has been reached when the whole future and perpetuity of the industry depends upon proper forestry being instituted in New Zealand, as it also behoves the people of New Zealand to realise that forestry is useless without the sawmilling industry. The forester and sawmiller are "natural partners," not "natural enemies," so let them get together as soon as may be and see to it that the laws and regula-



tions governing both are soon so framed to meet the best interests of both, and consequently the best interests of the people as a whole.

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During the absence of Mr. W. T. Irvine on sick leave, Mr. Arthur Seed (address, 153-5 Featherston Street, or Box 226, Wellington) has been appointed acting-secretary of The Dominion Federated Sawmillers' Association (Incorp.).

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A very valuable and informative article by Mr. J. H. Simmonds, of Auckland, entitled "Private Forestry," appears in the November issue of the "N.Z. Journal of Agriculture," and deals with the well-known "Homebush" plantation in Canterbury. The article is accompanied with several excellent illustrations of various species of exotics, and should be read by all who are interested in forestry and timber.

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In our last issue reference was made to the Government having chartered three vessels to bring timber from the West Coast for the Housing Department. Ill luck seems to have followed these vessels, for none has yet made a trip. The first, the auxiliary schooner "Lily," with general cargo from Wellington for Greymouth, went ashore on Kapiti Island, and has become a total wreck, while word has just reached us that the second, the auxiliary barquentine "Zita" (lately Aratapu), also loaded for Greymouth, has been towed into Nelson on fire. This vessel has been for the past few weeks endeavouring to make Greymouth, but has met a succession of westerly gales and has spent most of the time sheltering about Golden Bay. The telegram from Nelson states that it was believed the fire had been extinguished, but a previous message stated that she had been burning abaft the engine-house for eighteen hours, so the damage must be considerable. A third vessel which was under engagement to bring timber from Westhaven for the Housing Department, the auxiliary ketch Coronation, recently purchased from Auckland, also met trouble in that coming from Napier a blade of the propeller was broken by striking some floating object and she had to put into Wellington for repairs. While anchored in Evans Bay awaiting these the anchor cable parted in a recent northerly gale, and the vessel was driven ashore, but has since been refloated and is now on slip repairing the damage. These misfortunes are to be deplored, for the shortage of shipping from the West Coast is very acute, as is also the shortage of timber at this end.

### Bush Tramways.

The following Parliamentary news item of the latter part of the session will be of interest to all sawmillers:

The Tramways Amendment Bill, which provides for the inspection of bush tramways, constructed on

private land, was before the House of Representatives recently. Power of inspection is not held by the Government at present, and some accidents have occurred owing to deterioration of material. The Bill provides also that the Minister may issue regulations for securing the safety of passengers, tramway employees, and the general public with respect to any public or private tramways.

Mr. R. W. Smith (Waimarino) suggested that many regulations would be apt to hamper the sawmillers, who would often put down a short line, get out the timber, and lift the line again in the time that the procuring of a permit from the Department would occupy. He approved of the provision for inspection.

The Minister of Public Works (Mr. Coates) said he proposed to simplify the Bill by cutting out the provision for the licensing of private tramways and substituting merely a clause authorising inspection.

The Bill was passed.

### Companies Registered.

Rotoiti Timber Co., Ltd. (The). Registered October 27, 1920. Office: Wellington. Capital: £75,000 in £1 shares. Subscribers: Rotorua—J. J. O'Brien. Bulls—R. A. Wilson. Taihape—R. W. Smith. Wellington—W. H. Rose, G. Fitzgerald, E. M. Boulton, all 1 share each. Objects: To acquire leases and timber rights held by Auckland Rimu Timber Co., Ltd., and W. D. T. Steele, timber millers. (Wellington, 104/20)

