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Publisher's Announcements.

Our 44th Competition

We offer a prize of £1 1 0 for the design adjudged to be the best for

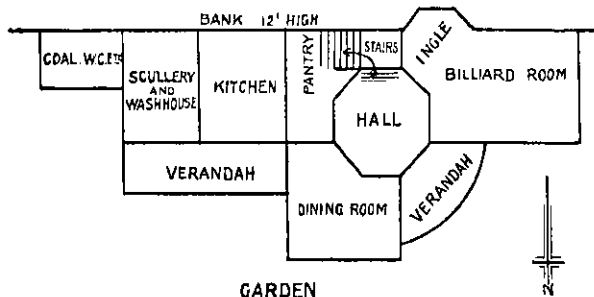
A Country Residence

The site is level; the residence to stand on an elevated position on the side of a hill with bush in the background and will be seen for miles around—good view.

The building to be built against a steep solid rocky bank 14 feet high at back, facing due N. and sheltered from S. and W. For the guidance of competitors the ground plan to be arranged somewhat similar to rough sketch; the first floor to contain three bedrooms, balconies and conveniences.

Drawings to be in black and white, $\frac{1}{2}$ inch scale and to consist of two elevations; plan of each floor and section. Materials to be of rough stone rubble to height of ground floor windows and the balance timber or rough cast. Cost £1500.

Mr. J. C. Charlesworth of Wellington has kindly set this subject, and as an extra inducement to students has offered a special prize of £1 1 0 for best draughtsmanship **irrespective of design.**



Designs must be sent in, finished as above, under a nom-de-plume, addressed to **Progress**, 8 Farish Street Wellington, and marked clearly, "Forty-fourth Prize Competition" on outside with a covering letter giving competitor's name, and address of employer. Designs to be sent in by July 10th.

Our 45th Competition.

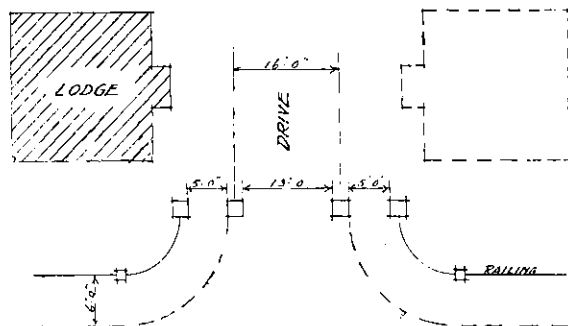
We offer a prize of £1 1 0 for the best design for a

Lodge and Entrance Gates to Public Institution.

Lodge House.—The house must contain the following accommodation, viz:—Living room (150), kitchen (120), bedroom (120), and two smaller bedrooms, scullery-washhouse, store, cupboards, etc., and bathroom, all on one floor. The plan must be symmetrical, the entrance facing the drive, and the design in severe Renaissance style with flat roof. Fenestration, proportion, and similarity in the three principal elevations (N., W., and S.) must be specially studied. There may be small loggia or portico at the entrance.

Gates.—The gate piers, 4 in number, must accord with the design of the lodge,—on two must be an escutcheon for the arms of the Institution, the crest may form the finials,—the other two must bear lamp standards.

The materials allowed are as follows:—Piers—Freestone with Granite base. Gates and Lamps—Wrought Iron. Lodge—Brick or terra-cotta walling, with freestone dressings and cornice, asphalt roof. One bay of iron railing with brick dwarf wall, stonecure and piers, must be shown.



The design must be dignified, and not too elaborate, carving only allowed in the finials, and mantling to escutcheon. It is to be assumed that a similar lodge can be built on the opposite side, as shown dotted on plan, to complete the symmetry of the scheme.

The plan is not to scale, and, except dimensions, is only suggestive, the exact location of lodge is at discretion.

Drawings required.—Plan of lodge and dissimilar elevations, one of which must show the gates, and section, to $\frac{1}{2}$ inch scale; details of gates and piers $\frac{3}{4}$ inch scale; and sketch perspective from within grounds showing lodge and gates.

Messrs. Atkins and Bacon of Wellington, have kindly set this subject.

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Our 46th Competition

We offer a prize of £1 1 0 for the design adjudged to be the best for a

A Seaside Bungalow.

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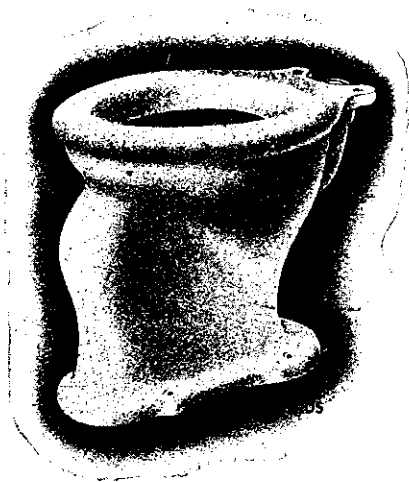
Choice of materials left with competitor.

The accommodation shall be:—Living room 200 sq. ft., bedroom 170 sq. ft., 2nd ditto 120 sq. ft., 3rd ditto 100 sq. ft., kitchen 160 sq. ft. The areas given are approximate. There shall be good verandah or verandahs. Bathroom, W.C., small scullery, (this may be designed in combination with the kitchen), pantry, etc. Cost need not be considered.

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

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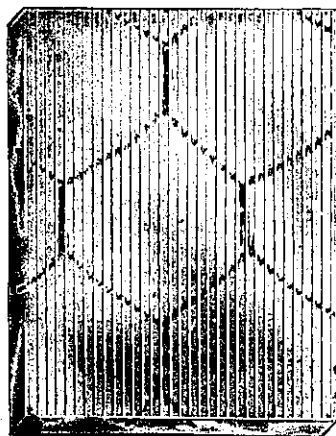
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WELLINGTON, AUCKLAND, CHRISTCHURCH, AND DUNEDIN, NEW ZEALAND, JUNE, 1916.

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Editorial Comment

The Passing of Kitchener

This month has seen the Empire in two moods. The triumph of the Navy: its great sacrifices, its glorious bravery, sent a thrill of admiration around the world. The spectacle of the German fleet scuttling back to safety behind its mine-fields proved even to doubting neutrals that Britannia still rules the waves, and that the triumph of the great ideals for which the Allies fight, will surely come. And then, when we were almost counting the day of victory, came the smashing blow of Lord Kitchener's passing. True to their British character, New Zealanders spared no time for rejoicing or reproach. Within a few days of the tragedy of the Orkney Islands, the House of Representatives passed a Military Service Bill, which will make sure of our supply of soldiers though the war goes on for years. We are truly carrying out the Kitchener plan in doing this. The great organiser, in the first month of the war, declared that he was planning for three years ahead, and his wisdom has been proved only too truly. Victory will not come from one pitched battle, nor even a succession of them. It has to be slowly forged by dogged resolution in the organisation of resources to that end. And Kitchener's death, swift and dreadful as it must have been, stirred us all to still greater resolves. The future will see in New Zealand a more systematic marshalling of our power, a sterner reminder to every man that "the State comes first." Those who have selfishly left to warmer-hearted patriots the real sacrifices which war entails will now find the compelling hand of the State upon their shoulder. The whole community will at last face the reality of the great situation.

Employers' Obligations

The State's reminder of duty takes the shape of compulsory military service. It is supposed to operate only when the voluntary system fails to provide sufficient recruits, but we believe that when, in the course of a couple of months the machinery of the new Act has been perfected, there will be a clamorous demand to end the "moral suasion" system which takes all the sterling patriots, and leaves

eligible fit skulkers in ease and safety, to profit by the departure of better men. Every possible loop-hole by which the shirker could have escaped seems to have been anticipated in the carefully drafted bill. Two clauses are of direct and special interest to employers. Clause 37 reads: "Every person shall be guilty of an offence punishable on summary conviction by a fine not less than *twenty* pounds and not more than *one hundred* pounds who, at any time after the enrolment of any division or class of the reserve has been proclaimed and directed, employs in his service or continues in such employment for more than seven days any man who belongs to that division or class and who is not enrolled therein, unless the defendant proves that he believed on reasonable grounds that the man so employed or retained in his service did not belong to that division or class or was enrolled therein." And the next clause prohibits, under equally severe penalties, the employment of men who, though enrolled, have failed to answer the call when the ballot has included their name in the list of the monthly draft of recruits. Employers have been considered in connection with the exemption system. If the calling up of any employee will seriously prejudice their business, or the State's interests, they will have a right to be heard before the Military Service Board. The same thing applies if an employee enlists voluntarily when there might be good sound reasons why he should stay in his civilian position. Employers must be prepared to stand inconvenience and loss, if it is part of the supreme war-winning effort.

Timber Waste

As New Zealand is coming within measurable distance of the end of its timber resources, it has been suggested to the Minister of Railways by the New Zealand Builders and Contractors' Federation that railing freights upon imported timbers should be reduced, with a view to encouraging imports, thus considering our own supplies. It seems strange that timber should have to be brought to this "timber country" right across the broad Pacific, but we have to admit that the pine forest of the Pacific coast of North America are of great advantage to the New Zealand building trade. Hardwood is brought in large quantities from Australia for the Railway Department, and is of the utmost value, while the beautiful figuring of the Oregon Pine is being utilised to give distinctive effects in our domestic planning. If it is disappointing to admit that we are large importers of timber, it is just as well to know that we are even larger exporters. Over six million feet of sawn timber went out of the country in April last. Our woods have distinctive and valuable qualities which make them sought after. But how long will they last? Our milling methods are as a general rule, wasteful, and no attempt is made to use the trees which will not "cut up" to best advantage. An American authority estimates that only 44 per cent. of the tree is actually turned into boards the rest being wasted into sawdust and useless slabs. It does not pay to worry about the little pieces, though thousands of articles could be made from them if there was closer co-operation between the timber miller and the joinery factory. A paper famine prevails in the Dominion, enormous prices being paid for this product of wood pulp. Many years ago one of our Land Bills contained special provision for a paper pulp concession on the West

Coast of the South Island. The establishment of this industry would have enabled the country to utilise profitably a class of timber now entirely wasted. If such a concern had been in full swing a year ago its value to the country would have been enormous. But it does not exist.

