Long Life

S ASSURED to your Roof if you cover it with a material manufactured from ingredients selected with the utmost care, after searching scientific tests, and combined in a manner that has been proved satisfactory after exhaustive and long-continued experiments.

Certain-teed

Roofing is made under the above-mentioned conditions in the most extensive factories in the world, devoted exclusively to the making of roofing materials.

CERTAIN-TEED Roofing is a combination of mineral asphalts and selected cotton rags, and is put up in convenient sized rolls, ready to lay—1, 2 and 3-ply in thickness.

The only tools required for laying **CERTAIN-TEED** Roofing are a pair of hands, a hammer and a knife.

Samples and Literature concerning CERTAIN-TEED will be freely posted to anyone interested by

JOHN CHAMBERS ® SON Ltd.

Fort Street (Head Office)

Jervois Quay

-

AUCKLAND WELLINGTON

Lowe Street

GISBORNE

200/2 St. Asaph Street

CHRISTCHURCH

Stuart and Cumberland Streets

DUNEDIN

N.Z. BUILDING PROGRESS.

DIRECTORY

OF SUPPLIERS OF MATERIALS, &c., &c.

We frequently get enquiries from Architects, Builders. Engineers, &c., asking for names and addresses of suppliers of specialities connected with the various trades. Suppliers frequently assume that because they send out a printed circular or make a call now and then on users, that they have done all that is necessary to "keep the users' memory green." This is quite a mistake. The User must have instant and ready means of reference to some reliable source of information that he sees regularly.

This is why we have started this "Directory" to which hundreds of our clients refer almost daily. If you are a regular advertiser with us, your name goes into the Directory free of charge. If not, write us for terms which are nominal,

Architectural Works-

"Progress" Publishing Dept., 10 Willis Street

Baths-

Hargreaves, Jas., Auckland

Bricks-

Glenmore Brick Yards, Hillsborough, Christchurch

Building Stone—

Wilson, J. & A., Ltd., Buckle Street, Weilington

Buying Agents (English)-

Wm. Wilson & Sons, Abehurch Lane, London, E.C.

Cement Pipes-

Cement Pipe Co., Masterton

Cement-

Craig, J. J., Ltd., 100 Queen Street, Auckland Golden Bay Cement Coy., Nathans' Buildings, Wellington Reese Bros., Christchurch. Chote, W. A., Farish Street, Wellington

Cement (Waterproofer)—

"Pudlo," Paterson & Robertson, Auckland.

Concrete Paint-

Holmes, Francis, Woodward Street, Wellington; Lichfield Street, Christchurch

Directory-

H. J. Clark, 46 Morgan St., Petersham, Sydney, Australia

Fire Bricks-

Tyneside Proprietary, Ltd. Customhouse Quay, Wellington

Electrical Equipment—

Tolley and Son Ltd., Chew's Lane, Wellington.

Glass Manufacturers—

Pilkington Bros., Ltd., C/o F. Butcher, P.O. Boy 1094, Auckland.

Hotels-

McCarthy's Family Hotel, Taugo Quay, Wangapal

Leadlights—

Bradley Bros., 782 Columbo Street, Christchurch

Patent Agents-

Baldwin & Rayward, Auckland, Wellington, Christehurch and Dunedin

Photographers—

Bartlett, W. H., 10 Willis Street, Wellington, and Queen Street, Anckland

Roofing Tiles and Slates-

Briscoe and Co., Ltd., Auckland, Wellington, Christehurch, Dunedin and Invercargill

Chambers, John & Son, Ltd., Auckland, Wellington, Gisborne, Christchurch and Dunedin

Gualter, Aubrey & Co., Featherston Street, Wellington Redpath and Sons, Ltd., Christchurch, Wellington, Auckland

Steel Construction-

Burt, A. and T. Ltd., Auckland, Wellington, Christchurch, Timaru, Dunedin, Invercargill

Timber Merchants-

Leyland O'Brien, & Coy., Auckland

Waterproofer for Cement ---

" Pudlo," Paterson & Robertson, Auckland

Mention of "Progress" when writing ensures prompt attention

N.Z. BUILDING PROGRESS

Published Monthly by the Proprietors, Harry H. Tombs Ltd.

8 Farish Street

Wellington, New Zealand

TELEPHONE 1651

P.O. BOX 481,

Annual Subscriptions:—To any address 8/6 post free, single copies 9d. Note: 1/- will be allowed on this account if paid in advance.

Remittances should be made by Post Office or Money Order. All cheques, plus exchange, to be made payable to Harry H. Tombs I.td., and sent direct to P.O. Box 481, Wellington.

All communications to be addressed to "The Proprietors, Progress," Box 481, Wellington."

Advertising Rates will be sent on application.

To Our Advertisers—All copy for advertising matter must be in our hands by the 10th of the month preceding publication, otherwise no responsibility with regard to insertion will be undertaken.

The Editor will at all times be glad to receive Illustrated Articles on subjects of interest for consideration, provided the articles are short and to the point, and the facts authentic.

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

In case of change of address, or irregularity of this paper's delivery, subscribers should send immediate notice.

Publisher's Announcements.

Our 64th Competition.

We offer a prize of £1 is, for the design adjudged to be the best for

A Six-Roomed House

with ground and first floor to be built on a flat suburban section with 150 feet frontage to a road running along its southern side. The materials to be used for outside walls to

section win for the materials to be used for outside walls to any of the following:—Entirely brick; Brick covered with plaster or finished in any suitable manner; Brick plastered (rough or smooth) with quoins or facings of brick; Concrete plastered or finished in any other suitable manner; Concrete and brick combined. Hanging tiles or slates may be used in the gables or elsewhere. Partitions to be shown 6 inches thick. Roof to be covered with tiles or slates. The rooms, etc., to be approximately of the areas given below. Heights of ground floor to be 10 feet for main rooms, for first floor they are not to be less than 9 feet over half their area.

Drainage into sewers (public), rain water into pits. The design for front fence, or wall, with gates (single and double) to be shown. Verandah en North side only. Bay windows or portico at the option of the designer.

Sizes:--Hall not less than 7 feet wide. Staircase not less than 3 feet wide. Drawing room about 300 square feet exclusive of window recesses. Dining room about 144 square feet. Kitchen 120 square feet. Scallery about 100 square feet. Bed room No. 1 same size as drawing room. Other two bed rooms not less than 170 square feet each. There must also be a sufe, store room, bath room, W.C. (separate from the bath room), linen closet, etc. The laundry and outbuilding need not be included. Drawings to be to linch scale, finished in ink.

Mr. F. de J. Clere, F.R.I.B.A., of Wellington, has kindly set this subject.

Designs must be sent in finished as above, under a nonde-plume addressed to "Progress," S Farish Street, Wellington, and marked clearly "Sixty-fourth Competition" on outside with a covering letter giving competitor's name, and address of employer. Designs to be sent in by July 21st.

Conditions of "Progress" Competitions

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.

NOW PUBLISHED!

The Lighting of Picture Galleries and Museums

By S. HURST SEAGER,
F.R.I.B.A.

Price:

ONE SHILLING & SIXPENCE

Send Postal Notes direct to the Publishers:

HARRY H. TOMBS, Ltd.,

8 Farish Street - WELLINGTON

NOTICE!

TO OUR READERS.

The Publishers of "N.Z. Building Progress" announce that from and after the June issue, owing to the enormously high cost of paper, the price of "Progress" will be 9d. per copy, or by subscription, paid in advance, 8/6 post free per annum.

PILKINGTON'S

BRITISH MADE GLASS



POLISHED PLATE and MIRRORS
SHEET WINDOW GLASS
FIGURED ROLLED,
ROUGH and ROLLED PLATE
PATENT FIRE RESISTING WIRED
GLASS

PATENT PRISMATIC ROLLED GLASS (for lighting dark interiors.)

REPRESENTATIVE :

Mr. Fred. Butcher

ETP. 0. BOX 1094. AUCKLAND.

PILKINGTON BROS., LTD.

GLASS WORKS

ST. HELENS .. ENGLAND.

Dominion Insulators

Made in the Dominion by Dominion Workmen from Dominion Clay. . .

Tested and used by Public Works and City Councils.

Quality equal to imported article

For Prices and full Particulars apply to

J. A. Redpath & Sons

LIMITED

181 CASHEL ST. - - CHRISTCHURCH N.Z.

Why Use Wooden Laths on Exterior Walls?

Why make a Cavity Wall when you can make a Stronger Solid One?

Simply paint on **R.I.W.** (Remember It's Waterproof) **No. 232** on the interior of exterior walls and put on your lime and hair mortar. The **232** binds the mortar to the brickwork like glue binds wood. No damp will get through, It is a permanent job.

Bostwick Trussloop Metal Lath

makes fireproof partitions and ceilings on wooden studs and joists.

FRANCIS HOLMES

10 Woodward Street

P.O. Box 418

OR

Phone 208

138 Lichfield Street

P.O. Box 460

CHRISTCHURCH

Phone 2395

WELLINGTON

"Truly an Art that can bring a living individual before our eyes, is a great Art."

ENLARGED PORTRAITS of SOLDIERS

BY

BARTLETT

ARE LIFE-LIKE, and in every sense faithful likenesses of the ORIGINALS.