Waione Timber Co., Ltd. (The). Registered as a private company October 28. Office: Wellington Road, Marton. Capital: £10,000 in £1 shares. Subscribers: Marton Sash, Door and Timber Co., Ltd., of Marton 9980 shares, R. A. Wilson, Sir J. G. Wilson, H. G. R. James, J. A. Bush, J. Gordon, C. P. Mather, W. H. Larkin, E. Hutchins, A. Munns, N. Wilson, L. M. Taverner, L. Gordon, F. Purnell, D. Wilson, Lady A. Wilson, G. H. Wilson, L. M. Hutchins, S. Gordon, L. C. Purnell, G. H. Denbow, all 1 share each. Objects: Timber merchants, sawmillers. (Wellington, 105/20)

### Empire Forestry Association

The Empire Forestry Conference passed a resolution in favour of the formation of an Empire Forestry Association for the promotion and development of public interest in forestry throughout the Empire, and it also appointed an interim committee to consider ways and means (says the "Dominion"). This committee has drawn up proposals for circulation for all parts of the Empire, for the establishment of a governing council for the association, and for the formation of an interim executive committee. It is held that in view of the vast area embraced the association's activities, apart from occasional conferences, must take a literary form, and its principal medium of communication would probably consist of a quar-

terly journal. A publication of this kind, dealing with the needs, problems, and progress of forestry in all parts of the Empire, should, it is felt, be of great interest and practical value to foresters, students of forestry, and owners of woodlands, as well as the architects, engineers, and traders interested in the distribution and use of timber. It would also afford an opportunity for an exchange of views between those working in widely distant fields.

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## State Forests.

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### REORGANISATION OF CONTROL.

Important events have happened lately in the New Zealand forests, or rather in the circumstances affecting them. In the past two years over 5,000,000 acres of land under the administration of the Lands and Survey Department have been gazetted as provisional State Forests and placed under the administration of the Commissioner of State Forests (now Sir Francis Bell). The total area thus designated is now close upon 7,000,000 acres. Some of the land carries no forest; on some of it the timber is at present of low value; but within the total is comprised a very large proportion of New Zealand's useful timber resources.

Among the commodities of which New Zealand has a short supply, and for which the demand is clamorous, timber takes a first place; and one of the most important functions in the system which the Forestry Department has laid down is the organising of a proper and efficient method of increasing this supply. The recently-appointed Director of Forests, Mr. L. Macintosh Ellis, has prepared and had approved by the Commissioner a scheme for the organisation of a skeleton staff more in proportion to the magnitude of the task than the existing one. At present the Department has only about a dozen officials directly concerned in active forestry work. The scheme comprises the division of the Dominion into seven forest regions. The head office will remain in Wellington, but control will be considerably decentralised in the hands of a conservator of forestry in each region. The regions will be divided into districts, each of which will be in charge of a ranger.

The first aim of the Department is, in brief, to make the best use of the timber resources. It is estimated that at present only about 25 per cent. of the timber cut or destroyed is used; and that by proper means this proportion could be increased to 65 per cent. The great loss is occasioned largely by public ignorance of the properties of the native timbers—ignorance for which they cannot be blamed, because very little serious research has yet been made in the matter. A case in point is that there is a large supply of Southland beech (the so-called "birch"), which is an admirable timber for many industrial purposes, but is, as yet, not widely used. Another aspect of the same subject is that certain manufacturers are importing English

timber for special constructional purposes, because their designers have ample information about these timbers, but no authoritative data about equally suitable New Zealand woods. An effect of this ignorance is that many timbers which are now wasted or deliberately destroyed, would, if their properties were known, go into employment, and release a large quantity of building timbers for their best use. Proper measures to test the economic qualities, as well as the rate of growth, of all native timbers are to be made by the Department, and if the results come up to expectations the effect will be to meet much more freely the cry for timber for houses. The work is already in progress in the kauri country by Mr. McGregor, of the Auckland University, and in Westland by Mr. Foweraker, of Canterbury College. In view of the prompter results likely to be secured, this research work is regarded as of high importance. It is as vital as a replanting policy, because the unnecessary wastage now going on is greater than the gain due to planting. Describing the Department's intentions, the Director stated to a "Post" representative that the general idea is "first, to house-clean, and bring order out of chaos; and to dispose of the now available timber in the most businesslike way." Cultural measures, so far as native trees are concerned, cannot proceed for some years, because it is not yet known what methods can best be followed. These will be studied by those in charge of the research work.