A Great Industry

The surpassing prosperity of our primary producers has been of some assistance to the building industry. New freezing works have been erected in many parts of the country, and this branch of building still goes on. No wonder our farmers require to put more money into these indispensable aids to economical working of their stock-raising business when last year's exports of meat and by-products exceeded those for 1914 by the impressive total of £2,052,554. Values will probably go down after the war ends, but we shall have the "turn-over" just the same, with a good chance of developing a hitherto closed market, France. Among the freezing works recently completed, or being built we note a fine undertaking at Whakatane, with a capacity of 100,000 carcasses, one near Feilding, with a capacity of 40,000, others at Wanganui, Marton Junction, Westfield (Auckland), and Kaiapoi, showing that this form of development is well distributed. Nothing but the limitations of shipping will prevent next season from being another record, but if the war goes on longer than another year, a radical reorganisation of labour power will have to be made. We may live to see the time when workers engaged in activities not directly productive of food, clothing, and other supplies for fighting men, will have to "get back to the land."

"The City Beautiful"

A custom that is becoming common in America, and one which we might profitably follow in New Zealand," said Mr. B. Leyland of Auckland recently, "is the 'spring-cleaning' of cities, as well as houses." Mr. Leyland said that when he arrived in Vancouver he saw the following notice posted in street cars and in all public places:—"Clean up, paint up, plant flowers; make your city beautiful, a joy to yourselves and to the strangers within your gates." Although Vancouver was suffering from severe commercial depression at the time, he was surprised to see, two months later, on his return visit to the city, the results of the spring-cleaning, painting and flower-planting. Many other American cities visited by Mr. Leyland has also been "spring-cleaned," and he concluded by saying that after what he had seen he was convinced that wonderful results could be achieved. The extra effort once a year to make the city beautiful was not too much to ask of the residents of any centre. We are glad to say that Mr. Leyland's impression has been given wide publicity in New Zealand. It appealed to newspaper readers, probably as a new and refreshing idea, but it is really one of the things about which the Town Planner is always preaching. If every citizen would be induced to see that his fence, his untidy backyard, his depressingly ugly house, helps to create a poor impression in his own district—if all his neighbours realised the same thing of their own fences, gardens and houses—the sum-total of the general awakening would be to turn some districts perilously on the edge of slum-dom into what the usual flattering house-agent can truthfully call "desirable residential localities."

Preparing for Peace

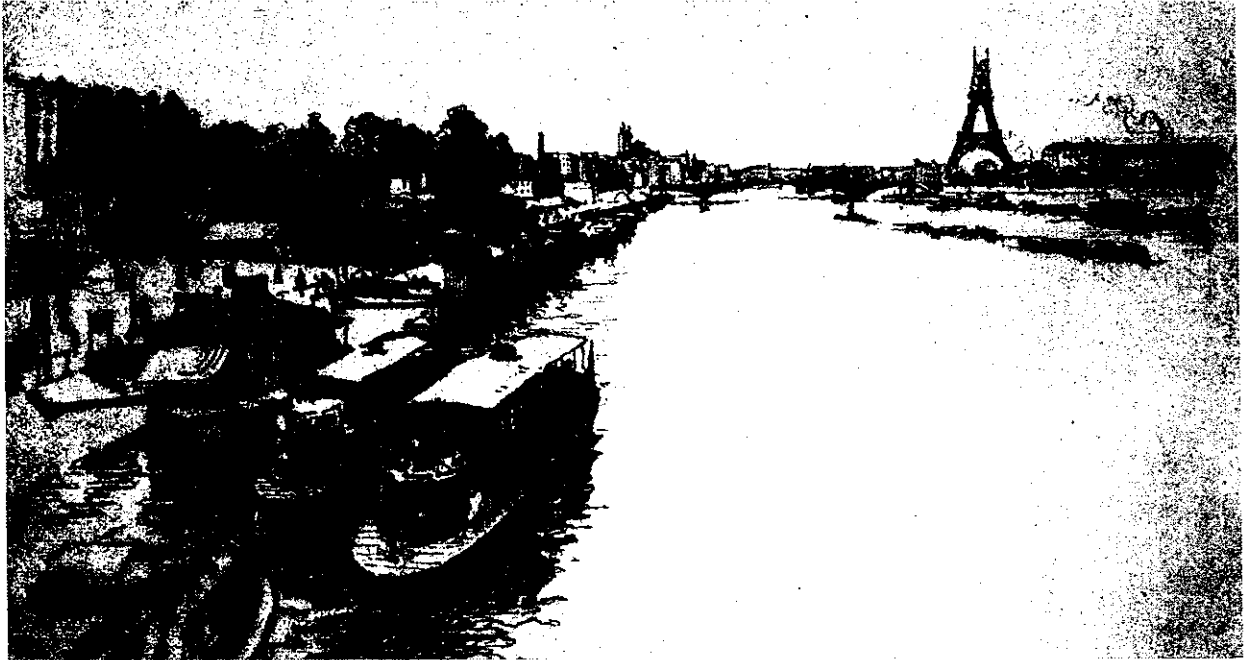
Exhibition of the "Re-organised City" in Paris this year to prepare plans for the re-habilitation of France on the return of Peace.

The Belgian Authorities together with the English Town Planning experts have been busy for some time past preparing plans for the re-building of their cities as soon as peace is declared, and now France has announced an exhibition to be held in Paris this year on similar lines.

With this object in view the exhibition has been planned of "The Re-organized City. Its beautification and Hygiene," to be given on the terrace of the Tuilleries and in the Salles du Jeu de Paume,

private dwellings. Farm and factory construction, materials and methods of construction and the interior administration of private dwellings. The General Manager of the exhibition will be Edouard Tijou, Director of the International Exhibition of works of Art at the Grand Palais in 1912.

In announcing the coming exhibition the management says: "Deeply moved by the sufferings of our brothers in the invaded districts and by the sad state of this part of our beloved country, a number



"On the Seine." From an etching by Eugene Begot.

Paris, under the direction of the General Association of Hygienists and Municipal Technicians of France and the countries speaking the French language. It will be under the distinguished patronage of the President of the French Republic and of the Ministry of Commerce, Industry, Post Offices and Telegraphs, the Ministry of Agriculture, the Ministry of the Interior, the Ministry of Public Education and of Arts, and the Municipal Council of Paris. As the result of this exhibition plans will be devised for the reconstruction of destroyed cities and villages, the development and administration of towns and villages, the reconstruction of public buildings and

of our countrymen now regard the measures to be taken to reconstruct our destroyed cities and villages as an essential element of recovery to a normal state. The General Association of Municipal Hygienists and Technicians of France and of countries speaking the French language consider that the moment has come to address a pressing appeal to the patriotism of all to organize from now on all our technical and industrial skill to help rebuild our cities and private dwellings. It seems to them that an exhibition of the necessary materials to prepare and hasten this work of reconstruction would be of valuable assistance, and they are using all their efforts to organize such an exhibition."

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The programme decided on includes four groups of exhibits, divided into twelve principal classes. In the first group will be all appliances required for a modern city; plans of administration and development, plans for reconstruction and for the beautifying and sanitation of a modern city, precautions being taken to respect the style of architecture of each district, the diversity of which styles add so much charm to French cities, and for the preservation of historic monuments and particularly of beautiful beauty spots. The second group will include general buildings, public buildings, private dwellings and road and factory buildings. The third group will include modern building methods and materials for construction with models, and the fourth group will be specially devoted to legislation concerning the construction, development and beautification of French cities. Meetings and numerous conferences will tend to make familiar the necessary elements of a healthy national life. It is believed that this important economic manifestation will once again show both the friends and enemies of France that, confident in final victory assured her by her army, she can organize her workmen to rebuild the ruins made by her enemies and place the country once again worthy of the dedication she has made of it, to the development of Liberty, of Justice and of Progress.

Group I., which is devoted to the development of towns and villages, will present plans for reconstruction, part plans, and plans for the whole work, and for the development and use of undamaged sections. Class 2 of this group will offer plans of administration of towns and villages. Class 3 will be devoted to public highways and promenades, squares for public use, gardens, parks, fields for play and sports, wood preserves, upkeep of roads and pavements, methods of repair and construction, public lighting, public conveyances, etc. Class 4 will deal with the appearance of a city and its beautification, general schemes of decoration, general co-ordination of buildings with the landscape, the preservation of monuments, historic styles and archaeological spots. Class 5 will cover the sanitary question, illustrating sanitation methods before reconstruction, sanitation of city, country and factories, the protection of drinking water, filtering, purifying and sterilization; conduits and the distribution of water, the collection and disposal of surface water from the public roads and from houses, factories, etc.; filth removal and its treatment; general methods of heat, light and force; sanitary service, health department service, public charities, disinfecting plants, etc.

Group II. deals especially with public buildings, palaces and public monuments. Among them are specially grouped buildings of public utility, city halls and various municipal offices; sanitary establishments for cures and lectures; shower baths, halls and markets, military establishments, the exterior and interior architecture of buildings and temporary buildings. Class 7 in this group deals with private dwellings, the modern dwelling, lodging house, individual house and cheap houses, which will be shown by furnished models. Electric lighting and

distribution of power, electric canalization, telephones, etc., will be illustrated as well as heating and ventilation, the instalment of kitchens, kitchen fittings and vacuum air purifying apparatus. Class 8 will be devoted to farm and factory buildings, showing the model farm and its outbuildings; private dwellings and the distribution of water; barns, stables, cow sheds, sheep folds, pig styes, wells, manure pits, etc. Dairies, butteries, cheese rooms and distilleries will also be exhibited with the methods of draining and purifying dirty water. Factory construction in cities and the country will be illustrated with temporary sheds and portable buildings. In Class 9 materials and supplies used by the building trade, terracing and masonry, iron and wood work, locksmithing, roofing and plumbing, joinery, arrangement of chimneys, painting and varnishing will be exhibited. Also natural and artificial materials, stone, bricks, tiles, wood and iron, with various methods of rapid construction. Fixed and movable decorations of buildings, the furniture making industry and different types of dwellings and healthy rooms, including the "guest room," will also be illustrated in this class.

Group IV., devoted to legislation, will give the principles and application of city and rural economy. Class 11 will compare French and foreign legislation and regulations, and Class 12 will show methods for realization of plans for the development and reconstruction of cities and repairs, covering syndicate and co-operative associations, private and public companies, regulations for the construction of towns and villages, and schools for imparting special technical skill.

Churches as Fire Traps

Boston has just had, for the first time in recent years, a general inspection of churches with a view to fire prevention. Conditions were found very unsatisfactory. A writer in an American exchange says that fire-escapes, automatic-sprinkler systems, and hand-fire extinguishers must be installed in many Boston churches as a result of orders issued to church-trustees by Building Commissioner O'Hearn, who has just completed an investigation of the four hundred churches of all denominations in the city. His inspection lasted several weeks.

Some of the typical unsafe conditions found by the Commissioner and his inspectors were as follows: Doors opening inward; rubbish-piles under stairways and in basements; no means of egress from sides of buildings; basement-screens screwed to the window-frames; lack of fireproofing around steam-pipes and furnace-pipes; improper exits from galleries and choirs; doors that, when opened, blocked stairways; heating apparatus installed beneath wooden stairs.