We do not employ Canvassers, so kindly call or write direct for further particulars—you will save commissions and get better work,

 $||\mathbf{W},\mathbf{H},\mathbf{B}||$ artlett,

Only ONE Address:

Photographer,

QUEEN STREET

AUCKLAND

N.Z. BUILDING

PROGRESS

(With which is incorporated "The Scientific New Zealander")

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

Editor: Chas. E. Wheeler.

PRICE 9d. per Copy; 8s. 6d. per annum post free.

(Note: Is. Discount allowed if paid in advance.)

Wellington, Auckland, Christchurch, and Dunedin, New Zealand, June, 1918.

Contents for June

Directory	••••		Paga 218
Publisher's Announcem	ents		219
Editorial		,,,,	221
The Summit Track on Christchurch-By Ro			223
The Boys' Institute, We	ellington	••••	226
Some of France's New	Homes		228
Australian Town Plan			230
Corporal P. E. Holst			231
Architect's Gift			231
New Timber Mill for M Timber Co., of C			232
New Building Regulation	ns in Syc	lney	232
High Tension Insulators	S	••••	233
Correspondence		1+7+	233
Patents of Interest to Br	uilders		234
Building Notes			236

Editorial Comment

"National" in Name. The recent batch of nineteen appointments to the Legislative Council shows how hopelessly alienated polities is from honest everyday business.

We are supposed to be stimulated to high patriotic sacrifice by the sight of party politicians thrusting their party squabbles behind them for the period of the war, so that all may unite under the National banner in the only duty which matters to-day. The National Government stands, we are told, for unity, and the temporary sacrifice of political ambitions. Yet, when it came to making nineteen nominations to the Upper House, how was the process conducted? Did the Government look around for the best business brains to help in guiding the nation's affairs in a time when business administration is proved to be one of the great war-winning factors? Did the National—save the mark! Government put its composite head together to find out some people who, by reason of organising ability shown in war service have won the right to recognition from the State? No, the Government simply resolved itself back into its old party shape, each side nominating a man, until the list was full of the political rubbish—the rejects—of both Reform and Liberal camps, and His Excellency the Governor was then advised to "call" these estimable party hacks to a sphere which they had failed to reach or to hold by the right of the people's votes. If there is any value in the nominative system at all, it is in the fact that it gives governments power to call to the nation's counsels men of ideals and constructive capacity who lack the talent for wooing demos, but who become excellent servants of the democracy so long as they have not to stand for election against more experienced ticklers of the public car. In failing to live up to the high national ideal for which it is supposed to stand, the National Government went down a hundred per cent, in the estimation of the business community, which now realises, and

declares emphatically, that politicians form a class apart from the useful people of New Zealand, and the useful people are glad not to be too closely associated with them.

The State as Employer. Among a number of important war pamphlets sent to New Zealand by the British Minister of Information is a very valuable brochure on the work of British Workshops for the war. The story it tells of business

organisation in the face of huge and growing tasks is one to make business people proud of their class. England has not been backward in honouring her great business men, and her notable recognition of their war service makes the New Zealand Government's recent failure to take a good opportunity of doing this makes our so-called National Government look very pitiable and mean. It would take too long to even summarise every phase of organisation described in this small booklet, but we turn with great interest to what the writer, the Rt. Hon. Chrisotpher Addison, P.C., M.P., has to say in regard to the State's relations with its great industrial army, for this experience is bound to have an effect on New Zealand's future after the war. Under the Munitions Branch, national factories and "controlled" industries have run during the war with only one-third the number of disputes experienced before the war, notwithstanding the enormous increase in the number of workers, and the stress of war production. "One day," says the author "you are confronted with a demand for acroplane workers, another day it is augmented production of chemicals for smoke clouds, another day it is acetylene welders that are wanted for bombs or mines, another day it is workers in T.N.T. and poisonous compounds, then it is a demand for long-range guns, then for agricultural tractors, then for iron-ore workers, and so on and so on, requiring ever-changing adjustments and improvisations-time-rates, piece-rates, movements of labour and all the rest of it. We face our critics without apology, and we shall find, I believe, that in the rates of pay of women workers, in the reduction of the hours of labour and in humaner methods of employment, as well as in many other directions, the Labour Department of the Ministry of Munitions has made an enduring contribution of high value towards our industrial methods."

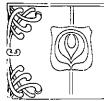
Problems of Reconstruction. Very hopeful is the outlook of the Rt. Hon. Christopher Addison as a result of his experience of the State as an employer. He puts his finger unerringly on the weaker spot in in-

dustrial relations when he states: "Nothing in the relations between Capital and Labour gives rise more to difficulty and distrast than two customs which are dependent upon one another. The first is the cutting of the rates of pay on piece work so as to limit the rise of earnings when improved methods of manufacture, leading to a great output, are introduced. It is not the practice of the best employers, but it is adopted by many. This practice—or the fear of it—has inevitably led to the second and retaliatory practice of the restriction of output. The influence of

these two practices in our industrial life is thoroughly poisonous. We must establish a system whereby both parties have a direct interest in the introduction of improved methods. Without it our progress will inevitably be accompanied by endless disputes. The accounting side of the Ministry has abundantly proved that modern methods of production are not only well able to afford good wage rates, but are benefited by so doing." This is exactly what we have been long preaching, for America's example in the metal manufacturing industry shows clearly that high wages are not a bar to world-wide success. The war has done good service to British industry in forcing the scrapping of slow, out-ofdate machinery and creating a broader outlook in the minds of capital and labour. Perhaps New Zealand manufacturers will also learn the lesson that high wages and good machinery mean capable workers and a big output, and that protection is not likely to be swallowed if it is simply used to bolster up inefficient plants.

Extensive Town Planning. Though the war at the time of writing does not give promise of an early evacuation by the Germans of the rich and fertile lands of northeast France and Belgium, the people

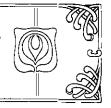
of those countries, with the magnificent spirit which they have shown throughout the struggle, have set about the plans for reconstruction in thorough earnest. One of the most attractive and appropriate schemes, which originated in America, is to make some city or district in the United States responsible for financing the reconstruction of the dwellings in some particular area devastated by the Hun. The extension of this principle can go on indefinitely, and unfortunately the need is so great, that this form of organised private generosity will not meet the whole situation. The Governments concerned have already laid out the main plans of reconstruction, and we shall see town planning come into action on a vast scale, which will provide the world with an object-lesson of the value of this science. Already the French Minister for the Interior has had an investigation made concerning the supplies of building materials likely to be available for reconstruction purposes at the conclusion of peace. Among the materials thought to be available in sufficient quantities are stone, lime, sand, tile, building hardware, and wall paper; while lime, iron piping, street paving materials, and sandstone may also be secured in France. In the groups of materials in which there may be a shortage are plaster, timber and lumber, slate, structural iron and steel, heavy hardware, tin, zinc, lead plumbing supplies, pumps, sanitary appliances, heating apparatus, paint and glass. The necessary steps are to be taken to encourage the larger production of those materials by the resumption of operations in plants that were shut down; the exploitation of mines and quarries; the re-opening and improved equipment of brick yards, tile works, and establishments engaged in the manufacture of lime and cement and other basic building materials, and the adoption of measures to increase the available supply of labour.



THE SUMMIT TRACK

On Port Hills, Christchurch

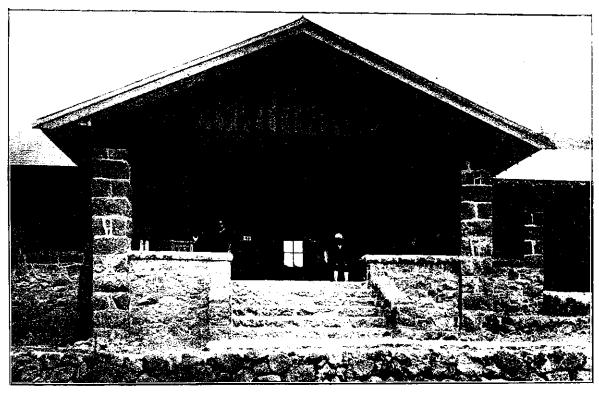
By ROBERT LAING



When the organisers of the Canterbury Settlement planned the chief town of the new province, they set aside a large area of over four hundred acres for a city—park and recreation ground. The foresight thus displayed has given to Christehurch one of her finest assets—Hagley Park. Here almost in the heart of the town are beautiful gardens a

The plenteousness of all, shat there are no bounds, To emerge and be of the sky, of the sun and moon And flying clouds, as one with them."

For the Summit Road as its name implies runs nearly all the way on the sky line; and provides a series of panoramic views and nearer beauties, that even in New Zealand are not easily rivalled.