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## The Impending Shortage of Softwood.

Frequent reference to the need for greater supplies of softwoods has been made in *The Australian Forestry Journal*, but the subject is of such vast importance to all concerned in the production or use of timber, that no excuse is needed for again writing on the same lines. It is a matter of world-wide concern. Unfortunately writing will not improve the conditions; but it is only by constant urging that the full moment of the question can be ventilated to such a degree as to ensure that steps are taken to effect a remedy in as near a future as may be. There is no doubt about the existing shortage of many classes of timber, but in the matter of softwoods it is already very serious and the experience of to-day is but a preparation for what is yet to come.

The best evidence of the condition of the supply is, perhaps, that afforded by the soaring scale of prices in the Australian market, and of these striking testimony was given recently before the Fair Profits Commission in Melbourne. Mr. E. H. Clark, of Rosenfeld, Hillas & Co., Pty., Ltd., stated that prices of redwood had ranged in 1914 from 22s. to 24s. 6d. per 100 superficial feet; in 1917 they had increased to 32s. up to 35s. 6d.; last year from 35s. to 54s., and recent shipments had risen as high as 93s. per 100 superficial feet. Quoting the market

for Baltic pine, the same witness said the rate had risen from 10s. in 1914 to 28s. 9d. in 1920, and shipments due in March or April next would probably be about 32s., and this state of affairs must continue for some time. It is claimed that these prices are controlled not by the measure of profit made by the Australian merchant, but by the price fixed overseas and the cost of freight, while in business with the United States there has been the added expense of ruinous exchange. But, whatever the cause may be, the fact remains that the Australian consumer is the sufferer—wherever timber is used in building and construction or in manufacture the purchaser has many times more to pay than he had in normal times before the war, and as the Fair Profits Commissioner in Victoria remarked, the prospects offer cold comfort for the building trade so far as imported timber is concerned.

Another question is that of the supplies coming from other countries. Admittedly Australian forests cannot give the softwood required for domestic purposes—that is a well-known condition—and the softwood now growing must be conserved with never-failing consideration to increasing our resources in years to come, apart from any relief that may be obtained from vigorous afforestation policies. Therefore the importation of timber must continue, and Australia must be at the mercy of other countries which are more favourably situated for the time being. Yet, here again, we find that according to all records the war demand has seriously depleted the forest of Europe and of the North American continent, thereby creating a condition of competition in which there is not any great anxiety to send the valuable and much-sought-after cargoes on the long journey to Australia when there is a ready market much nearer at hand in Great Britain, France and Belgium. In this connection it is interesting to follow the statistics of imports for a period of ten years, such as given in the last Annual Report of the New South Wales Forestry Commission. From that authoritative source the following figures are quoted:

## IMPORTS.

Year.	Superficial feet.
1910-11 ... ..	156,893,170
1911-12 ... ..	175,512,627
1912-13 ... ..	219,064,874
1913-14 ... ..	165,642,479
1914-15 ... ..	175,412,864
1915-16 ... ..	124,266,616
1916-17 ... ..	125,975,727
1917-18 ... ..	126,275,588
1918-19 ... ..	86,686,910
1919-20 ... ..	86,636,780

As the quantities have decreased the values have rapidly increased—so much so that, without going into a long series of figures, it is found that in 1919-20, when the quantity imported was 50,200 superficial feet less than in the previous year, the

value of the cargoes was £372,000 more. That puts the story very tersely.

The only solution of the difficulty is, of course, a vigorous policy of afforestation—a policy of progress which should be bounded only by the extent of suitable land available for planting and the financial resources of the Forestry Commissioners. It has not, however, been easy to obtain suitable areas for planting in accessible localities, as some of the most attractive lands are included in mining reserves, the development of which by the growth of forests is strongly objected to by other Government Departments. The position is, nevertheless, becoming desperate, and the need for making unproductive land productive will, it is hoped, be better realised and objections will be withdrawn. The New South Wales Commissioners have made strong representations to the Government, and in anticipation of more favourable conditions have, as a preliminary measure, sent a trained officer to America and Europe to acquire knowledge upon some of the problems of afforestation concerning species to be introduced.