This is the first general inspection of churches made in recent years. "I am sure" said Commissioner O'Hearn, "none of the violations of the fire hazard laws was wilful. They were simply the result of neglect; and, possibly from a sense of security in the fact, there have been few fires in Boston churches."

Should Town Planning be Postponed on Account of the War?

This question exercised the minds of the members of the Greater Wellington Town Planning and Municipal Electors' Association at its meeting last month. The President, Mr. J. G. W. Aitken, read a letter from the Hon. Mr. Russell stating that in his opinion the time was not opportune to bring up Town Planning legislation. Some time back Mr. Russell made a definite promise to a deputation of members of the above Association that legislation would be introduced this session, and we cannot see any reason why this very important matter need be any longer shelved.

It may be of interest to Mr. Russell and those who think with him that the same views are not held in England, as the following excerpt from the Municipal Journal of December 24th shows.

"The necessity for economy has been brought so prominently before us lately that it has, perhaps, had the effect of making people uncertain as to the truest economies to practice. Local authorities have been urged to curtail expenditure, and to postpone all work having no direct bearing on the prosecution of the war. One of the results of this policy has been to engender a feeling that at the present time the preparation of a town-planning scheme is an unnecessary and costly undertaking, and it is in the public interest to draw attention to several points which show the time to be a most opportune one.

The general attitude was brought into prominence recently at a conference of owners convened by the Tadeaster R.D.C., when objections were raised in connection with the authority's resolution to apply to the Local Government Board for leave to prepare a scheme dealing with the district of Barwick-in-Elmet, to the east of Leeds, several of the owners maintaining that it was an unsuitable time to incur expenditure of this nature.

Their objections were ably met by the chairman (Mr. Prater), who was supported by Mr. Bromet, clerk to the council, and Mr. Longstreth Thompson, of Messrs Allen and Thompson (late Pepler and Allen), who are advising the council on the preparation of the scheme. The chief points in his argument have a general application.

It is in the interests of the owners and the general public that the local authority should have full control of the future development of the district, and in this way a very real economy may be practised. For while the cost of preparing a town-planning scheme is very small, a very large saving is effected by the avoidance of costly "improvements" in the future.

Owing to the war, building is practically at a standstill, and it is therefore a most opportune time to prepare a careful town-planning scheme in order that, at the end of the war, when builders begin to supply the acknowledged shortage of housing accommodation, a well-thought-out scheme may be ready so that the work can be expeditiously carried out on ordered lines.

While many activities of local authorities have been suspended, the Local Government Board, for the foregoing reasons, has encouraged rather than discouraged the preparation and prosecution of Town-planning schemes.

It is of interest to note that Mr. Prater, who is agent for a large landowner in the district, is thoroughly convinced of the expediency of town-planning at the present time, both from the council's point of view, and (this is perhaps more instructive) also from the point of view of the owner."

Better Concrete

WHAT THE KINEMATOGRAPH SHOWS

A Motion Picture Analysis of the flow on concrete from the mixers used in combining its elements shows that those elements are largely unmixed by the time they reach their destination, owing to the influence of gravity, under which the liquid part separates from the solid and the finer ingredients from the coarser. This is explained by Nathan C. Johnson, a consulting concrete-engineer of New York City, in "The Engineering Record." Mr. Johnson does not say that this partial undoing of the mixer's work is producing unsafe results, but he hints it very strongly and believes that the motion-picture analysis warns us of the necessity of improving the present methods of mixing and pouring concrete.

The pictures show that a liquid runs first into the forms, carrying dirt and scum and light particles—"a poor bond," as Mr. Johnson remarks. Then—"After this first rush of dirty fluid comes the gray of the finer cement and sand, in a sort of soup that constantly thickens with increasing quantities of coarser cement and sand as the pouring goes on. Next come the heavier sand and finer stone, sometimes washed nearly clean of cement; and at the bottom of the barrow lies the heavier stone, which, refusing to flow, has to be scraped out with shovels. All this is done in a few seconds—not more than a minute after the mixture was delivered by the mixer, for the cost of placing must be kept low—yet the materials have become almost completely separated. A little more time, as in a longer haul to the forms, and this separation, or 'segregation,' might be complete.

"But what of the mass in the forms? How does it lie—in layers, as it went down? What of its endurance? And what of its strength? Is careful design useless? Or is the concrete being used in such bulk, regardless of initial cost or actual possibilities, that nothing would matter, save almost total lack of cement? The answer is that, consciously or unconsciously, "Everybody's Doing It," and it is "Getting Away With it"; and if Luck turns thumbs down, and if something happens in the far-off future, there are so many inanimate things that can be blamed when the time comes that the risk is held to be negligible and unworthy of consideration compared to present profits.

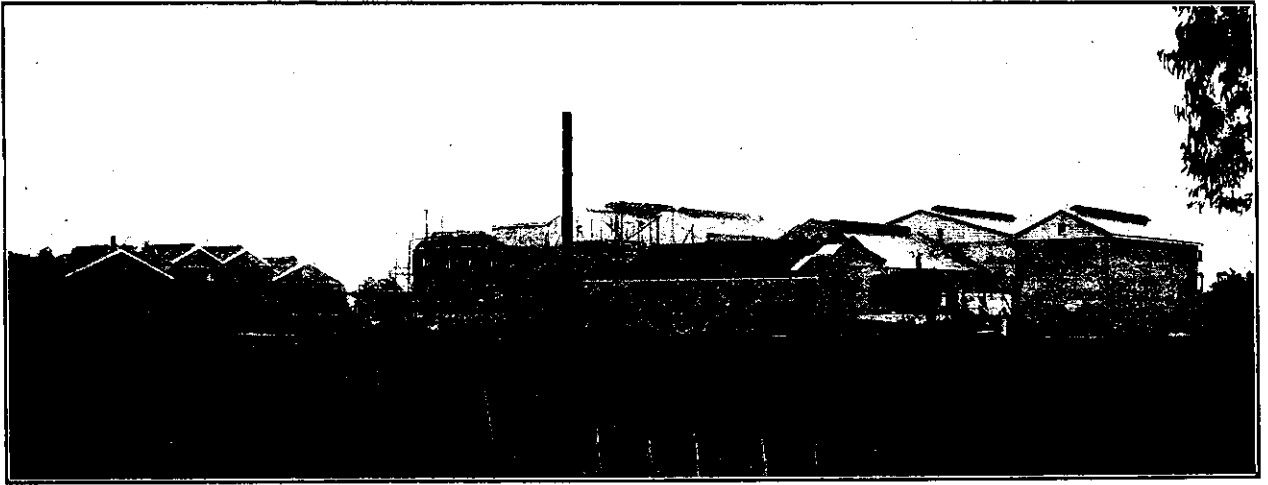
"If the practises illustrated above occurred only in isolated and infrequent instances they would have little bearing on the general quality and endurance of concretes. Unfortunately, however, they are all too prevalent; and although their impropriety is recognised when pointed out, they are yet of general daily occurrence and will continue so until more general understanding is had of their economic fallacy.

"When this understanding becomes general, such procedure in the manufacture and placing of concrete will be no more tolerated by owner, engineer, or contractor than would the distribution of fire-producing chemicals throughout the structure of an inflammable building. Under certain favourable conditions the two might prove equally potent for trouble and damage.

"The ultimate loss falls on the owner. Cement is a wonderful servant, standing much abuse. Trouble will probably be some time in coming, and

The Speculative Builder

The problem of what to do with the incompetent speculative builder is of course no new one. Many a man has had bitter reason to regret the purchase of a house built by this method. It must be obvious to a thoughtful person, that when a man offers to build a house and 'save the architect's fees,' that he is going to suffer in some way, else the whole architectural profession is an unnecessary encumbrance. It is not altogether easy to convince the average person about to build that it is false economy to dispense with the architect's services, though one strong reason, that of repairs, ought to be sufficient to deter people from dispensing with adequate supervision. Unfortunately the purchaser sees only the surfaces, internal and external, of the house he buys, and he has to take on trust the builder's statement. What guarantee has the purchaser of the quality of



New Freezing Works for the Orua and West Coast Meat and Produce Co., situated at Aorangi near Feilding.
L. A. James, Consulting Engineer, Wellington. (See "Building Notes" for details.)

by then the contractor will be paid and away. Nor has there been any normal obtuseness on the part of the latter. He has done his work probably as well as he knew how, in full accordance with average practise, and as carefully as his bid rate-per-yard has permitted with the making of a reasonable and fair profit.

"Obviously, the remedy lies first of all in better understanding of concretes, not on the part of those whose knowledge is beyond question, but on the part of the great army of every-day workers on whom dependence must so largely rest. If improved methods of mixing can be produced which will secure better results without increased cost, the problem is much simplified, but if this cannot be accomplished, there will have to be an economic readjustment all along the line, with the securing of better-quality concrete and a proportionate recompense to the owner in the quality and endurance of the structure he has purchased."

the woodwork and the plaster which are carefully hidden behind the bright paint and tasteful wall-papers? A person who buys a house built without proper supervision should allow 15% to 20% on to the cost to cover repairs which will surely be necessary before the house is very old.

A method is being tried in England to do away with the speculative builder house by calling for tenders for quantities of houses say up to 20 of one type. This can of course only be done under proper organisation, and is usually only practical in some of the Garden City or Housing schemes. Its advantage is that the speculative builder has no chance to compete against the big contractor in quantities such as these, and the client gets the benefit of a good article designed and supervised by an architect, and built by a builder of reputation, at a lower cost.

These schemes sound rather ambitious to us in New Zealand, but something should be done to protect the public. Now that we have Sir Rider Hag-

gard with us enquiring what we are prepared to do to assist in placing the English Soldier on the land, perhaps the Government might be induced to get designs in the open market of suitable houses which could be built in quantities.