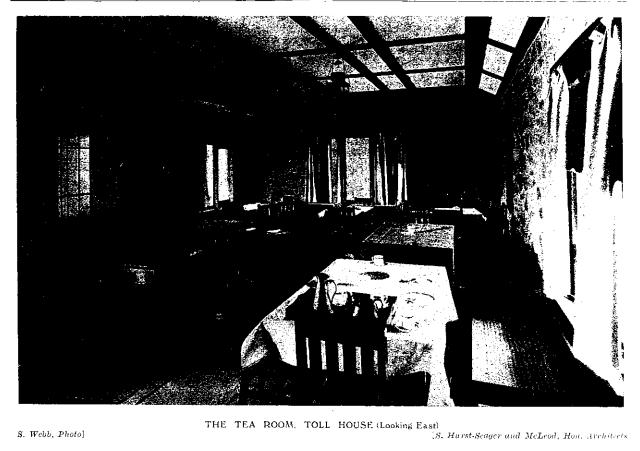
THE TOLL HOUSE (Front Elevation)

(Hurst-Seager and McLeod, Hon, Architects

S. Webb, Photo;

handsome domain, and sport and recreation grounds that suffice for the needs of many thousands of the citizens. When the city was founded it was comparatively easy to set aside this area; it would be a very difficult if not impossible task now. Yet a similar and even more ambitious scheme is at present being attempted in the neighbourhood of Christchurch, which when finished, will provide the inhabitants with a magnificent walk of some sixty miles over the hilltops from Lyttelton Heads to Akaroa Heads. Few towns in the world will have (for recreative purposes only) a more glorious road. Thus will the citizens of Christchurch in Whitman's words be able

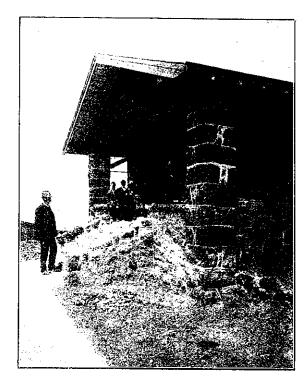
It is my purpose in a couple of short articles to describe roughly some of the glimpses and scenes from the road, as a recommendation to the citizens of Auckland, Wellington and Dunedin to go and do likewise. Let us then start from Lyttelton Heads and imagine ourselves going like the bounds of empire—for a time at least—ever westward. The Lyttelton lighthouse is on the top of a rocky ridge some five hundred feet high. This ridge runs towards the south-west for about twelve miles rising at times in peaks to fifteen hundred feet above sea level. Along the top of the ridge goes the Summit Track, in most places only for foot passengers but widening to a road between Dyer's



S. Webb, Photo]



Pass and Kennedy's Bush, and near the summit of Mt. Pleasant. On our left hand side, far below is Lyttelton Harbour, behind us is the sea. And on our right a wide plain slowly but determinedly sloping up to the great mountains in the west. Yet though there is to this extent uniformity in the view, every turn in the road, every little peak gives fresh and unexpected Pisgah-sights. To one, who has not made a study of the effect of a slight alteration of the standpoint upon the outlook, these



TOLL HOUSE (View from Side) S. Webb, Photo

kaleidoscopic changes are astonishing, and yet a little alteration in height and angle make new and wonderful changes in the pictures, that are a constant source of pleasure. It is quite impossible then to give more than a hurried account of the varied views to be obtained from different parts of the track. As everywhere, however, the most beautiful effects are the rarest. Thus I have seen the harbour looking like a translucent pearl into which one might peer like the crystal gazer in search of deeply hidden visions. On another occasion the outlines of ridge and peak were limned upon the clouds, whilst a white-winged schooner, sailed through a rainbow end, midst a flock of glinting sea birds. Sometimes the plains are hidden by a sea of rolling mist, whilst the white mountains to the westward rise into a cloudless sky from this yeasty ocean. Again on rare occasions under the northwest arch, the mountains magnified by unusual atmospheric conditions seem to rise to more than their usual height and grandeur.

However, these are but passing visions, glimpsed perhaps once in a decade, and disappearing again swiftly as the snewflake on the river. To the average city dweller they are quite unknown. Yet no day comes and goes which does not bring with it beautiful pictures of mountain, sea and plain. These are to be seen by any walker on the Summit Road, and though they may never be twice alike yet he can never fail to secure something worth perpetuating in memory.

The first gap in the ridge is at Evan's Pass, here on the left the road zig-zags into Lyttelton and on the right slopes down to Sumner. Rounding the flank of Mt. Pleasant, we arrive at a tea-house immediately under the summit of the mountain (1,615 ft.). Here one may rest, obtain a meal and even accommodation for the night. From the top of the bill the red roofs of Lyttelton may be seen below, with the ships in the basin looking like mere toys. A mile or two further on is the next pass-the Bridle Path—which has left unforgettable memories in the minds of the early settlers. Here again almost at our feet on the left is Lyttelton, and to the right the warm sheltered Heathcote Valley. Some feur miles further on, we come to Dyer's Pass, about 1,000 ft. high. This is the locality best known to Christchurch people. enough the vast majority of plain-dwellers are content to live in complete ignorance of the hill country at their doors; but the number of outdoor people is I think slowly increasing, and on most fine Sundays and holidays several hundred people reach the pass and descend to Governor's Bay or continue along the summit track to Kennedy's Bush some four miles further on. On the top of the pass is the Toll-house a quaint and beautiful little cottage built from stone in the vicinity, and of a strength to stand a thousand years. On the beams over the lintel are carved verses of comfort and inspiration for the foot-sore and thirsty traveller.

"Jog on, jog on the foot path way, And merrily hent the stile—a!

A merry heart goes all the day, Your sad tires in a mile—a."

01'--

"Merry to meet, and merry to part, And merry to meet again."

It would have been very easy to spoil the general effect by some meretricious modern cottage; but this stone-built, slate-roofed old-fashioned little building fits into its rocky background as if it had always belonged to it; and in a year or two it will look old if not antique.

Governor's Bay is now on our left and Christchurch on our right; and at this point we shall stop for the present—and indeed we may stay at our cottage for the night if we wish.

Modest Johnnie: Teacher: "Do you know, Johnnie, where shingles were first used?"

Johnnie (modestly): "I'd rather not tell."---

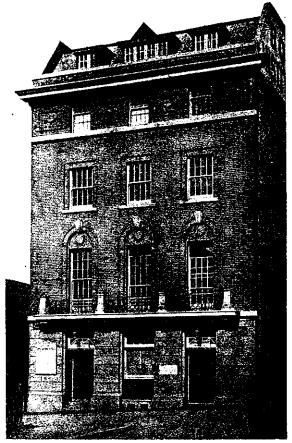
The Boys' Institute, Wellington

We are pleased to be able to reproduce the two iliustrations in these pages of the work of Mr. W. Gray Young, of Wellington, from the "Architects" and Builders' Journal' of March 13th and 20th of this year. The editor of that journal says:—"That the architectural traditions of the Old Country exercise a considerable influence over the development of colonial architecture is shown in this admirable example of the work of Mr. W. Gray Young, F.N.Z.I.A., who has manifestly derived inspiration from the late Georgian period. At the same time there is a character about the building that clearly reveals other conditions and a different environment --- a breadth and simplicity of effect that is achieved elsewhere only in the best modern American architecture. The Boy's Institute contains a public swimming bath, dressing rooms and directors' room on the ground floor, and assembly room, library and a gymnasium on the first floor. The building is constructed on the steel frame principle."

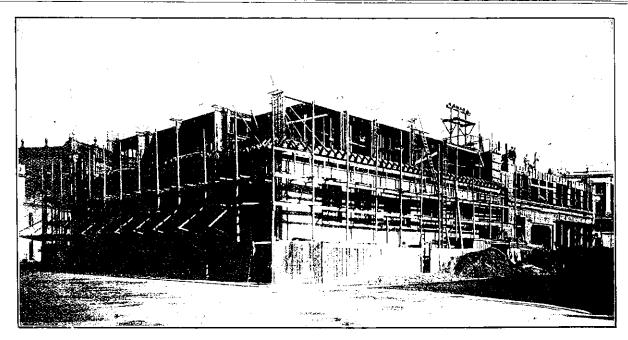
In the issue of the following week the editor says:--"House in Wellington".--"This is a further example of the attractive work of Mr. W. Gray Young, F.N.Z.I.A., whose Boy's Institute was illustrated in last week's issue."

Heck: "Yes, I have met your wife. In fact, I knew her before you married hea."

Peck: "Ah, that's where you had the advantage of me-I didn't."—"Boston Transcript."



BOYS' INSTITUTE, WELLINGTON
W. Gray Young, Architect



Building in course of Erection in Wellington for the Dominion Farmers' Institute

Messes, Collins and Harman, of Christchurch, Architects



 $\begin{array}{ll} \textbf{MODERN} & \textbf{DOMESTIC} & \textbf{ARCHITECTURE}. + \textbf{Doctor's Residence}, & \textbf{Wellington} \\ & \textbf{17}. & \textbf{Groy Young}, & \textbf{F.N.Z.I...}., & \textbf{Architect} \end{array}$



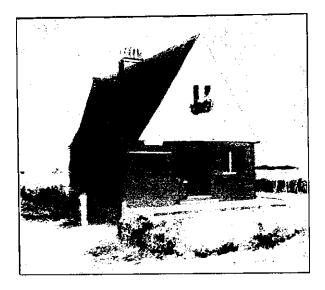
FARMERS' FERTILIZER COMPANY'S NEW BUILDING (part only)
The largest Superphosphate and Sulphuric Acid Works in the Southern Hemisphere, now being erected at Te Papapa, Auckland
Total works when completed will cost about £250,000

Some of France's New Homes

Many suggestions have been put forward by both England and America with regard to repatriation after the war, but none so far as we have seen present the French view of what the ideal house for the Frenchman is.