### Paper from Wood Pulp.

As a result of representations by the Auckland Forestry League, a Commission is to be appointed by the Government to inquire and report as to the manufacture of paper from wood pulp in New Zealand (states the Auckland "Herald"). In a letter to the Mayor of Auckland, the Minister of Industries and Commerce (the Hon. E. P. Lee) states that now the Parliamentary session is over, he proposes to go fully into the matter with the Board of Trade, with a view to inquiry being made into paper manufacturing and other industries for which, from the efficient treatment of existing forest areas and their energetic extension, adequate supplies of raw material would be available. He adds that in view of the condition enlisting as to prices and scarcity of paper supplies, it is recognised that the inquiry should be urgent. During the war the National Efficiency Board made fairly comprehensive inquiries into the matter. As a result, inquiry had been made from abroad by interested parties in the South Island as to the possibility of securing the necessary machinery for the manufacture of paper from wood pulp. The Department was advised that the cost of machinery at present was prohibitive. Though inquiries were still being made, it was not considered wise to start the industry at present, in view of the very heavy prime cost of establishing it. The Department, however, would continue its investigations, and the Minister hoped to be in a position to publish the result next session of Parliament.

"The transformation of productive forests into idle wastes impoverishes the nation, damages the individual, is wholly needless, and must be stopped."

## Our 69th Competition.

We offer a prize of £1 is. for the best design for a  
**GOLF CLUB HOUSE**

for a nine-hole course in a country district. Membership 100—75 men and 25 women. Club house about 75 feet from main road, which runs at right angles to front of building. First tee, 200 feet from road on an axial line running through centre of building from road. This axial line is due north and south—first tee pointing to north.

Accommodation.—Entrance hall, small office for secretary, two lounge rooms (one for men and one for women), common dining room, kitchen, scullery, necessary larder accommodation, etc., and lavatories for staff. Changing rooms, with lockers for men and women, with lavatories. Large loggia. Heating by open fires. To be planned on one or two floors, as desired.

Materials.—Any materials other than wood.

Cost.—Reasonable economy to be aimed at.

Drawings.—One-eighth inch scale in ink. Plan or plans: four elevations and one section. Block plan to small scale showing area from road to first tee by about 200 feet wide, laid out in some simple orderly manner.

Design.—English domestic. Competitors who display character and good taste in design will gain ascendancy.

Mr. S. Fearn, of Wellington, 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 "Sixty-ninth" Competition on outside, with a covering letter giving competitor's name, and address of employer. Designs must be sent in by December 27th.

## 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 com-

plete 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.

### The Pinus Insignis.

Mr. J. C. D. Hay, Forest Guard, Moss Vale, forwards particulars of two pinus insignis trees which were planted 29 years ago at Bundanoon, five miles from the Penrose State Forest. Not only did the sawyer, Mr. Tooth, remember distinctly the plant-

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ing of the trees, but also a count of the annual rings showed that the calculation as shown by the sections were correct. The total quantity of sawn timber contained in boards up to 15 inches in width which were yielded by the two trees amounted to 1,700 super. feet, giving an average of 850 feet per tree.

The owner desired to keep the timber for his own use, but it could have been marketed locally for 35s. per 100 super. feet, so that the value of the sawn product was £29 15s. This works out at over £14 10s. for a 29-year-old tree, or roughly 10s. per year. The standing value of the trees before conversion would not be less than half of this, so those who had sufficient interest in trees to plant them extensively in earlier days have now an asset of considerable value.

This very fine development per tree may not of course be accepted as a measure of the growth to be expected under forest conditions, for the trees in question were growing in isolated positions and consequently made much faster growth than is possible for each individual tree in a close plantation.