Architects' Tenders

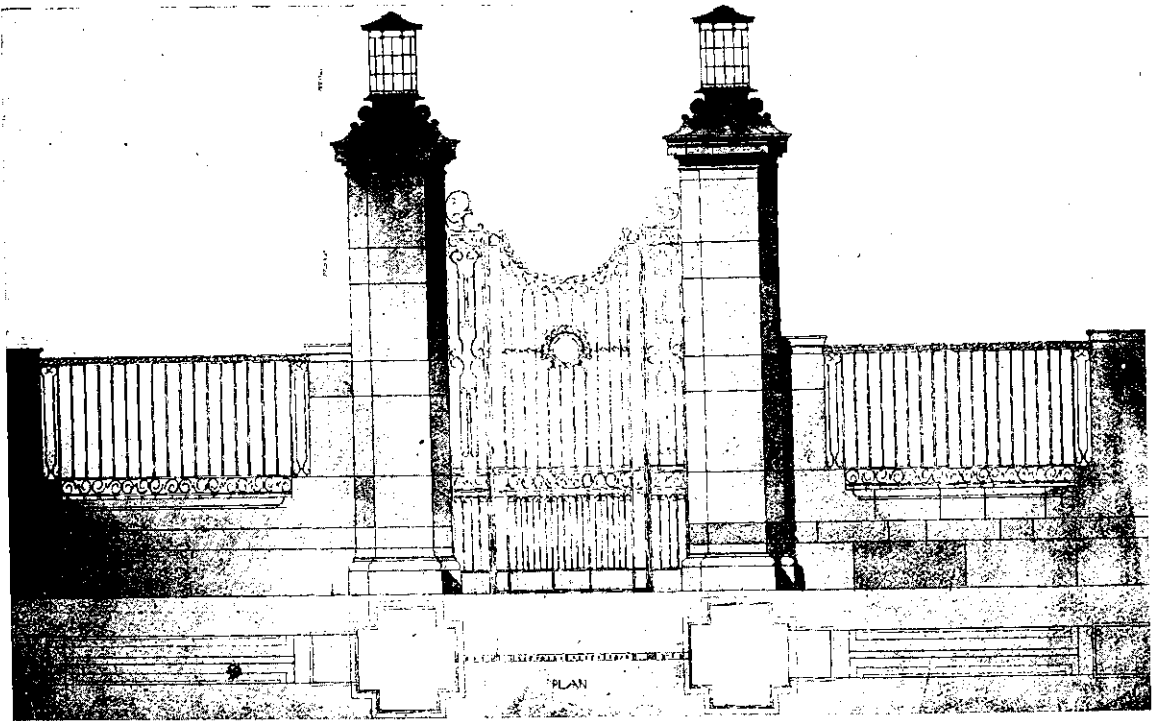
The Architects and Builders' Journal, London, comments on the report of the annual meeting of the New Zealand Federated Builders and Contractors. At this meeting it was resolved: "That the Institute of Architects be asked to agree that tenders for all contracts be opened in the presence of any builders who may be present when tenders close." "One can imagine,"

Auckland Architectural Students' Association

REPORT OF MEETING HELD FEBRUARY 22nd 1916

Owing to the situation caused by the war, it was decided to forego the idea of having a Club Room for the coming year. The Association is to be run on similar lines to those of the previous year 1915, and a syllabus of Lectures and Competitions is to be drawn up. The election of officers took place and resulted in the following:—

President: Mr. Bamford, A.R.I.B.A., (Messrs Bamford & Pierce, Hobson Buildings). Vice Presi-



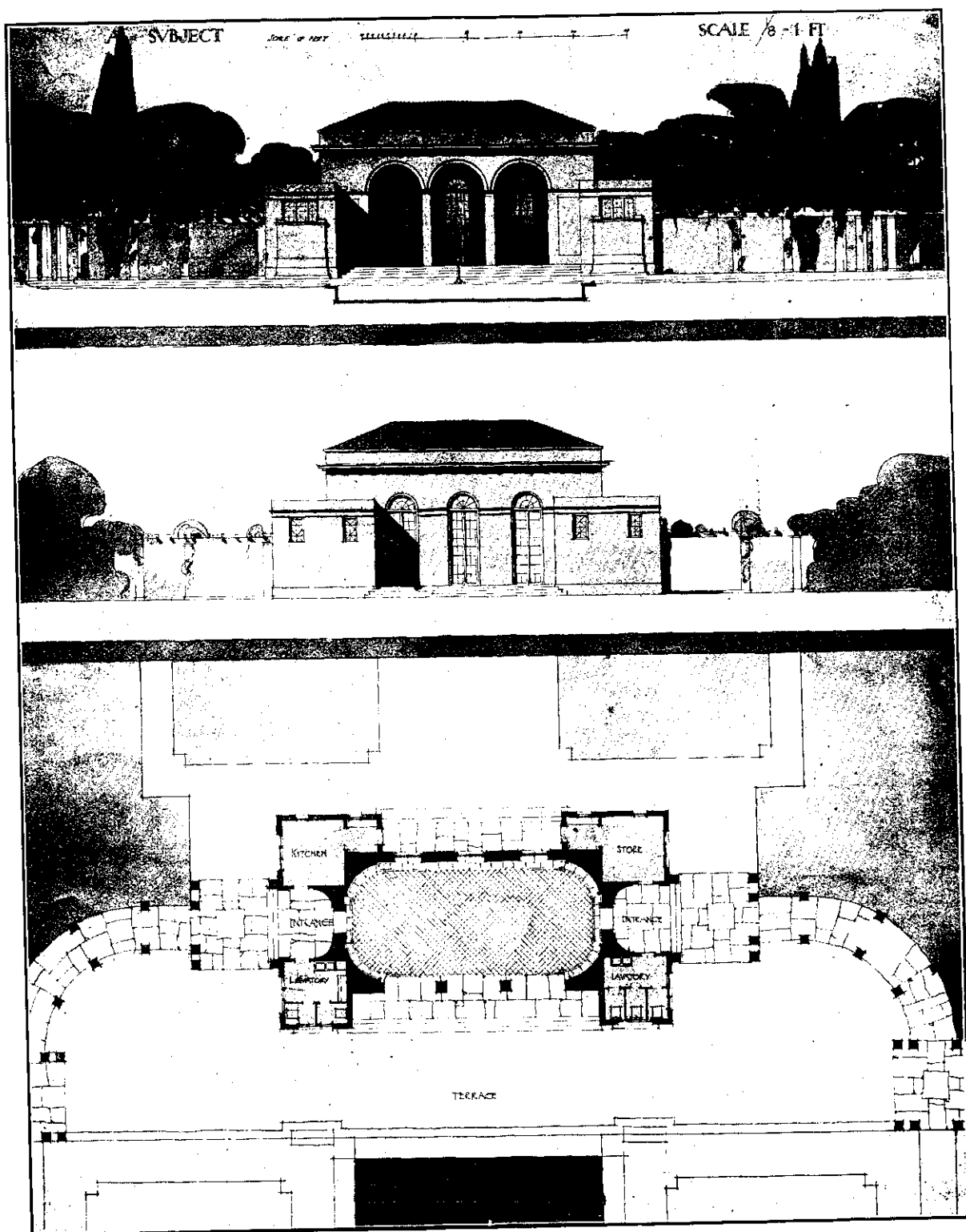
AUCKLAND ARCHITECTURAL STUDENTS' ASSOCIATION.

Entrance Gates to Pavilion and Sunk Garden, by E. Phillips

says the journal, "that if this became the established practice it would afford much exercise in the gentle art of making enemies. Meek men would shrink from such an ordeal, which, however, would be seized upon as a great occasion by the 'win, tie, or wrangle' contingent. Heated discussion might sometimes necessitate calling in the police as supplementary assessors. In this country, at all events, it is a matter in which the architect or public body may be wholly trusted to select the most advantageous tender without assistance, however disinterested, of rival contractors, thirsting for a minutely analytical acquaintance with each other's business methods, and quite capable of proving to their own satisfaction that the highest tender is in reality the lowest, and vice versa."

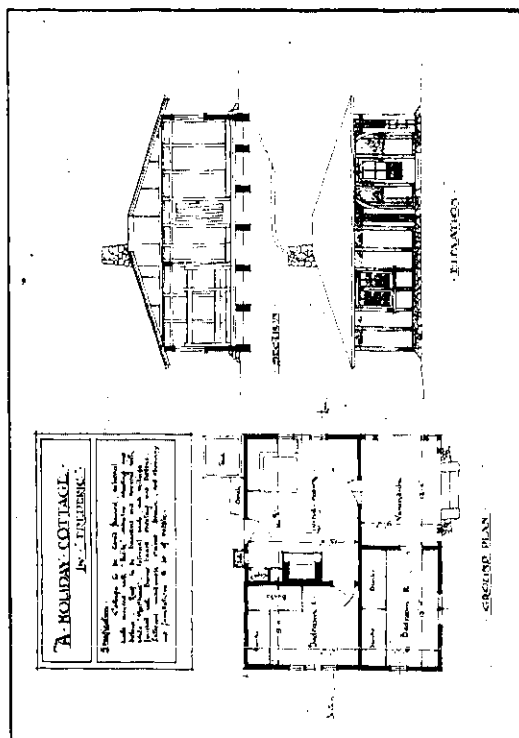
dents: Messrs W. H. Gummer, A.R.I.B.A., A. Hunter, F. Moodie, D. B. Patterson, H. C. Savage. Hon. Sec. N. Garlick, C/o Messrs Hoggard & Prouse & W. H. Gummer, A.R.I.B.A., 25 Safe Deposit Buildings, High Street; Hon. Treas.: P. Garrett, C/o Messrs Holman & Moses, Victoria Arcade; Committee: H. L. Massey, H. Hyland, E. Phillips.

The membership now stands at 19, and the Association has the proud distinction of being able to state that 15 of its members have left for the front, viz.:—Mr. R. K. Binney (Vice President), A. P. Morgan, E. Le Petit, J. O. Owen, C. Towle, K. Murray, A. B. Millar, I. Hall, K. Draffin, E. Marr, G. Hunt; (enlisted), A. Carter, E. Reidy, S. L. Bent, and A. Stewart. We illustrate some work by members of the Association this issue.