For the people who will soon again turn their faces homeward four types of building have been designed by French architects at the behest of their Government. These are the village inn or tavern, the farm-house; the peasant home, and the homes for artizans, mechanics, and small merchants. In "L'Illustration (Paris) are set forth many of the plans for these structures. We read:

"It is to be remembered that the attempt has been made in each case to keep in mind the charac-



A Proposed French House for Factory Labourers

teristics of the region as exhibited in its former type of buildings, and also suitability to the environment. The regions planned for are quite different, varying from the plains of the province of the north to Alsace.

"In a great part of the northern district the village inn, as it is found in other regions of France, has for a long time tended to disappear. The region, principally industrial, is veined with roads to facilitate the transport of travellers and their merchan dise. The urban centres are easily attainable. Commercial travellers pass quickly, and tourists do not stop. It is sufficient, then, to provide some rooms for modest travellers and a restaurant for the most part frequented by workmen. On the other hand, the thing is to be an expression of the inveterate tendency among the population of the north to group in societies, in order to give themselves 'with intensity to vocal or instrumental concerts, archery, bowling, pigeon-flying, and cock and dog-fighting.

"With this in view Messrs. Barbotin and Bray have shown plans of two inns, both typical but very different in conception. Mr. Barbotin gives us a

rich note in the shape of a plan perfected after the Flemish style of the plains. All those who have passed through Artois recognize that architecture in its neat lines, impression of firmness, alleviated by vivid colouring, toned down in its general effect, however, but still giving a warm touch in a cold atmosphere that is grayed by coal smoke. Under



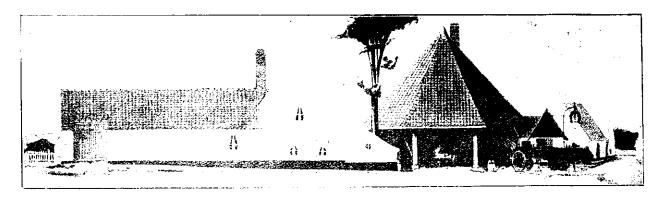
Where a Small Country Farmer may Live-a structure suggested by those native to the soil

a firm roof with brilliant tiles, pierced by dormer windows, there is a construction that is flanked by a gable pierced with large windows, the small panes of which admit the light. The windows are mullioned, adorned with flowers placed above them, and the whole produces an effect of equilibrium by means extremely simple. The example given dedicated to Saint Sebastian, patron of archers, is estimated to cost about £920."



An Inn for an Alsatian Mountain Town, designed by the French Architect, Mr. Lambert, to be erected in parts of Alsace after the war.

No attempt was made to draw up special styles for the regions between the north and the east, but the committee could not forget Alsace: "For that privileged land, where the residence of the Boche has been unable to efface the local colour, the programme looked to an inn in the mountains, not indeed the inn of tourists, isolated in the forest or



The House and Shop of a Blacksmith, showing a Forge under the "Monumental Hangar" at the right, rather dwarfing the house, but clearly defining the purpose of building

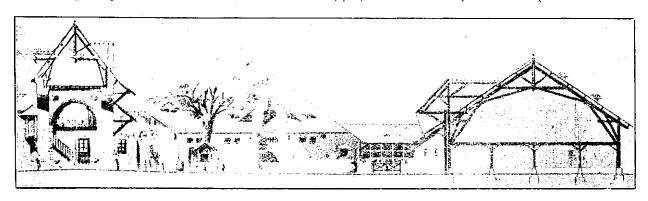
placed on the top of some hill, but one that is part of the village, open to all, continuing the traditions of country hospitality in picturesque times of family residence, and not needing to be modified by the suggestions of modern classic comfort. The construction of an inn in these regions raises difficult technical problems. One must have in mind the cold, the snow, and also the materials available. One must keep at the minimum the chances of conflagration, employ in large measure the wood which is found on the spot, and also conserve heat and provide light. An additional complication is furnished by the necessity for having regard to agricultural exploitation. Mr. Lambert's inn, 'A Saint-Christophe,' adapts itself well to the surroundings conceived for it, its form rough in finish in accordance with the environment. It is at the same time more substantial than the Swiss chalet and than the usual hotel of the forest. The cost of the inn itself is about £3,300.

The farm has an importance which differs entirely from that of the inn. Its general dispositions are always imposed by the necessities of exploiting conditions, the main lines of which change little, also by the relations which must exist between the house and the soil and the climate—the frequency of rain, the trend of the winds and the temperature, the possibilities of drainage, and local resources in material. Moreover, the plans have to be governed by the exigencies of hygiene, so frequently violated, of economy, and of custom. Such were the elements of the designers problem:

"From the Meuse to the Vosges one special note dominates. The Lorraine village-houses press concentration to a maximum; the farm-houses arrange themselves side by side along the highway. Thus each wall serves two families. The dwelling house is naturally in front, while the other farm buildings stretch out to the rear."

Mr. Poyé offers a strongly built construction of rough brick, covered with plaster, the base tarred, the roof projecting over all the facades, 'a bit of Normandy near Calais,' the whole costing £960. Mr. Sardou offers a plan than which one can hardly imagine anything more modest. The structure is of plain stone, with gables and arrangements for the training of vines. Above the whole of the roof of tiles, when it has gathered its native growth of lichen, will go to the making of a desirable object for the artist painters of Paris. . . .

"Mr. Patout, serving in the war as a camoufleur, plans a model house for a blacksmith in the region of Abbeville or Dunkirk. The house which presents an appearance of length, seems almost to efface itself in the presence of the forge, installed under a monumental hangar, sheltering from the snow and from the rain by what one might call a Tonkenese chapeau. It is, however, difficult to individualize and embellish the house of the millworker, since the architect is hemmed in by limitations of cost. Mr. Goupil wishes to escape that grouping which has been rightly criticized from the points of view of hygiene, comfort, and art. He proposes three modest types, which fit well upon a small space of land. In



 Λ Suggestion for a Farmer's House in the Champagne, at present ravaged by the Huns

one he provides the facade in rough or moulded brick or plaster, costing £280

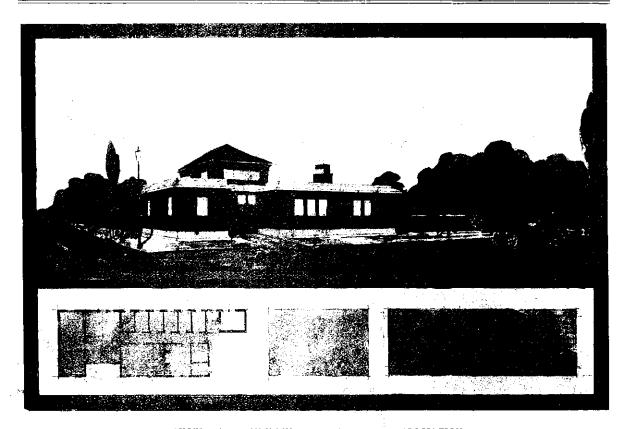
"Mr. Bois has in mind the small merchant, whom he supposes at the same time to be the possessor of a small estate. The rather elegant form is suggested by the structures which one finds in the valley of the Meurthe.

"In Alsace Mr. Dory has conceived the house of a locksmith, which is exceedingly seductive. The architect wished to provide a maximum of cheerfulness and of light consistent with a minimum space. The workshop to the left of the entrance is visible from the street. The window is adapted to the accomplishment of work, with an abundance of air Naturally there would be provided a sign of forged iron, the work of the artizan himself. The cost is £1,060."

Australian Town Planning Conference

Not much encouragement was offered the Wellington Deputation which waited upon the Hon. G. W. Russell with reference to sending a man from this country to attend the forthcoming Town Planning Conference in Brisbane. The deputation came from the Wellington Town Planning Association, and was represented by Mr. T. Ballinger and Mr. T. Leigh Hunt.

The Minister replied that the matter had already been considered by the Government, and the decision had been that at the present time it was not necessary for the Government to incur expense in sending one of its experts to attend the conference, seeing that conditions in Australia were so dissimilar from those in this country. Another consideration was that on account of the shortage of staffs in all Departments it would be impossible to spare a man who would adequately represent New Zealand at so large a conference. The reports of the conference would be carefully scrutinised after it was over in order to see whether there was anything that New Zealand could learn from Australian friends. The Town Planning Bill circulated at the end of last session of Parliament was under the consideration of town planning associations in New Zealand. The Bill had been specially devised to meet New Zealand conditions, for in this country town planning was probably more necessary in connection with growing towns rather than in cities already built. Here we were fortunate in having no slum population, and consequently it was the future rather than the present that had to be borne in mind. If, however, the Town Planning Associations would recommend a suitable man to go on their behalf, he would be prepared to consider the advisability of recommending to Cabinet that the Government should pay part of his expenses.



AUCKLAND ARCHITECTURAL STUDENTS¹ ASSOCIATION

Design for a Suburban Fire Station—A Two-Hour Subject. By J. O. Owen, Auckland

First Mention

Corporal P. E. Holst

Another Christchurch soldier who has died of wounds was Corporal P. E. Holst. Art students will remember (says the Sun) that his was the name on the very fine drawings from byvereargill which were the surprise of one of our annual exhibitions three or four years ago. They will recall also that the same name appeared on the winning design for the gold medal offered that year by the Institute of Architects. It was, indeed, the opinion of many who examined his work that for delicacy and suggestiveness of line it was in a class almost by itself. Corporal Holst, who, in his pre-war days was an architectural draughtsman in Invercargill, leaves a widow and one young daughter.