## Building Notes.

### AUCKLAND.

Building operations in the Mount Albert district are being actively pursued. The building inspector for the borough reported to the Borough Council that for the three weeks ended November 25 permits had been issued for the erection of 12 dwellings valued at £10,760, and two motor-garages valued at £95. Permits for alterations and additions to dwellings for the period amounted to £129. In the period from April 1 to November 21 a total of 95 permits for the erection of dwellings had been issued, the value of the buildings being estimated at £81,560.

The building occupied by the Bank of Australasia, at the corner of Queen Street and Wyndham Street, has been acquired by the Government. The purchase price was £32,000, and the building is to be used by the Auckland office of the State Fire Department. The property has a 26ft. 5in. frontage to Queen Street, and a 52ft. frontage to Wyndham Street. The building, of five storeys, is practically new, having been erected about five years ago.

The Bank of Australasia in March last purchased from the Goodfellow estate the buildings occupied by the National Bank of New Zealand, on the opposite corner of Queen and Wyndham Streets, and other buildings extending to His Majesty's Arcade in Queen Street, and to the Eldon Chambers in Wyndham Street. This block has a frontage of 133ft. to Queen Street and 103ft. to Wyndham Street, and the purchase price was £122,500.

The National Bank of New Zealand has new premises in the course of erection in Shortland Street, but it does not expect to be able to occupy these premises for about two years. Immediately the National Bank vacates its present building the Bank of Australasia will move into it.

The Auckland Education Board, through its architect, Mr. John Farrell, invites tenders for the erection of a Technical School Building (in wood) at Te Awamutu; also for the erection of a School at Paraheka (near Aria, Ohura County), and for the removal of, and additions (in wood) to, the Mangatete School (near Awanui). Tenders in each case close on December 21st., at noon.

### BLenheim.

Tenders are invited for the erection of a Medical Officer's residence (in concrete and wood) at the Wairau Hospital, Blenheim.

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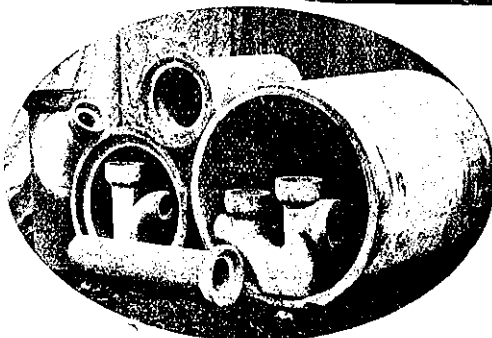
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## CHRISTCHURCH.

A promise has been made by the Minister of Education, the Hon. C. J. Parr, to provide funds to re-build West Christchurch School. The question of re-building this school had been under consideration for a year or two, said he, in a recent visit. He had in mind a building more of the central school type, which was coming into vogue in other countries, giving a post primary class in addition to the ordinary classes. The Department should have no hesitation in deciding to make West Christchurch a school of such a type. The question of the type of school to be aimed at had been responsible for the delay regarding the re-building of West Christchurch, and he now proposed to send the Department's architect down to confer with the Board's architect. If the Education Board assured him that that was the most urgent work in Christchurch, he would treat it as such, and begin work at West Christchurch.

Tenders are invited up till noon, Saturday, December 11th, for the erection of Freezing Works at Washdyke, near Timaru, for the Co-operative Freezing Company of South Canterbury, Ltd.

The Christchurch Tramway Board invited tenders for the erection of new Repair Shops in Moorhouse Avenue, tenders closing on 2nd December.

City building permits issued in October totalled 53, representing a value of £42,376. For October last year the permits were 45 and the value £35,935. Since April 1st the permits total 342 and the value £266,187.

The Combined Buyers, Ltd., through their architect invite tenders for business premises in Oxford Terrace. Tenders close 15th December.

## TE AROHA.

Mr. A. D. Snedden, of Hamilton, representing the housing branch of the Department of Labour, has been in Te Aroha arranging for a local firm of contractors to commence the erection of six workers' dwellings on the Department's land in Fma Street, Te Aroha.