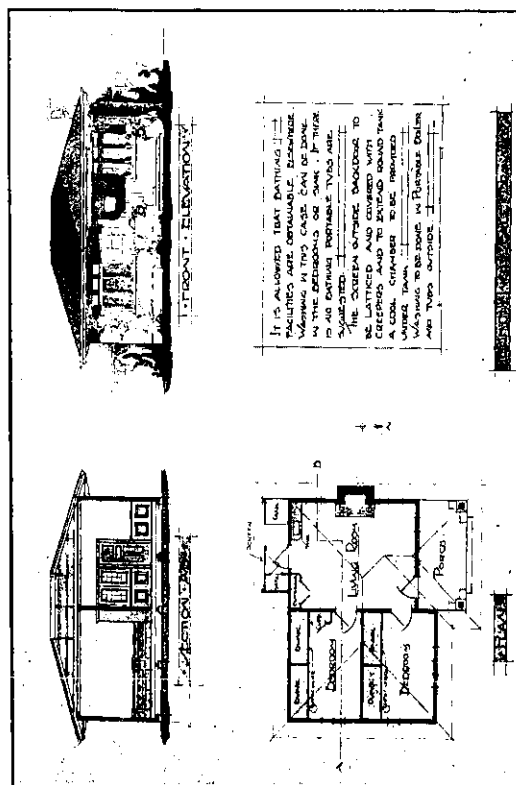


Auckland Architectural Students' Association—Pavilion and Sunk Garden, by J. O. Owen

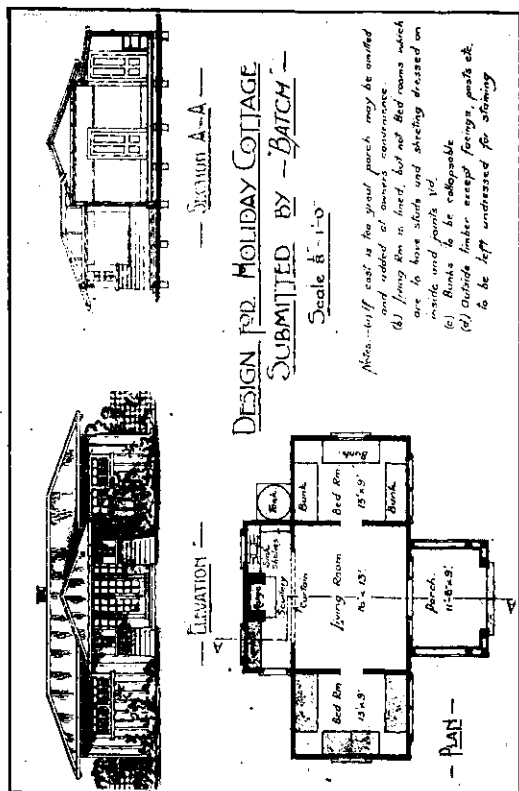
Our 42nd Competition



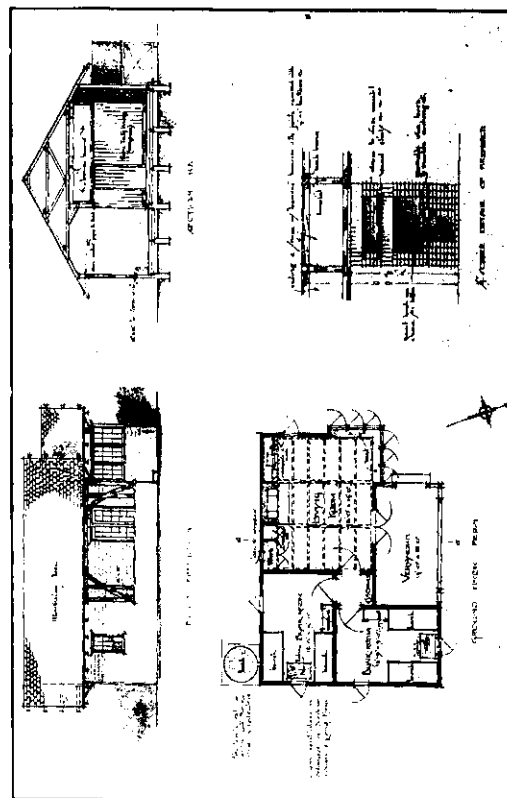
Winning Design ("Frederic") in our 42nd Competition by F. J. Hyde with Mr. J. Turnbull, Timaru.



Awarded "Hon. Mention," Design "May Morn" by W. Wallnutt with Messrs. Mahoney & Sons, Auckland.



Awarded "Hon. Mention," Design "Batch" by C. W. Watkin with Messrs. Holman & Moses, Auckland.



Awarded "Hon. Mention," Design "Ink" by J. R. Doyley with Mr. Gray Young, of Wellington.

Our 42nd Competition.

Won by F. J. HYDE, Timaru.

Ten designs were sent in for this Competition, viz.:—"Regal," by Leslie H. Charlton, with Mr. A. Garnett, Hastings. "Rus Casa," by Richard Osten, with Messrs Ancombe & Smith, Invercargill. "Ink," by John R. D'Oyly, with Mr. Gray Young, Wellington. "Tiny," by F. G. Bradley, with Public Works Dept. "May Morn," by N. Wallnutt, with Messrs Mahoney & Son, Auckland. "Frederic," by F. J. Hyde, with Mr. J. Turnbull, Timaru. "Quart," by H. A. Lynch, with Govt. Architect, Wellington. "Goblet," by S. H. Parsons, with Govt. Architect, Wellington. "Rus," by E. C. Small, with Mr. H. C. Savage, Auckland. "Batch," by C. B. Watkin, with Messrs W. A. Holman & L. V. Moses, Auckland.

The judge, Mr. Leslie D. Coombs, A.R.I.B.A., of Dunedin, who kindly set this subject, reports as follows:—

"FREDERIC," (Placed 1st):—This is an excellent and practical design showing all the accommodation required. A single two-light window to each of the bedrooms would have been sufficient. The outside bench at the back door is a small item but a useful one. The rubble masonry foundation and chimney give a necessary rustic touch to the appearance.

"INK," (Hon. Mention):—This design, especially the planning of the bedrooms, is very good. It is not such an economical design as that by "Frederic," and economy, with nine people out of ten, is a most important factor when a "Holiday Cottage" is to be erected. The top of the chimney should have been shown on the elevation to come above the top of the ridge.

"BATCH," (Hon. Mention):—The scullery arrangement is good, but as it is really part of the living room, it makes that room about 18-ft. x 16-ft. The tank is well hidden.

"MAY MORN," (Hon. Mention):—The plan of this design is very similar to that by "Frederic." The same fault re bedroom windows. The tank is small. The elevation is nicely drawn and shaded.

"RUS,"—The draughtsmanship of this set of drawings is excellent. Five different entrances are more than a three-roomed cottage requires. The unnecessary side porch is made doubly bad by having a vestibule added to it.

"QUART"—The plan is but fair, and the elevation lacks the artistic touch. It has, however, the merit of simplicity.

"TINY"—It is exceptional when sea or river bathing is not obtainable near a holiday cottage. Also remember that if a bath is used too often the tank will soon run dry. Under these conditions therefore we must—though reluctantly—condemn "Tiny's" luxurious bathroom. The proportions of the cottages are rather lofty for a snug effect.

"GOBLET"—The plan is good but the elevation is not beautiful.

"REGAL"—This design is too ambitious. The porch (or rather verandah) to bedroom No. 2 is money wasted for the sake of making the cottage appear to be more important than it really is.

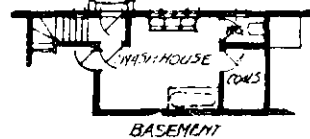
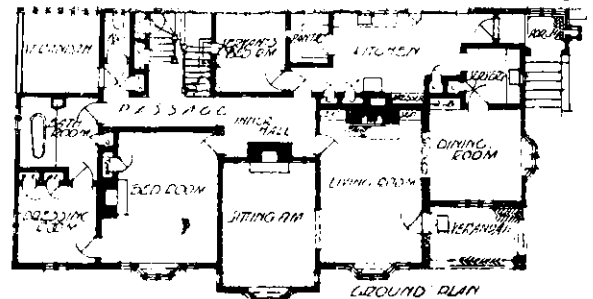
"RUS CASA"—Another design showing too many luxuries. The roof window is superfluous. The chimney cap would have been better quite plain.

LESLIE D. COOMBS.

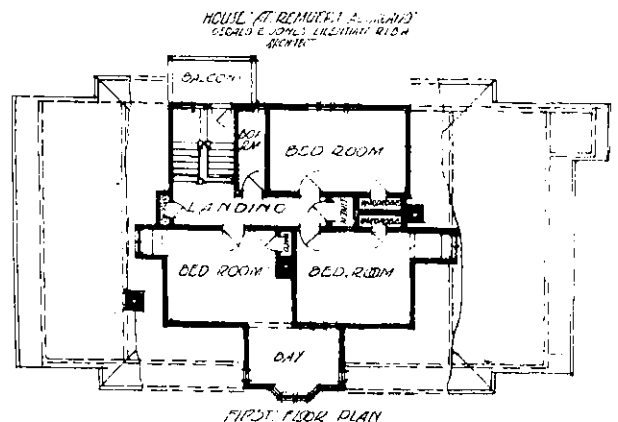
Recent Domestic Architecture.

HOUSE AT REMICERA, AUCKLAND.

The plans shown below of the two floors of a residence (exterior of which is illustrated on our cover), are to the designs of Mr. Gerald E. Jones, Lic.R.I.B.A. of Auckland. The house is situated amid beautiful surroundings. It is built on a 9-inch brick base, the outer frame oregon lathed and covered with rough-cast, lime washed white. The roof is



of green dual slates. The diningroom and hall are panelled in oregon, and the kitchen and pantry match lined and enamelled white. All the bedrooms are papered, and the principal ceilings plastered; the hall having a beam ceiling. The hall fireplace is built of variegated bricks, the staircase being arranged so that the servant can enter the first floor



without going through the living hall. Folding doors are placed between the diningroom and hall enabling them to be turned into one room. The verandah and porch floors are paved with pressed bricks set in herringbone. The windows have wood casements and frames. The eaves of the buildings are exceptionally large, 3-ft. wide, giving protection against prevailing gales.

War and Commerce

THE EMPIRE'S OUTLOOK

A most interesting address was given before the Christchurch branch of the Royal Colonial Institute last month by Mr. H. J. Marriner. The address is so full of suggestive points that we have no hesitation in reproducing it for the benefit of our readers as published by a Christchurch daily.—

Mr. Marriner, in the opening portion of his speech, dealt with the historical aspect of his subject. He quoted Sir Walter Raleigh's ever memorable and true remark: "Whosoever commands the sea commands the trade; and whosoever commands the trade of the world commands the riches of the world, and consequently the world itself," and said that as the history of England herself showed, war did not necessarily mean that a nation must reach disaster because of it. In fact, during the long struggle with Napoleon, England, though she increased her burdens, also increased her wealth and opportunities, and the secret lay in her having the command of the sea. During the period from 1815 to 1870 Great Britain was able to manufacture and export to all countries without competition or practically so. The speaker touched upon the important point of England's free trade policy at some length. This policy, he said, was so engrafted into the British idea that although it was now obsolete and detrimental to Britain's true interests, it had become a fetish to which the people still bowed. Cobden, the free-trader, and Bismarck, the protectionist, had diametrically opposed ideas. Both had prophesied, but the German's prophecy had come true, or was about to.