Architect's Gift

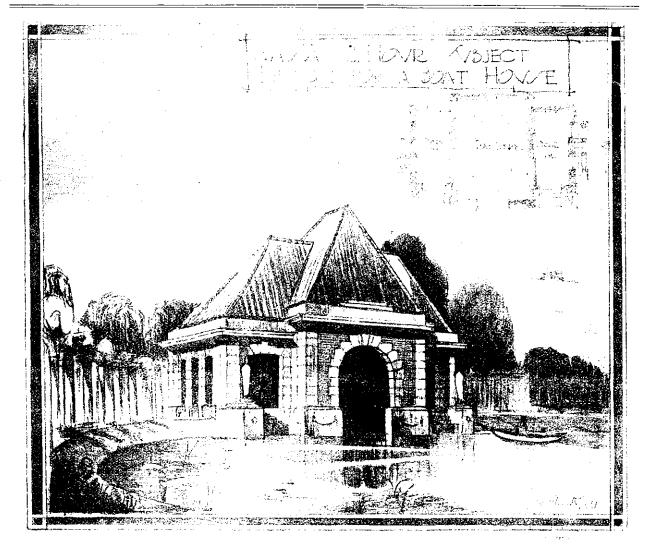
At a recent meeting of the Board of Governors of Canterbury College, Christehurch, a vote of

thanks was accorded Mr. S. Hurst Seagar for his valuable gift to the technical section of the Public Library of 38 volumes of work upon art and architecture, and also 63 magazine parts dealing with architecture. In moving the resolution, Mr. C. H. Opic said that the formation of a technical library was receiving a great deal of attention on the part of the committee, as such a library would be of great value to the community. He hoped that others would follow Mr. Seager's example in helping to form the nucleus of the technical collection.

Of Russia's 180,000 people about 500 have already formally agreed to accept Germany's peace terms!

Bill: "I understand the Kaiser has already ordered his halo for the next world."

Gill: "I hope and trust he has taken the precaution to have it made of asbestos."—"Yonkers Statesman."



AUCKLAND ARCHITECTURAL STUDENTS' ASSOCIATION

A Two-Hour Subject. By Nigel Wallnutt First Mention

New Timber Mill for Marlborough Timber Company, of Christchurch

Under the title of "To Build Mill in New Zealand" the "Timberman," an American lumber journal, describes a new entreprise on the part of the above company as follows:

"To construct a mill and install equipment for the Marlborough Timber Co., of Christehurch, New Zealand, E. A. Wright, of Everett, Washington, a veteran mill builder of the Pacific Coast, sailed recently from San Francisco under contract to build the mill and operate it for a time until island labour can be trained to handle the machinery. The mill will be on the South coast of the South Island.

"A double circular rig from the Sumner Iron Works, Everett, Washington, with all other necessary equipment, had been landed in Wellington before Mr. Wright sailed. All the hardware and even roofing for the mill were bought on the Pacific Coast.

The mill will be one which, on the Pacific Coast, would have a daily capacity of 150,000 feet, but with the conditions to be met in New Zealand the output will probably be somewhat less, according to Mr. Wright. The mill will be the largest in New Zealand and will mean more economical production than has ever been accomplished there. A number of other timber operators are known to be awaiting its completion and operation before deciding on purchasing similar equipment.

"Headquarters of Reese Bros., controlling owners of the Marlborough Timber Co., are in Christehurch, a city of 60,000 people. The nearest post office to the new mill will be the village of Tutupura.

"Logging in the Southland, as the southern area of the South Island is called, is entirely by narrow gauge roads with light steam engines, because of lack of driving streams and the fact that many of the woods are too heavy to float.

"I'm sending a dozen peaveys with the other equipment," said Mr. Wright, in illustration of the primitive methods used in New Zealand. "When I was down ther last year I saw that the logs were rolled by natives who pushed with their breasts. I asked why they didn't use peaveys and had to explain what a peavey is. I tried to make one in a blacksmith shop but couldn't find a suitable piece of steel."

"The time which will be necessary to complete the mill depends entirely upon the labour. A vast area is available for the Marlborough Timber Co. to cut over, according to Mr. Wright. The timber will be mostly rimu, matai, totara and kauri.

There was a young lady named Banker Who slept while the ship lay at auchor; She woke in dismay When she heard the mate say, "Now hoist up the top sheet and spanker."

--"Index."

New Building Regulations in Sydney

Some interesting remarks about the city building regulations of Sydney were made by Mr. Arthur Prichard at the annual meeting of the Institute of Architects of N.S.W. recently, which could be profitably studied by our city fathers in New Zealand. Mr. Prichard said :--"When, rather than continuing to wait for a new Building Act as we had been doing for the last twenty years, the late Minister for Works (the Hon. Arthur Griffith) agreed to my suggestion that the authority of Parliament should be obtained for the issue by the City Council of Regulations permitting and governing the use of reinforced concrete and steel framing construction in the City of Sydney, and the promised measure appeared in a short Bill, sandwiched, as an astute old Councillor remarked, between two doubtful clauses about Waterworks and Adult Franchise, I thought our work would be in vain, but the skilled Parliamentarian knew better, and eventually, backed by the assistance of the late Lord Mayor, the measure became law.

"Thanks to the Advisory Board and the able assistance given by the many societies and eminent professional men interested, these regulations have now been completed and issued by the City Council, and, as Chairman of the Board, I am proud of the fact that the whole of the work involved was done by all concerned gratuitously, as a service we were privileged to render as citizens to our City, and for which we have received the thanks of the Council.

"One of the results of these regulations, and possibly the most important from the Civic standpoint, is that, as I have previously stated, the available ground floor area of the City has been increased by nearly 10 per cent.—a fact which, if translated into land value, would run into millions of pounds.

"The urgent necessity that exists for the Government to extend on the same lines the power of the City Council, so that regulations governing all building operations may be issued and amended from time to time, as is done in London, New York, San Francisco, and other great cities, is obvious to all experts, and would be more generally recognised if the following and other similar instances of the necessity for such further and early action were more generally knewn.

"At present the authorities have no control over, nor can they insist on the use of, fire-resisting construction in buildings other than in those of the theatre class; yet every day in most of her fashionable tea-rooms, Sydney faces the certainty of, unless matters are altered, appalling disaster. The mere call of "Fire!" in these over-crowded resorts would result in the loss of many lives, while the actual event would be a holocaust worthy of Nero himself.

"These rooms, occupying, as they mostly do, the topmost, and what were formerly the least valuable, areas of buildings constructed generally, whatever their embellishments, on those economical shopbuilding lines which prompted their installation, have their chief access for the public by lifts, the stairways, in some cases, constructed of softwood

and of spiral plan in most cases, being not readily accessible, and of a capacity absolutely unequal to cope with the rush of hundreds of men, women and children, whose efforts to find a way of escape would be further impeded by the overturning of the unfixed chairs and tables crowded into these rooms.

Another instance of similar lack of provision a rainst the ever-increasing fire risk is found in the construction of many of the large residential flat buildings, in which instances may be seen where, in addition to softwood floor and stairway construction, projecting Oriel windows of the flimsiest construction of seftwood and stamped metal seem almost to have been specially designed to facilitate the spread of fire from storey to storey, forming, in some cases, practically uninterrupted flues from the first floor to the topmost storey.

"A further instance, but in another category, is the avoidable, and in these times discreditable waste in building material, due to the lack of regulations governing the thickness of walls, built of different qualities of materials. At present the highest grade of brickwork in cement must be built of the same thickness as the lowest grade of brickwork in lime mortar, the thickness, not the strength, of the wall

being the chief consideration.

Before these and many similar matters can be dealt with effectively, an extension of the powers conferred on the City Council by the recent Act, giving similar authority to regulate all building operations, must be obtained, and at the request of the late Lord Mayor such regulations are being considered; but Parliamentary authority for their enactment has yet to be obtained, and, in view of the above instances and their admitted urgency, should be granted during the coming session."

High Tension Insulators

Mr. L. Birks, Electrical Engineer to the Public Works Department, gave some interesting information to a meeting of the Philosophical Society in Christchurch early this month on the testing of high tension insulators. The lecturer stated that the importance of the Lake Coloridge hydro-electric system to Christchurch now could be gauged by the fact that the trams were run by it, the water and sewage pumping, three-fourths of the freezing works, the flour mills, the butter factories, and hundreds of industrial plants. If the Lake supply failed for long the city would have to be abandoned. The chief difficulty in maintaining continuity of service was the long distance transmission line, and a breakdown in the line was distinctly serious if of long duration. The weakest links on this line were the insulators, and a good many breakdowns had occurred since the inauguration of the line, though the public only knew of a percentage of them. In 1915 there were 15; in 1916, 19; in 1917, 27; and during the current year, 7. These were the total interruptions, some of which, however, were not due to the insulators. The main trouble in dealing with an insulator in which the insulation had broken down was in locating the faulty insulator, not in replacing it when

found, which was a comparatively simple job. Insulators behaved in an irritating and tricky fashion, often working well enough when the weather was dry and failing when there was rain or moisture about. A fruitful cause of the breakdown of insulators was tree back, especially the back of bluegums. In the autumn this blew about in long strips, which hung on the line and caused "shorts," and often serious breaks in the insulators. Lightning was also troublesome sometimes, and one severe discharge caused four or five breaks on one occasion; one at the time of the flash and the rest later as the weakened insulators gave way. The problem of insulation was rather an obscure one, and from investigations that had been carried out here and in other countries it seemed that the degree of excellence of the vitrification of the porcelain of the insulators was directly responsible for the degree of their excellence as insulators. Porosity in the porcelain was a bad fault, and usually porous insulators broke down in service, though this could not yet be stated as a rule. Very slight porosity seemed sufficient to weaken the effectiveness of an insulator, and for this reason it was difficult to detect porosity accurately. The speaker then described the mechanical and clectrical tests to which insulators were subjected, and a very interesting demonstration of the tests was given by Messes, Ferguson and Philpot, Mr. Birks's assistants.