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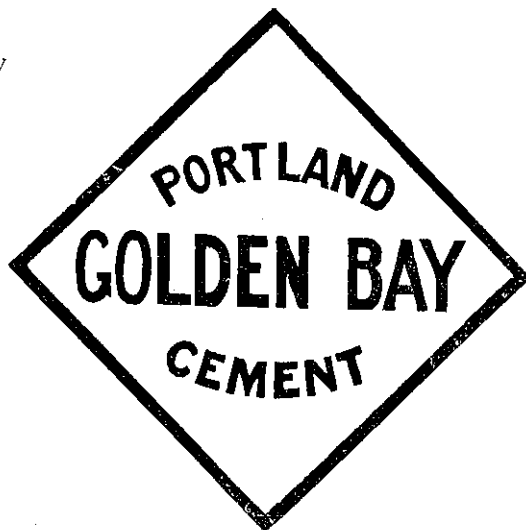
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CANTERBURY AGENTS

## TE AWAMUTU.

The Te Awamutu Borough Council is experiencing a difficulty in raising a loan of £2500 for the purchase of a site for municipal offices. At the last meeting it was reported that the State lending departments had all refused to entertain the application, and that the bankers had similarly refused to take up the debentures. Other negotiations are in progress.

Considerable difficulty has been experienced in the operation of a system for the provision of municipal dwellings, for which purpose a loan of £10,000 was raised several months ago. The Council originally arranged to make advances to approved applicants, but now it transpires that the Council must itself build the residences on its own land. The position is further complicated by the fact that at least one of the applicants for an advance has his building nearing completion. The Council decided to confer with the applicants and set the position before them.

## TIMARU.

A Timaru deputation recently asked for some definite action to be taken by the Department in regard to the Timaru Technical School. The Board of Governors, it was stated, had received an offer nearly two years ago of a site of four acres for a new Technical School, the conditions being that the building should be commenced within two years, and that offer expired next May. The Minister stated that the Department had some time ago decided upon a course of action whereby the Education Board, which was using the present buildings at various times during the week for manual training, would vacate the buildings, and new workshops and manual training buildings would be built. The Education Board had approved the scheme, but had since been the subject of "gentle pressure" by the Technical Board, and was now not so warm in its approval. The Department was of opinion that the scheme would prove sufficient for the Technical School for many years to come, and for the main school for a very considerable time. It would cost about £6236, while the new proposal would run into about £10,000 or £12,000. He was prepared to go on with the Department's scheme to-morrow.

## WELLINGTON.

The Public Works Department invites tenders, closing December 13th, 1920, for the erection of a new Post Office at Eastbourne.

Tenders are invited till noon of Thursday, 9th December, for the erection of extensive additions to Victoria University College, Wellington.

## Engineering Notes.

## AUCKLAND.

The Public Works Department invites tenders, up till noon on February 11th, 1921, for the Mangahao Pipe Line.

The Auckland Harbour Board invites tenders for the supply and delivery of 100 turpentine piles for Western Wharf, lengths 55 to 65 feet.

The Public Works Department invites tenders up till 14th December for the supply of Australian mixed hardwood sleepers.

## NEW PLYMOUTH.

The New Plymouth Borough Council invites tenders, closing at noon on Monday, December 20th, for the supply and delivery of Valves, Screens, Sluice-gates, etc., required in connection with hydro-electric extensions.

The time for receiving tenders in connection with Contract No. 4, Valves, etc., by the New Plymouth Borough Council, has been extended till noon, 18th January, next.

A proposal to raise £60,000 for extensions of the electric light system at New Plymouth was carried by a majority of 500 votes.

## WELLINGTON.

The Railway Department invites tenders, closing January 3rd, 1921, for the supply and delivery of Motors and Sub-stations for Frankton Junction.

The Wellington Harbour Board invites tenders for Contract No. 170, Thorndon Breastwork (reinforced concrete). Tenders close at 5 o'clock p.m. on Wednesday, December 22nd, 1920.

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