THE RISE OF PRUSSIA

The speaker sketched the events which, after 1870, led up to the rise of Germany. A great impetus, he said, was given to German commerce by Bismarck bringing down in the Reichstag in 1879 a strong protectionist tariff Bill, securing her home markets, but allowing her to exploit the foreign markets. From that date Germany's trade and shipping bounded forward in gigantic strides, until with swelled heads the whole nation had listened to the Kaiser and his war lords, and, as they forced their "blood and iron" policy on Denmark, Austria and France, so they would try and continue to do so, and force the whole world to their feet. By strenuous labour, by bringing applied science into their every day work in laboratories and factories, by supplying the wants of their clients, by peaceful methods, and in some cases by underhand methods, they gained a big hold on the commerce of the world, and nothing less than this war would overthrow the commercial power of Germany. Had it not taken place it only required two decades of peaceful but strenuous penetration on British commerce to have gained the mastery. This war had, therefore, in this case, been a blessing in disguise, pointing out to us the weakness in our national and commercial armour. It was erroneous to say that Germany and

Austria only made rubbish, for he had seen in these countries goods which for skill, workmanship, finish, and beauty were unsurpassed anywhere.

POWERFUL ORGANISATION

The speaker went on to outline the powerful and intricate commercial organisation which the United States and Germany had, legitimately enough, used to forward their aims. So far as Germany was concerned its organisation was the best in the world. All districts were divided, so that there should be no overlapping and no competition. Railways, Canals, and rivers all were brought to the highest standard of excellence so as to bring the raw material to the manufacturer, and take to the ports the finished articles. The factories were kept constantly at work, if possible three shifts daily, so as to reduce the cost of production, and the residue at stock-taking was dumped into free trade England at ruinous prices, and the loss made was spread over the year's workings, and was thus not appreciable. The German commercial power was felt in all countries of the world, and like a huge octopus was gradually spreading its tentacles until the aim was to have the world's commerce in its grasp. The Germans had done a great deal of filing ideas and patents from other nations. The great dye trade, worth £20,000,000 annually, was a British patent, and a large proportion of the steel turned out was by a process of Thomas Gilchrist. Out of fifteen German trade specialities the patents were in eight and a half cases British, four and a half German, one French, and one American.

THE CHALLENGE

In the period from 1870 to 1914 they found that British trade had been severely challenged, and Great Britain had not held or increased her industries to the same extent that the States and Germany had. For this three main reasons had been given, viz.:—

- (1) The physical and geographical advantages peculiar to Great Britain were being outweighed by the superior organisation of competing nations;
- (2) Our manufacturers did not receive from the people the same skilled assistance that the people of other nations were giving to their countries' commerce; and
- (3) The application of new inventions and discoveries in commerce was not encouraged to anything like an adequate extent.

Cobden's boast that all other nations would follow Great Britain's free trade in five years was not borne out. France, Switzerland, Italy, Holland, Denmark, Germany, and the United States, in fact, the whole world, with the exception of Great Britain, had to place prohibitive tariffs against imported goods so as to protect their home markets, while giving scope for exporting. Germany and the United States had increased their export trade a great deal more than Great Britain.

GROWTH OF TRADE

Between 1880-1884 Great Britain's exports of manufactured goods were valued at £206,000,000, Germany's at £93,000,000, and America's at £26,000,000. For the years 1902-1906 Great Britain rose to £250,000,000, Germany to £177,000,000, and America to £100,000,000. The increases were: Great Britain 21 per cent., Germany 90 per cent., and America 285 per cent. Some writers said that we must be careful not to upset Germany because she bought so much from us. True, but if they analysed what she bought they would find that she bought coal, food stuffs, and raw materials, which were essential to the manufacturers. What she sent to Great Britain were manufactured goods, on which the manufacturer had made his profit and the workmen received their wages. In 1913 Germany bought from England £40,000,000, and we bought from Germany £80,000,000; a half of this latter amount was a fair estimate for wages paid in the process of manufacturing. If the greater part of these goods had been made in Great Britain and the millions spent in British wages, what a difference it would have made to British manufacturing centres.

SALVATION IN WAR

After referring to questions of emigration and the huge resources of the Empire, Mr. Marriner said: "This war is going to be the salvation of our Empire. Money was so easy of accumulation that we were getting indolent, while our more strenuous competitors were taking advantage of us. This will all change. We have been shown the abyss that we were making for. Our commerce, patent laws, and tariffs must be amended so as to stop once and for all our markets being exploited for the benefit of foreigners. Our greatest commercial opponent is now busy manufacturing a large quantity of goods which are under the organisation of the Government, and as soon as peace is declared, will flood the markets, turn them into money so as to give her the financial help to gather strength to further fight our economic conditions in the future. This must be stopped before the crisis comes, and we, one and all, must strengthen the hands of Governments to see that these goods are not allowed to upset our British commerce. In the past the commerce of Great Britain has been built up by the individual, and upright efforts of the business population against strong hostile tariffs and subsidised steamers. Governments have seldom helped, looking rather upon business as outside their domain, and politicians have taken the place of men of expert knowledge. For the future party systems with their pernicious legislation must cease, and only the best brains be employed. Commerce must receive its full recognition and assistance from the Governments, and officialism must be brushed aside. The future will call for the best in us all as the problems of future government and commerce are stupendous."

In conclusion, Mr. Marriner said he was optimistic as to the future. He hoped to see the whole of the Empire allowed to have a say in the Empire's policy, and then with system, application and the

complete organisation of our huge wealth, we could rise to higher things, and bring peace and blessing to the smaller nations of the world.

Loud applause greeted the conclusion of Mr. Marriner's speech, which was followed by the exhibition of some excellent lantern slides of German towns.

Too Much "Speculative" Building in Auckland

—
AUCKLAND FIRM OF BUILDERS REPROVED BY MAGISTRATE

In Auckland recently two bankrupt builders were brought before the magistrate by the Official Assignee on charges of failing to keep proper books and with incurring debts whilst they were insolvent.

The accused, and his son carried on business in the latter's name, the father being responsible for the books and the son for watching the building operations. They carried on business without capital on the lines generally known as "Speculative building."

According to the evidence of the Assignee, when the business failed the accused's debts amounted to £968. There were no assets. No books had been kept, but the defendants must have known that they were insolvent some considerable time before their bankruptcy, yet with that knowledge they had contracted considerable debts. Evidence was given by several creditors as to the manner in which credit had been obtained from them by the accused.

Herbert William de Baugh admitted that books were not kept. Nevertheless, he said, when the debts were contracted reasonable hopes were held that they would be able to settle.

In convicting the accused, the magistrate said he had no sympathy with the style of building carried on by the accused. Building houses with other people's money, with the hopes of selling at a profit, was not right. He was surprised at business people, however. It was inconceivable that a person would be allowed to contract debts running into large amounts when there was no security other than word of mouth. There had been too much speculative building in Auckland, and he was going to impose a sentence which he hoped would be a lesson to others. The elder accused would be sentenced to two months' imprisonment without hard labour, on each of the three charges of obtaining credit, the terms to be concurrent. The younger accused would be convicted and discharged on each charge. On the charge of failing to keep books both accused were convicted and discharged.

—
The gradual change in character which has been traced in the external treatment of houses of the later part of the seventeenth century and of the eighteenth is also to be found in the internal decoration. The exuberant and vivacious detail of Elizabethan and Jacobean work gave way to the more sober and scholarly rendering of Inigo Jones, Webb, Wren, and their successors.—*J. Alfred Gotch.*

Competitions.

Improvements to Cathedral Square.

Won by Messrs. Hart & Reese (of Christchurch).

This competition, which was announced some considerable time ago, then withdrawn and again announced, has now finally been adjudicated upon by the assessor, Mr. Hurst Seager, F.R.I.B.A., of Christchurch, on behalf of the Christchurch Beautifying Association.

At a meeting of the Committee of the Association held recently, the competitive designs sent in and the report thereon of the assessor were considered, and it was decided to accept the recommendation of the assessor, and award the first prize of £25 to Messrs Hart and Reese, of Christchurch. The second prize of £15 was awarded Mr. Roy Lovell Smith, of Christchurch. A special prize of £5 was awarded Mr. Leslie Coombs, of Dunedin, and another special prize for excellence of draughtsmanship was awarded Messrs Salmond and Vanes. In all seven competitive designs and one non-competitive design were received. All the designs were on view to the public at the Art Gallery for a few days.

We are given to understand that four designs have been selected by the assessor, Mr. S. Hurst Seager, F.R.I.B.A. of Christchurch, in the recent Wanganui competition, the four competitors have been notified that their final designs must be in by October this year.

After Verdun, What?

Dr. Fitchett, in "Life" for June, just issued, rightly describes the Verdun battle—or series of battles—as "an epic of the war." All the military critics agree that the long continued assault on Verdun is the most important event since the Battle of the Marne, and it is extremely interesting to note the varying points from which the operations are viewed. Thus a leading Austrian critic sees in it nothing but a triumph for Germany. The French authorities count up the enemy dead by hundreds of thousands, and the most conservative English observer estimates German casualties at a quarter of a million; yet, by some queer line of reasoning, the Austrian writer calculates that Germany saves 70,000 men. His logic seems to be that of the Western cowboy who wrecked the passenger train, but saved the child.

Now Dr. Fitchett is a past-master in the art of collecting these widely differing accounts, sifting and gleaming the truth from each, and presenting to his readers a complete review of the operations, which loses nothing of its informative value through being told in his bright and picturesque style.

Nowhere have we seen a better summary of the Verdun drive than in "Life" for June.

The other departments of "Life" are so carefully edited that no one, we are sure, will grudge the extra twopence that, on account of the 400 per cent. rise in the cost of paper, has been added to the price. At ninepence, "Life" is still a cheap magazine, and remains the ideal magazine of the busy man. If it cannot be obtained locally, a postal note for 4/6 sent to T. Shaw Fitchett, 376 Swanston Street, Melbourne, will ensure its regular delivery by post for six months.

Personal.

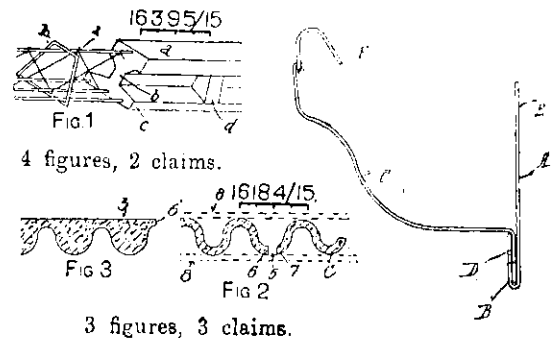
Mr. Henri Bastings, F.N.Z.I.A., has commenced practice in the South British Insurance Coy.'s Building, 326 Lambton Quay, Wellington.

Recent Building Patents.

Concrete Slab.—Aust. Patent No. 16,184 by J. Knowlson of Victoria, Australia consists of a concrete slab for floors, partitions, fences, &c., in which surface corrugations are arranged to form a key for the overlying plaster.