Correspondence

The Editor, "Progress," Wellington.

Dear Sir, =

The article in the April number of "Progress" by Mr. George Fowlds on Town Planning is most interesting and to the point, and one cannot but agree with most of what he has written. Mr. Fowlds, however, makes a great point about the necessity of adopting the system of voting upon "unimproved values." This system, may or may not be the best, but it certainly should not be adopted unless stringent regulations as to the number of houses per acre, width of frontage, etc., are parts of the system.

This form of rating tends to make owners fill up their land to the greatest possible extent, and results in congestion, which cannot be regarded as ideal. Even if regulations are passed such as mentioned, it usually means an end of large gardens, or even moderate sized ones, which help so much to make the suburbs of our towns healthy and beautiful.

Rating on "unimproved values" also comes very hard on privately-owned golf links, temis courts, etc., which although not available for the public at large, yet fulfil a most important function in creating and maintaining open spaces, which act as "lungs" to the cities, add greatly to the amenities of the district, and (in the case of golf links) provide most pleasant opportunities for the public to ramble about in open fields.

No doubt Mr. Fowlds has considered all these points and can answer any objections satisfactorily,

but to my mind his paper was hardly complete, without those answers.

I am, etc.,

BASIL HOOPER, A.R.J.B A.,

Joint Hon, Sec. Dunedin Town Planning Society.

[Note, -We referred the above letter to Mr. Geo. Fowlds, junn, whose reply follows.—Ed.]

Town Planning and Taxation

To Editor "Progress."

Dear Sir,-

Objection to the system of rating on the unimproved value as an adjunct to town planning is raised on the grounds that it might encourage the reduction of the frontage width of sections. But it should be recognised that under ordinary bye-laws and particularly under a comprehensive town planning act, regulations can, and ought to be, framed to prevent such tendencies.

It is further alleged that this system of rating would cause subdivision of land to the minimum, and congestion of too many houses to the acre and the result in the abolition of private gardens. Any effective town planning scheme should naturally provide for the adequate arrangement of parks and open spaces. It is admitted that gardens are a very useful feature in the embellishment of a city, but if private people desire to held large areas of land for their personal pleasure they must expect to pay rates and taxes for the exclusive privileges they enjoy. If a man wants to have an extensive estate in the main street of a large town, no matter how pleasing the grounds from the outside may be to the public, the owner should pay heavily for the monopoly. The effect of so much ground being held out of use for this purpose is to compel hundreds and thousands of people to live together in congested and unhealthy conditions. Surely in such instances the interests of the many are more important than those of the few.

Let us consider the case of a working man who buys a property in a district which exempts improvements and rates on the unimproved value of the land. If his house costs £400 and his section £80 and he only pays rates on the latter amount, would he not desire, and by the operation of this form of rating be more able to buy an adjoining section so that he could make a garden and improve the surroundings of his home.

It is claimed that golf links, tennis courts and other privately owned areas are really "lungs" or breathing spaces, and would be penalised by the rating on the unimproved value. As already pointed out, under proper town planning the authorities would make full provision for open spaces and recreation grounds. If limited sections of the community desire to reserve large areas of land from which they prefer to exclude the mass of the people then they must pay their just share of rates and taxes. Naturally the amount of land available in the immediate vicinity of large and growing cities is limited, and it is against public interest that the extensive holding of land for sport for a com-

paratively few should have a prior claim over the necessary supply of land for residential purposes.

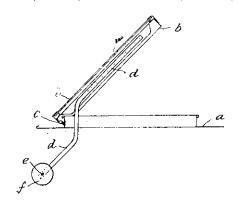
The supporters of taxing improvements which discourages building and encourages the withholding of land from use might urge that the existence of numerous vacant sections act as valuable "breathing spaces." But seeing that such sections are often nurseries for weeds and receptacles for old tins and dead dogs, it is hardly a good argument for this form of civic adornment and so-called hygienic open spaces. It is well known that the rating on the capital or annual value is a discouragement to the man who adds to his house, paints buildings and heautifies his allotment, because he is liable to have his valuation and rates raised accordingly.

A system of rating which is full cousin to the tax on windows which once operated in England and resulted in houses being built without windows, causing ill-health to the inhabitants of these insanitary hovels, is a relic of mediacvalism and should be changed.

GEO, FOWLDS, June.

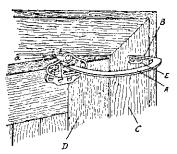
Patents of Interest to Builders

Skylight.—A putent, No. 29572, has been taken out by Herbert Smart, of Young Street. New Plymouth, which consists in providing the opening-frame with a lever or levers extending beyond its given, to which a weight or weights are



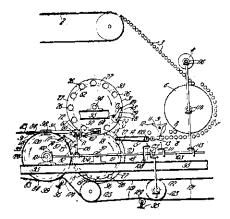
attached that serve to counterbalance the weight of the frame. This weighted counter-balance will thus allow of the skylight being opened by any of the ordinary appliances, with great facility, and will also serve to maintain it at any position to which it may be raised.

Door Holder.—A patent, No. 39,361, has been taken out by E. Heffernan, Sydney. This invention relates to holders



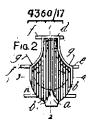
of the friction-grip type for retaining hinged doors in open or partly open position or in closed position as may be required, and for braking the movement of such doors, thereby to prevent "slamming." It consists essentially in a curved tongue attached to the door-frame and a friction-grip device attached to the door and engaging the curved tongue. Alternatively, the tongue may be attached to the door, in which case the friction-grip device through which the tongue works is attached to the door-frame.

Roofing Tiles, etc., Moulding Machine.—A patent, No. 39665, has been taken out by O. J. Oakley, of Branswick, and E. C. Hughes, of North Fitzroy, Victoria. This invention relates to those machines which compress clay or other plastic or pliable material to form roofing-tiles or other articles. The object of the invention is to provide a machine which will compress the material between two oscillatory moulds, and, in the case of tilemaking, form a hole through a lug which projects from the lower face of the tile for wiring



it to a roof, and also cut off the excess clay which exudes from between the meeting surfaces of the two moulds. The machine also transfers the moulded article to a conveyer, which carries it away for drying, seasoning, or other purposes. The invention comprises a series of oscillatory moulds mounted on the circumference of upper and lower supportingwhich, and adapted to be oscillated so that the faces of corresponding upper and lower moulds are disposed parallel to each other for a predetermined period, during which the compression of the article takes place.

Cement Tile.—A patent, No. 4360, has been taken out by A. Emsiedel, Victoria, for a tile for low pitched roofs or walls, which has flutings b on the upper face to distribute the rain-water evenly, and further flutings on the lower face to provide ventilation to the interior of the roof. The tile



is thickened at the lower end, thus providing additional weight to prevent the base being lifted by the wind, while wire fasteners and reinforcements may be embedded in the cement. Modified designs are adapted for ridge and abutting sections, and for starters at the eaves.

Piers, Concrete Jetties, etc., erected in Water.—A patent, No. 37373, has been taken out by C. F. Pulley, of Wairoa, Hawke's Bay, which comprises hollow caissons made of concrete, and having vertical keys and keyways upon their exteriors and interlocking with each other, the caissons being filled with concrete after the same have been placed in

FOR SALE.

Large Steel Storage Tank.

For holding Oil. Water or any suitable liquid.

Diameter and height, 25 feet.

Capacity about 80,000 gallons.

All parts plainly marked for quick erection.

In perfect order. Painted and oiled. Never exposed to weather. Excellent workmanship.

For price and further particulars, apply,

E. GRIFFITHS & CO.,

New Plymouth.

FOR SALE.

6-Wheeled Coupled Geared Locomotive

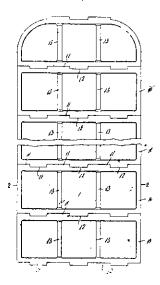
For 3ft. 6in. Line Tramway.

7in. Cylinders by 12in. stroke. Wheels 2ft. diameter by 4½in. tread. Firebox 3ft. 4in. by 2ft. 3in. by 3ft. Water Tank capacity 200 gallons. Nett weight 11 tons 5 cwt.

For particulars, photograph and price, apply to

JOHN FISHER, Clerk Ohai Railway Board.