The slabs, which may be reinforced, and corrugated on one or both faces, are made by passing the plastic concrete through a screed box to a mould which slides under a plain or corrugated roller. The slabs are then compressed and allowed to set, and, when erected, the faces may be rendered and finished in cement, &c., to produce flat surfaces.

Re-inforced Beam.—Patent No. 16,395 by P. B. Frost and F. Kings of England consists of re-inforced concrete or terra-cotta beams for supporting floors, roads, &c., in which



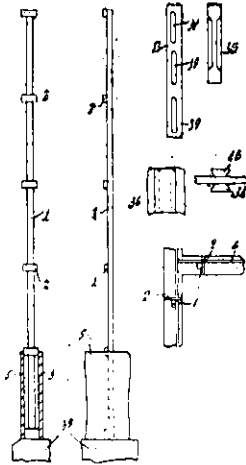
the top members are formed narrower than the bottom, to leave spaces for filling when the beams are placed side by side. The flanges may be re-inforced by rods *i*, and the stiffening brackets *d* by hoops *h*, while diagonal shear wiring is embedded in the web *b*. The bottom flanges of the beams are placed in contact, and the spaces between the webs filled with coke breeze concrete to which flooring boards may be nailed, while the stiffening brackets may be utilized to support between the webs *b*.

Spouting Bracket.—Patent No. 36404 has been taken out by H. G. Goodyer of Wellington. It consists of a bracket made in two parts, a fascia or vertical portion and a spouting holding portion. The fascia portion is formed by a single thickness of the usual metal strip, and has its lower end doubled up for a short distance so as to form a narrow clip. It is made with holes in its upper and lower ends, through which nails for securing it to the building may be passed, the hole or holes at the lower end passing through the clip. The other portion of the bracket is also formed of

the usual metal strip, and is shaped to fit the bottom and outer curves of the spouting. The inner end of the strip is bent vertically downward so as to pass into the clip of the fascia portion, and so that when placed therein and secured by the nails passing through the clip, also passing through holes correspondingly positioned in this member, it will be rigidly supported upon the fascia portion. The outer edge of this portion is provided with any of the known and approved means by which the top outer edge of the spouting may be engaged and locked in the bracket, such, for instance, as the hinged wire clip commonly used.

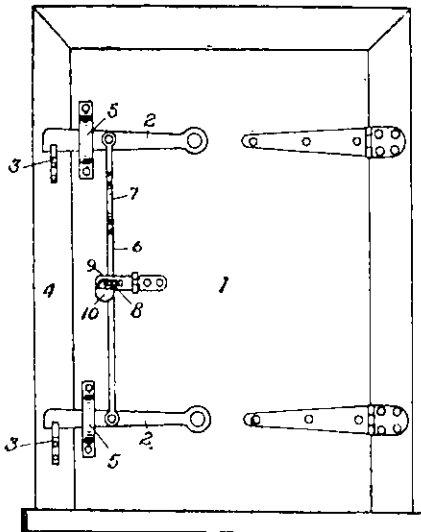
Concrete Construction.—A patent, No. 35950, has been taken out by S. H. Crump of Park Avenue, Auckland.

The invention consists of a frame of vertical and horizontal or diagonal members, and in providing distance-pieces attached to the frame for spacing apart shutters or making-boards, which are clamped against the distance-



pieces. The vertical members are made of wood, iron bars, or tubes, or a combination of wood and iron; and the concrete is cast around the members of the frame, which is entirely embedded in the concrete, so that there are no breaks in the surface of the same.

Door and Gate Latch.—A recent patent No. 37170 taken out by A. O. Rae, Remuera, Auckland is for a door and gate latch. The invention consists in providing an upper and a

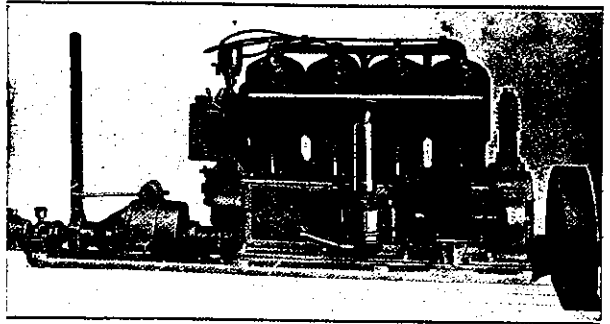


lower latch, each of which is provided with an engagement catch, situated on the gate-post, or door-jamb, or the like.

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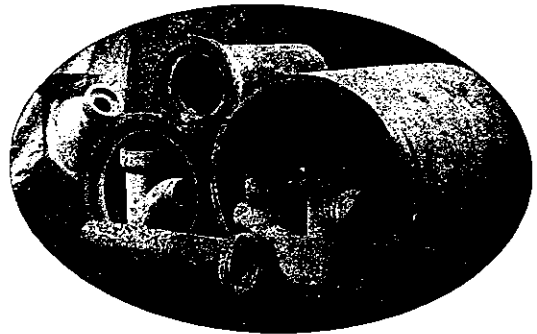
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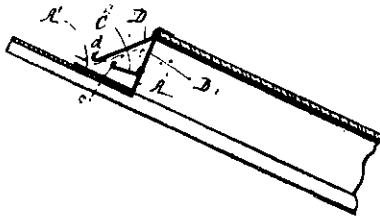
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The latches are connected together, so as to work simultaneously, by a vertical rod having a hand grip or handle thereon, a hasp also provided on the door being adapted to engage over an eye-bolt on the vertical rod, so that by means of a padlock or the like the door can be securely locked when desired.

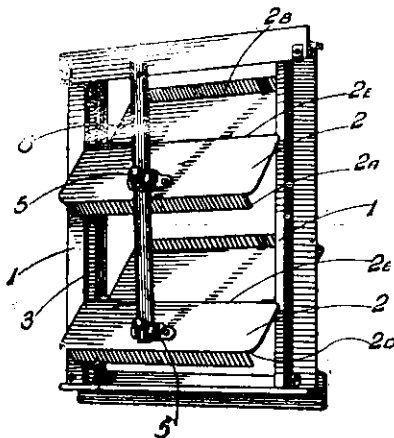
Skylight.—A patent No. 36221 for a skylight has been taken out by Aldred and Griffiths, plumbers of Wellington.

According to this invention, the upright of the skylight-frame at its top end is perforated with ventilating-holes arranged at a distance up from the roof-level. Beneath the holes a ledge is secured, running the full length of such side and projecting upwardly in a line approximately parallel with the flange of the skylight resting on the roof, but preferably dipping down slightly at its upper end. A gutter is thus formed between this ledge and the flange, in which water running down the roof will be caught, and out of the ends of which it will run on to the roof at the sides of the skylight. A flat hood is secured to the skylight top above the ventilation-apertures throughout the full length of such top, and inclines downwards at its end so as to overlap the



outer edge of the ledge before mentioned, leaving a clear space between them. This hood will prevent rain beating in through the apertures, and will also protect the ledge from any rain upon its top side, while air may pass freely in and out through the space between them. The outer edges of the hood and the ledge are turned up, to form small gutters that will collect any water falling thereon and convey it to their ends and on to the roof. The ledge and the hood may be fixed in position in any approved manner, as by riveting or soldering, and the hood may, if required, be suitably stayed.

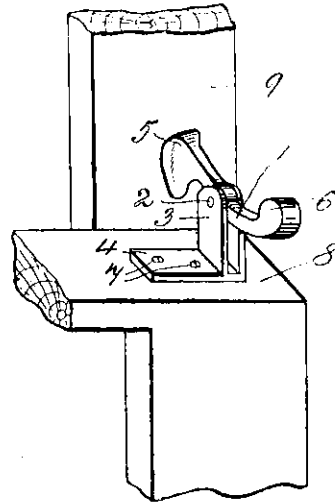
Ventilating Louvres.—Patent No. 37238 has been taken out by the Woolnough Window Co. Ltd. of Dunedin. It relates chiefly to ventilating-louvres used largely in freezing works and in works where ventilation is required without light, and is an alleged improvement on patent No. 37039 of 15th December, 1915. The louvre-blade comprises one strip of metal having its edges 2a and 2b flanged in opposite



directions, a portion of the flange being cut away to allow the blade to lie flat upon the surface of the web 3 of the side member 1. There is a set in the louvre-blade, as shown at 2e, so as to allow the louvre-blade to cross the web 3

at the cut-away part of the louvre-blade, to give the blade free movement in an outward direction at the bottom edge and an inward direction at the upper edge thereof. Pivot-brackets are provided and are riveted to the set portion 2e of the louvre-blades 2, and holes are bored in the side members to receive the pins on the pivot-brackets when assembling the louvre. Suitable brackets 5 are provided to receive a coupling-up rod 6, which is pivotally connected to the brackets in a manner that enables an operator to open or close all the louvre-blades in a set in one operation.

Anti-Rattling Device for sash windows. A device is shown herewith, the patent of Mr. A. M. Berry of Christchurch which should prove of interest. It consists of a lever pivoted at or near the middle of its length upon a fulcrumming block or bracket by means of which the device may be



mounted in the desired position. Upon one end of the said lever is formed a cam, while the other end of such lever constitutes a handle by means of which the device may be operated.

Building Notes

AUCKLAND

Tenders were received last month by the Auckland City Council for the new City Market to cost £46,230, as follows:

No. 1 Building: Fletcher Bros., Ltd., Dunedin, £9,590; J. T. Julian and Sons, £11,397; G. Garner, £11,894; J. H. Colbourne, £12,129; W. E. Hutchison, £12,740; Robert Sanders, Wellington, £12,987; W. J. Grevatt and Sons, £13,282; G. H. Edwards, £15,051; W. C. Johns and Sons, £16,132 9s. Engineer's estimate, £12,584.

No. 2 Building: Fletcher Bros., Ltd., Dunedin, £28,406; R. Sanders, £31,388 11s. 10d.; J. T. Julian and Sons, £32,997; J. H. Colbourne, £34,608; W. E. Hutchison, £35,336; W. J. Grevatt, £37,136; W. C. Johns and Sons, £42,185 14s. Engineer's estimate, £33,915.

After considering the matter for some time in committee the Council decided to accept the lowest tender in each case, those of Messrs Fletcher Bros., Ltd., and that the two next lowest tenders be retained. The whole matter of the details of the contracts was referred to the Works Committee, with power to act.

The buildings will be erected in ferro-concrete, iron and steel being supplied by the City Council. Satisfactory arrangements have been made for the supplies required, including the replacing of the quantity lost in Matatua. The No. 1 building has been leased for 21 years to one of the city auctioneers. The No. 2 building will be two-storeyed, and will be tenanted by eight auctioneers on leases for a similar period. The former building is to be completed in 12 months, and the latter in 18 months. As soon as the transfer from the old market buildings has been completed, the demolition of the former will be undertaken.