P.O. Box 1, Otautau. position. A cap of solid concrete may be employed, extending over the top of the caissons and keyed to the same. The caissons may be divided into compartments by partitions with or without holes through which reinforcing-rods are



passed, the caissons being nearly filled with concrete after the same have been placed in position, and a cap of solid concrete extending over the top of the caissons and keyed to the same. Other features are contained in invention.

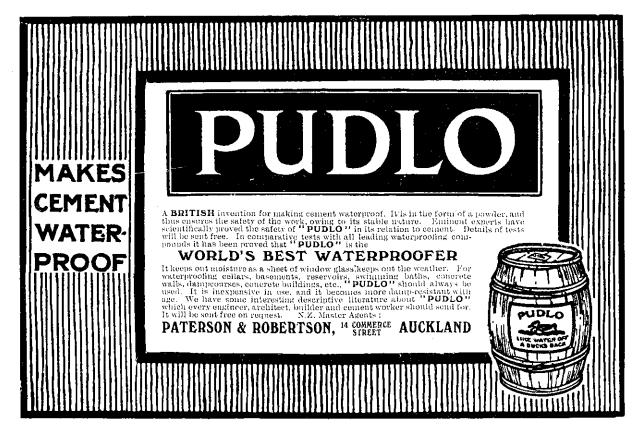
Building Notes.

AUCKLAND.

The new additions to the buildings for Messrs. Dalgety and Co., Ltd., being erected to designs of Messrs. Chilwell and Trevithick, A.A.R.L.B.A., in the Strand will have a floor space of 76,000 feet super, on each floor. When completed the whole store will have an area of a little over half acre on each floor. Height 12ft, each floor. Prontage 148ft, to road. The whole of the foundations and outer walls are of reinforced concrete, and the posts and beams are of ironbark. Provision for concrete hide washing space top lighted under beams and curt arches to the Main road, and railway siling at rear under the new railway scheme.

The elevation shows the modern factory arrangements of lighting to be a misimum of doors and walls and a maximum of window space. The roof is designed on the sawtooth principle with Southern light uninterrupted the whole length of each space. Cowperthwaites concrete tiles on main pitch of roof. Works to be completed in October next. Julian and Sons, Contractors £15,197.

Messrs. Chilwell and Trevithick have also in hand a building for the Shaw Savill and Albion Co. Ltd. adjaining and communicating with the above building. Each floor bas half an acre of space with a beight of 15ft. Gin, clear under beams. Frontage to road 128ft. The whole of the building is of reinforced concrete including roof trasses. Elevation is designed in harmony with the above building. Saw-tooth roof and concrete files. Two triple cart arches under one span; covered railway siding at back. Work to be finished early in 1919. G. H. Edwards, contractor. Price, £25,989 exclusive of equipment which include two



hydraulic wool and flax presses on each floor in centre of building. Electric conveyor, electric portable erane and hoists and three radiating chutes which will operate over the whole of the ground fleor. Offices for staff and dining room, etc., are provided for in each building. It is hoped that the store when finished will prove to be one of the most up-to-date wool stores in the Dominion.

Messrs, May and Moran called for tenders for extensions in brick to Messrs, J. J. Craig's Exhibition at King's wharf. Messrs, Ed. Mahoney and Son called for tenders for

additions to house in Victoria Avenue.

The Auckland Education Board, through its architect Mr. Juo. Farrell, called for tenders for the erection in brick

of a school building at Otahuhu last month.

The foundation stone of the new fertilizer works at Te Papapa was laid last mouth. When completed, it is claimed the works will be the largest superphosphate and sulphuric acid works in the Southern Hemisphere, and their capacity will be over 60,000 tons a year. It is estimated they will cost approximately £250,000. The works are now in process of erection, the power-house being practically completed, while considerable progress has been made with portion of the main buildings. The works are situated to the left of the railway line, a few hundred yards from the railway station, from which railway access is being made to the works.

Plans for the Red Cross workroom, to be erected at the hospital annexe in the Domain, have been approved. The work is to be proceeded with at once under the Board's architect, Mr. Allsop. The workroom will be an addition to the annexe on the east corner and will contain over 2,000 square feet of floor space. The new workroom will be fitted up to enable wood-carving, timber-working, and anything which may engage the activities of the soldier patients, to be carried out.

CHRISTCHURCH.

The contractor for the erection of the new convent of St. Mary's, Colombo street, has started work on the foundations. The new structure is to be erected on the lawn area at the rear of the existing building, which will be removed when the new one is completed. The contractor for the building is Mr. B. Moore, and the contract price (exclusive of the heating and lighting of the premises) is £9,287. Mr. J. S. Guthrie is the erchitect.

The new wing of the Technical College was opened early this month. It is a two-storeyed brick edifice, with an entrance from Moorhouse avenue. Downstairs it contains an engineering drawing room, and public service class room, and upstairs an agricultural classroom, an art room, an altered physics laboratory, and a common room for the staff, which was the old balance room. Separate from these buildings is a new cloak room and lavatory for the girls, in connection with the domestic science classes.

The laying of the foundation stone to the new building at St. Albans school took place on the 25th of last month. Three new rooms (very badly wanted) are to be added in brick. This building would form the first quarter of what was intended to be a complete school. The amount of the contract for the present three rooms, without furniture,

was £2,153.

The Board of Governors of Canterbury College have taken the step of purchasing a substantial block of land with which to meet the further increases in the roll of the Boy's High School which must inevitably come in the near future and at a recent meeting it was announced that a block of land comprising 261 acres had been purchased from Mr. Deans, Riccarton, as a playing area and future site for the Boys' High School. The land has a frontage to Stravern road and to other roads at present unformed. The Avon flows through one corner of the block. The purchase price was f11,100. It is not proposed to build for some considerable time. The ground will be used as a playing ground in the meantime.

Tenders were called for additions and alterations to the Marble Bar by Messrs, England Bros.

Mr. Roy Loveli-Smith called for tenders for a residence on Casimere Hills.

The south-eastern side of Cathedral Square is to have a new building for the use of the Tramway Board, the top fleor of which the Harbour Board propose to lease.

W. A. CHOTE LTD.

FARISH STREET

WELLINGTON

PHONE 763



Victoria Bridge, Moonshine, Upper Hutt.

BUILT WITH REINFORCED CONCRETE

Another Everlasting Monument to the SUPERIOR QUALITIES of

Golden Bay Cement

Also Agents for: -MILBURN LIME, J. J. CRAIG'S HYDRAULIC LIME. BRUNNER FIRE BRICKS, FIRE TILES & FIRE CLAY CHIMNEY POTS, DRAIN PIPES.

KELLY'S DIRECTORY

OF

Merchants, Manufacturers & Shippers

and Guide to the Export and Import Trades of the World

The great object of this Directory is to bring the Buyers and Sellers of all Countries into direct communication.

The work, which is published annually, contains in one volume the names of the Manufacturers, Merchants, Exporters and Importers for all Gountries, and the Publishers can with confidence state that this is the only work in English which serves as a complete and accurate guide to both the Import and Export Trade of the entire world.

All Trade Headings are given in English and French and in the commercial language of the country to which the information refers so that the Directory can be readily used by the people of any country.

Our Representative will call on all N_iZ_i business houses during October, November, and December each year,

For further information and copy of book, please write -

Kelly's Directories

Ltd. Estab. 1799 182-34-High Holborn, London, W. C. H. J. CLARK,
Sole Australasian Representative,
"Tasma," Airlie Street,
Elsternwick Victoria, Australia.

The total cost of the Addington Library building, which was erected by the City Council by day labour, amounted £564 17s. 11d., being £17 17s. 11d. more than the lowest tender received for the work. Councillor Beanland, chairman of the Works Committee, informed the Council that a "real good job? had been effected. It is not often that day habour contracts come so near to an open tender price. The Canterbury Education Board invite tenders for

heating new rooms at Sydenham school with a hot water

A mild scare was created in the city recently when a crack was discovered in the New Government Buildings, Mr. J. McEnnis district engineer of the Public Works Department, and Mr. W. G. Jamieson, one of the contractors for the building, inspected the crack, Mr. McEnnis subsequently stated that he considered the disturbance was only a local one, and that there was no cause for alarm. The crack was due, not to the sinking of the foundations, but to the contraction of the stone and the concrete, the stone having a tendency to shrink. About eighteen months ago a crack appeared in that part of the building facing Cathedral square, due to the expansion of the concrete. Levels were taken in the building at that time, and proved quite

Mr. Jamieson expressed the opinion that the foundations were so substantial that an express train could be driven over the huilding with perfect safety to the structure. Owing to the variations of heat and cold in Christehurch there was often a disturbance in the stonework of buildings, and the Government offices did not compare unfavourably in this respect with many another building in the city.

The lead light workers dispute has been settled by the Conciliation Court by adopting the present agreement with the following amendments: Lead glaziers, plate-glass cutters, and hand bevellers, 1s. 6d. per hour; and silverers, polishers, leadlight workers, and machine bevellers, 1s. 3½d. per hour. The agreement will come into operation on July 5th, and will hold good for a term of two years from that date.

DUNEDIN.

With a view to providing suitable sites for the development of the manufacturing and other industries of the city, the Otago Harbour Board placed a large block of land adjoining the water-front on the market. Some sixty sections were offered for lease. As an incentive to settlement the board has taken 25 per cent, off the upsets fixed by it's valuer. Eight of the sections offered for lease were disposed of by auction, and since then applications for two more sections have been received by the board.

The contractor for the new Anglican Cathedral (several illustrations of which have appeared in these pages) has reached the highest point of the building, and last month Archdeneon Fitchett placed in position a finial on the northern turret. The tops of these towers are 130 ft, above the lowest step at the Octagon Entrance. Owing to the fact that the platform space was restricted, and had to be reached by a series of long ladders, no representative gathering was possible. Besides the Archdencon, the Rev. H. O. Fonton, Mr. Basil Hooper, Mr. Stanley Smith, Mr. McLennan (contractor) and Mr. Haig (the clerk of works) were present. The finial on the south turret was placed in position by Mr. Basil Hooper, local representative of the Home architects. The scuffolding is being removed as the stone work is cleaned down, and a good idea of the final appearance of the west front will soon be obtainable,

Surveyors are now engaged on the Teviot Estate, which was recently acquired by the Government for discharged soldiers. They are now picking a road-line. The Phantom block, which comprises about 7,000 acres, or half the estate. is the better portion. It has a good supply of water, possesses excellent soil, and is more suitable for sub-division into medium-sized areas than the western portion of the block.

The alterations to the building selected by the Red Cross Society as a military convalescent home for sick and wounded soldiers are being pushed on energetically, and it is hoped that the institution will be opened in the last week of this month. Major-General Henderson who paid a visit of inspection recently was delighted with the comfortable house and its beautiful grounds, and expressed the opinion that it should make an ideal home for soldiers

TOLLEY & SON,

CHEWS LANE .. WELLINGTON

Contractors for the Supply and Installation of

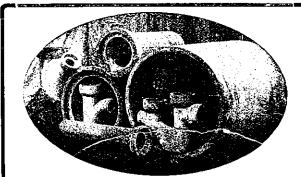
Electrical Equipment

:: Representing in New Zealand :: JOHNSON and PHILIPS Ltd., London Cables' Switchgear Transformers.

WRIGHT & WOOD Ltd., Halifax Dynamos and Motors.

WAGNER ELECTRIC MANUFACTURING Co., St. Louis, U.S.A.

Wagner Single Phase A.C. Motors.



CEMENT

have proved the best for SEWAGE and ROAD CULVERTS. In sizes from 4 inches to 42 inches in diameter, STRONG and EVERLASTING. Improve with age. We make Concrete Posts and Strainers, Pig Troughs, Sait Pans, Garden Rollers, Flags, etc., etc. Factories: Masterton, Hastings, and Waltara. Full particulars—

The Cement Pipe Co., Ltd., Masterton.

FIRECLAY GOODS

are necessary wherever heat is used.

To ensure satisfaction specify

BRUNNER

The Tyneside Proprietary Ltd.

Owners Brunner Collieries & Works,

TRADE

BRUNNER

MARK

Head Office: Union Chambers, WELLINGTON

in need of medical attention, amid surroundings designed to accelerate their complete recovery to health. The project is being taken up very enthusiastically by country branches, and many are organising concerts and other entertainments for its benefit. Several offers of help have already been received and more are sure to come when the country efforts are properly under way. It is intended soon to call for tenders for a recreation room and functional hospital—two very important departments in any useful convalescent home.

The Southland Hospital Board has decided to try to arrange with the Southland A. & P. Association to take over the dining room and grand stand at the show ground and convert them into a hospital ward to relieve the congestion in the present hospital. The board will also shortly be moving cases out to Lorne Farm where accommodation was arranged for last November. The consumptive sanatorium at Kew is now practically ready for occupation. At a special meeting on Tuesday evening the board decided to initiate a comprehensive scheme, and it is about to ask for Ministerial sauction for the purchase of an additional block of land at Kew. This is to be used to establish the nucleus of a new hospital for Southland, as there is no room available for extension on the present site. The board is instructing its architect to draw up a scheme of buildings for sabmission to a subsequent meeting.

Tenders are invited by Messrs, Mason and Wales, architects, for the erection of hospital buildings (brick), at Waikari.

HAMILTON.

Another public meeting has been held to consider the Soldiers' Club proposition, and an offer was put before the meeting of a suitable site from the Borough Council at a very low rent. The club was to be available to citizen and soldier members and would afterwards revert to the municipality. £1,150 was subscribed of the £5,000 required.

HORNRY.

At a meeting of the Hornby School Committee it was decided to call for competitive designs for a water tower. for a soldiers' memorial to be erected at the school,

KAWHIA.

Tenders are being called by Messrs, Ed. Mahoney and Son, for the crection in brick and concrete of a building for the Bank of New Zealand,

MASTERTON,

It is proposed to erect a convalescent ward for soldiers as an annexe to the Masterton Hospital. The Mayor (Mr. Corndine) has given notice to move that the sum of £5,000 he voted by the Patriotic Association towards the ward.

$MATAMATA_{\ast}$

Tenders are called for additions (in wood) to the school building by the Auckland Education Board.

The North Canterbary Hospital Board are about to build a maternity home at Oxford.

PHONE 1649

F. d. J. Cherc FRIBA. M.C.L. LOND

Llowellyn E. Williams

ARCHITECTS AND STRUCTURAL ENGINEERS, 157 FEATHERSTON STREET, WELLINGTON, N.Z.

GOLDEN BAY CEMENT

Universally Used.

Sets like a

Rock.



Tested under every working condition.

Quality proved by results.

THE GOLDEN BAY CEMENT WORKS, LTD. Nathan's Buildings, Wellington.

REESE BROS.

CANTERBURY AGENTS

ROTORUA.

Tenders were called early this month for the erection in wood of two hospital wards, officers' and orderlies' quarters, bath-house, workshops etc., at Pakeron Hill, Rotorua, for the Defence Department. Plans and specifications may be seen at the Defence offices, Auckland and Palmerston North, Tourist office, Rotorna, and the office of the Director of Works, Railways Bend Office, Wellington

THAMES.

Tenders were invited early this month for alterations and additions to the Phames Police station.

The Timaru Presbytery have purchased for $\mathfrak{t}^3,000$ Mr. E. A. I.e Cren's property in North street, for the purpose of a Presbyterian orphanage for South Canterbury. The section coatains 1; acres of land, beautifully laid out in lawn and garden, and on it is an almost new brick house of 10 rooms. The purchase was made after the property had been inspected by the Rev. Frank Rule, of Christehurch, who pronounced it ideal for orphanage purposes.

WMFARA.

A project is allow for the erection of a Casualty ward and Maternity Home for Waipara.

WELLINGTON.

Tenders are being called for the erection in brick and concrete of a new factory for Hamilton's New Zealand Welding Co. in Waterloo Quay.

Tenders are being called by the Public Works Department for a police station at Island Bay.

The new Fire Brigade Station in Constable street is

now likely to become a reality. A tender has been let to Messrs, Trevor Bros. for the erection of the station building, and it is hoped by this time next year the station will be

Large office and factory premises are being creeted in Dixon street, for the Christehareh firm of Messrs, H. Berry and Co., salt and soire merchants. The front of the building will consist of three storeys and a basement, and the back building (the factory) with he two storeys in height. The

contract price is about \$9,000.

Recently tenders were invited by the Labour Department for the building of six homes for workers on the Marauni Plat. Kilbirate. After Cabinet land authorised the expenditure, a contractor whose tender had been approved asked for an increase of about £60 on each house over the amount that he had quoted in March last (about a 10 per cent, increase), He stated that this request was due wholly to the rise in cost of materials, and that his profit would be the same as it would have been on the original basis, if materials had been available at the prices in his estimates. The Department declined the request. Negotiations are now in progress with another builder.

Notice to Subscribers

"N.Z. Building Progress" is posted each month through the G.P.O. at Wellington. If any subscriber should not get his copy, another will be sent him if we are notified in good The paper is supplied from year to year only, and if subscribers continue to receive the paper after expiry of the carrent year, we shall accept it as an intimation of their desire to continue for another twelve months. take to supply the paper for such further term. of discontinuance must be sent to the Manager, 8, Farish Street, Wellington in writing, as no Agent has authority to receive notice of discontinuance on our behalf. scription is 8/6 per annum. A discount of 1/- will be allowed off this amount if subscription is paid in advance.

THE Roof you should specify in the building of your new house is MALTHOID. It gives far longer service than galvanised iron—it is the most durable roof you could decide upon. Any weather, any amount of heat or cold are all the same to

MALTHOID ROOFS.

If it were only a matter of price, that recommendation would point to MALTHOID, for it costs about half the price of galvanised iron. But apart from price its immense advantage in durability has given it the premier place in Australasian favour.

> Write for prices and FREE Malthoid Booklet.

Aubrey Gualter & Co., WELLINGTON.

McCarthy's Family Hotel

Taupo Quay, WANGANUI

C. J. McCARTHY, PROPRIETOR

Steel Constructional Work for Architects, Contractors, Etc.

Joists, Beams, Stanchions, Compound Girders, Solid Steel Columns, Steel Roof Trusses, Galvanised Roofing Iron, Ridging, Spouting, — Downpipes, etc. —

Full stocks. Quick deliveries.

& T. BURT, LTD.

Auckland, Wellington, Christchurch, Timaru, Dunedin, Invercargill.

London Office: Eldon St. House, E.C.