Mr. Gunson added that plans are now being prepared for the No. 3 building, for the erection of which tenders will be invited in two or three months. This building should be completed about the same time as the No. 2, which will be the largest of the three.

Referring to the municipal fish markets scheme, the Mayor said that at present it was not proposed to exceed an expenditure of £8,000, though the Council had authority from the ratepayers to devote £20,000 to the development of this enterprise. The sum of £8,000 includes the cost of erecting the present building, extensions which are now to be made, the cost of the steam trawler recently purchased by the council and all other expenses incidental to the scheme.

During the month the new Freezing Works erected for the Westfield Company were formally opened by the Prime Minister. The building was erected by Messrs J. T. Julian and Sons of Auckland to the designs of Mr. L. G. James of Wellington. The works are situated on what was formerly known as the Sylvia Park Estate and comprise 100 acres. They have been erected in four main blocks, with several subsidiary buildings, the principal material used in the construction being reinforced concrete. They are served by a railway siding from the Westfield station, the line branching into five loops serving the main buildings with half a mile of sidings. The frontage of the property is on the Main South Road, but it extends to the Otahuhu-Panmure Road, from which all live stock will be admitted to the works, and only the finished products will pass through the front of the works.

The central building, the slaughterhouse block, comprises three storeys, and is 130-ft. square. Throughout the works the gravitational system is followed, so that the live stock enter the building by wooden ramps leading to the second floor from the cattleyards and the covered sheep-pens. From the slaughter-boards, the fresh meat is passed before the Government inspector and the weighing clerks into chill rooms. The hides, skins, and offal are conveyed by chutes to the first floor. The latter receives a certain amount of handling, and is then transferred to other departments. The treatment of the hides, pelts, and wool, advanced through several processes on the first floor, is completed on the ground floor of the building.

Covered ways connect the slaughter-house block with the freezing block, and through these the quarters of beef and the carcasses of mutton are passed. The freezing block is also of three storeys, 170-ft. long and 130-ft. wide. The top floor is divided into eight freezing rooms, each of which has a hanging capacity for 1,500 carcasses of mutton, and two rooms for small goods. The actual freezing is effected by air circulating from two large batteries of ammonia expansion coils with brine showers. From the freezing chamber the meat is passed to either of the lower floors, which are the main stores. In the latter a low temperature is maintained by 24,000-ft. of direct expansion ammonia piping. Adjoining the freezing block is the engine-room and the boiler-house, both equipped with British machinery. Power is obtained from three double furnace Lancashire boilers, producing superheated steam at 580 degrees Fahr. The refrigerating plant consists of two 50 ton, ice-making capacity, compressors direct coupled to horizontal compound engines. There is a complete electric power plant for the lighting of the works and the operation of some 40 motors in the various departments.

Other buildings comprise the preserving department, tallow-house, fertilizer department, stores and offices, while a row of cottages is being erected along the picturesque drive for the engineers and other officers of the company, who are obliged to be convenient to the works at all times.

The Auckland Harbour Board is erecting a building on the waterfront costing £800 to provide accommodation for water-side workers.

A large wool store is being erected for Messrs G. W. Binney and Sons, on a harbour leasehold, on the King's Drive. It will be in brick, with a tiled roof, and will have a depth of 175-ft. from the frontage to 100-ft. The building will be of two storeys, designed according to approved modern principles, and equipped with electrical hoists and other economical devices. The contractors for the erection of the store are Messrs McCallum and Bull, and the cost of

the building, which will be ready for use in August, will be about £12,000. A two-storeyed office building will be erected by the firm in Customs Street, in place of an existing property.

A site for a new school at Matangi, which is about eight miles from Hamilton, on the Cambridge loop line, has been purchased by the Auckland Board of Education. It comprises an area of four acres, in the midst of a very rich dairying district. A survey is now in hand. About 100 children are now attending the temporary school at the public hall, and it is expected that others, who are at present going elsewhere, will attend the new school when it has been erected.

Tenders were called for last month for additions to Thames Public Hospital to the designs of Mr. G. W. Allsop.

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Yet another freezing works is to be built at Whakatane, the contractor for which is Mr. Frank Amore. The buildings are to be built of reinforced concrete and will cost £100,000. The contractor expects to employ 70 men if he can obtain them, and building operations are to commence at once. The slaughter-houses would have a daily capacity would have a storage capacity for 85,000 carcasses. Manure of 200 head of cattle and 1,000 sheep. The freezing chamber works, fellmongery, wool store, meat-preserving works and cool store were other departments.

Tenders are under consideration by the Dilworth Ulster Institute for the establishment of a school of agriculture, land for which has been purchased at Papatoetoe near Auckland. The trustees held over for some time the accepted design for a building to accommodate 300 boys at Papatoetoe who were to be removed from Remuera. This is now being proceeded with. Messrs Arnold and Abbott are the architects. The plans show a one-storey building consisting of a central block and four wings, two in front extending at an angle to form the letter Y, and two at the back. This design is somewhat unusual for buildings of this description, but it has been adopted for the purpose of obtaining a sunny aspect for all dormitories and bedrooms. The building will be of brick, with a tiled roof, and the central block will be carried up an extra storey, and finished with a tower, in which a four-face clock and a bell will be installed later on. One wing will contain a large dormitory, five or six bedrooms, and the master's room, while the other will be occupied by diningroom, commonroom, and kitchen, accommodation for a married couple as caretakers, and also for a bee-keeper, apiary work being a feature of the farm. Particular attention has been given to having both portions of the building under supervision, the dormitories under con-



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trol of the master, and the other wing, which also contains a sick-room, under control of the married couple.

CHRISTCHURCH

Plans for a new Masonic Hall to be built in Gloucester Street have been drawn by architect W. A. P. Clarkson, and submitted at the dedication service held in April.

A new fire station has just been opened at St. Albans to the designs of Mr. J. S. Guthrie; contractor Mr. W. Taylor. The same architect called for tenders for a new picture theatre in brick for the New Brighton Co-operative Pictures Ltd.

DUNEDIN.

(Supplied by Leslie D. Coombs, A.R.I.B.A., of Dunedin.)

It is now apparent that the building trade this winter is quite up to what it has been in the past. Practically all the architects have a fair amount of work in hand, and the dreadful things the pessimists threatened would happen are still far off.

We have to extend our congratulations to Messrs Fletcher Bros., the Dunedin contractors, whose tender has been accepted for the erection of the Auckland City markets building. This firm of contractors has carried out various works under the writer and he has always found them straight-forward, business-like and energetic.

At a meeting of the Otago Branch of N.Z. Institute of Architects, held on Wednesday, May 24th, Mr. L. D. Coombs, A.R.I.B.A., read a paper on architectural styles. A most interesting and lengthy discussion followed, and Mr. G. Walden, our President, has suggested that another debate on the same subject be held at an early date.

Messrs Salmond and Vanes of Dunedin have let contracts for additions to the Kaiapoi Woollen Co.'s premises in Moray Place to Mr. Jos. E. White, and for a dwelling at Port Chalmers to Mr. Geo. A. Sykes. The Kaiapoi Coy.'s alterations comprise the pulling down of the existing old building and the erection of a new two storey building with a lofty cellar. The same firm have just completed extensive additions to the back of the old building, and the present contract will complete the new structure and provide a building 110-ft. deep with a frontage on to Moray Place of 40-ft. Mr. White was also the contractor for the first additions, while the National Electric Co. installed the combined passenger and goods lift.

Messrs Salmond and Vanes have also quite recently let a contract to Mr. J. Lunn for the erection of extensive additions to the Otago Farmers' Co-operative Association wool and grain store in Crawford Street. This work will link up a new building which has just been completed for them with their old building and thus provide a completed two storey store with a frontage to Crawford Street of 312-ft. and a depth varying from 148-ft. to 66-ft. The same firm have also in hand at present the erection of a three-car garage and open sheds for the same Company. Mr. Lunn doing this work also. Other work in hand includes a three storey ferro-concrete warehouse in Suva, Fiji, for Messrs Morris Hedstrom Ltd. The building of which is now being carried out under Mr. A. H. Marlow, contractor, Suva, who also recently completed ferro-concrete premises for the Bank of New Zealand in Suva to the firm's plans.

KAIAPOI.

A large freezing works is being erected at Kaiapoi for the North Canterbury Sheep-farmers' Coy. Ltd., the foundation stone for which was laid on the 25th of May.

TIMARU.

During the month the foundation stone was laid for a new Baptist Church.

WELLINGTON.

During last month tenders were called for a large freezing works to be erected at Kakariki near Marton for the Wellington Meat Export Co. Ltd. Mr. E. J. Greenstreet is the architect.

A little earlier in the month the foundation stone was laid for another freezing works for the Oroua and West Coast Meat Co., at Aorangi near Feilding. The land cost £3,968, buildings £24,272, and machinery and plant £16,650. Mr. McMillan was the contractor and Mr. L. G. James the architect.

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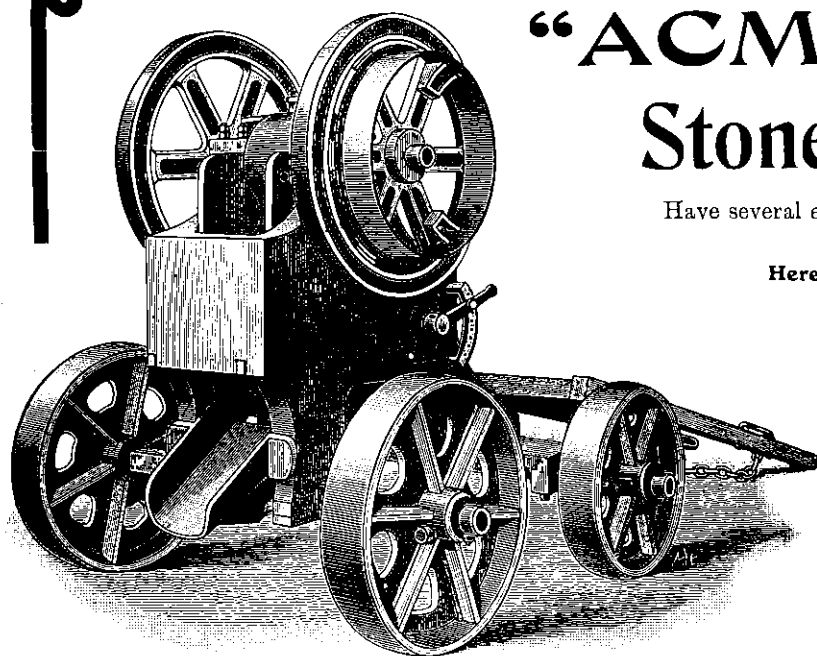
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