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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.

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

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Publisher's Announcements.

SPECIAL COMPETITION!

SOLDIERS' MEMORIAL

First Prize £10 10s. Second Prize £3 3s.

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- (b) $\frac{1}{2}$ inch scale details, with sections of all parts, and showing inscription, fully rendered.
- (c) Full size: details of the following letters, showing mode of execution; S. W. M. R. A. C. Y. The materials and their treatment must be stated. The inscription to be "To the memory of those who fell in the Great War."

Bronze panels (to be inserted afterwards), may be introduced, but the design must be complete without them.

The designs will be judged by Messrs. W. S. La Trobe, Joseph Ellis and William M. Page.

Designs must be sent in under a nom-de-plume addressed to "Progress," 8 Farish Street, Wellington, and clearly marked "Soldiers' Memorial Competition" on outside, with a covering letter giving name and address of competitor. The competition is open to anyone who can design, and drawings must reach Progress Offices by the end of November. This question of Soldiers' Memorials being a national one, it is hoped that a good response will be made. The proprietors of this journal reserve the right to publish any or all the designs as they think fit.

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.

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"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 time. The paper is supplied from year to year only, and if subscribers continue to receive the paper after expiry of the current year, we shall accept it as an intimation of their desire to continue for another twelve months. We undertake to supply the paper for such further term. Notice 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. The subscription is 8/6 per annum. A discount of 1/- will be allowed off this amount if subscription is paid in advance.

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WELLINGTON, AUCKLAND, CHRISTCHURCH, AND DUNEDIN, NEW ZEALAND, OCTOBER, 1918.

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Editorial Comment

Healthful Buildings.

Some idea of Great Britain's contemplated industrial and social activities after the war may be gathered, from the statement in the "The Times," London, that the programme of the Local Government Board Committee includes the building of 300,000 houses. The "Times" says:—"Whether this substantial measure is considered from the point of view of public health or of industry, it is essentially a reproductive undertaking. It needs little acquaintance with the lives of those who are confined to overcrowded houses to realise that they, and particularly their children, are subject to a heavy handicap, physical as well as moral and aesthetic. To-day the evolutions of the life of a man or a child are emerging from academic isolation. The actual figure indeed at which the value of a man's life to the country should be assessed has not attracted unusual attention; but the fact that the value, whatever it may be, as a national asset, has been driven home to the least imaginative minds." The obvious deductions from this newspaper's statements and comments is that a far-reaching movement is being made at last, to house England's workers in roomy and healthful buildings. In preparing its building programme, the Committee referred to has the assistance of a Research Committee, whose duty it is to inquire into the suitability of various building materials from the points of view of economy, health and durability. With so vast an enterprise in hand, such investigations will be paid for in immediate monetary saving, in the increased health, and consequent increased efficiency of the inmates, and in the prolonged life and low repair bills of the houses. The methods of building also, are being made the subject of inquiry, with the same objects in view. The results of this research when available, should be of immense value to New Zealanders. In this country an active building programme must be undertaken as soon as possible. Not only are more

houses required for the present inhabitants of the country, but the returning troops and inevitable but none the less welcome influx of immigrants will make heavy demands upon the existing housing accommodation. This is a matter of Government as well as private concern, and no doubt the question is being seriously considered in the proper quarters.

Money in Garbage.

A recent message from Australia reported that men were making much money by turning over the old garbage tips of Sydney and Melbourne, and unearthing broken glass and kerosene tins, which they sold to the glass factories and iron-works. These disused tips of the large Australian cities cover many acres, and so keen was the search for these precious things, that the Councils concerned issued "miners' rights" to certain defined areas, to individuals anxious to dig. It is perhaps not recognised by New Zealanders who smiled at this news, that the Commonwealth is making immense strides as a manufacturing country, and she is in the position of still retaining a large proportion of her male workers, in spite of the war's demands. The iron-mills of Otago are clamouring for iron, and there are millions of iron tins lying in the Jam-tin Gullies of every town. But New Zealand has not the man-power to gather them. Australia in collecting these is carrying on an industry which was formerly conducted by the Germans in Australia. By every ship of the North German Lloyds and the German-Australian lines, bale after bale of pressed kerosene tins were shipped. They were simply dumped, as wool is, into a compact mass and baled. In Germany tin and solder was melted off for spelter and the iron used to make machinery and guns. In a limited degree we understand that old kerosene and petrol tins are gathered and used by iron-mills in New Zealand. But the widespread extension of this practice would mean a greatly increased output in iron goods from the local mills. Glass and other waste has a value too nowadays. Since the war has made old ships valuable enough to put new machinery into them it is not surprising that there is money in garbage tips, were there men and boys enough in New Zealand to dig for it. But the war has called them to sterner work.

Price of Cement.

The impression which was gaining ground that the price of cement was unduly high in New Zealand, would seem to have been removed in a decided manner. Since Mr. J. A. Young, M.P. for Wai-kato, asked for an investigation of the position by the Board of Trade, shareholders of a large company, the Dominion Portland Cement Company, have applied to the Supreme Court for a compulsory winding-up. This fact adds additional interest to the report of the Board of Trade, in the course of which it was held that the increase of the price of cement to 96/- a ton was not unreasonable. The report stated that before the war the average price

of cement to the user was about 75/- a ton in Auckland, and it was emphasised that this price was arrived at by acute consumption. At that time, in addition to companies in active operation, a new company had large cement works in course of erection, and this company, after arranging for a capital of about £467,000, went into liquidation before the works were completed. Two other companies in the North Island had expended £300,000 altogether in plant and machinery. This went to show that a very large capital was sunk in cement works. And in addition to these North Island companies, a large amount of capital was invested in cement works in the South Island. The position to-day was that the existing works were capable of producing many more times the quantity of cement that was required at present. This state of things had been caused by the falling-off in the building trade. As a result, many of the cement-working plants were not working to their full capacity. As well as this, raw-materials used had increased in price, and the cost of production had increased accordingly. In expressing the opinion that the increase was justified the Board mentioned that it compared well with that of the price in Australia, namely, about 99/- a ton. Though the Board in its report did not venture to prophesy, there can be little doubt that when the destruction wrought by the present war comes to be repaired, and the immense output which will take the place of all kinds of building materials, makes it possible for New Zealand to have at least a quota of iron and other much-needed items, there will be a brisker building programme in this country. This should make the market for cement a much better one, and the companies which are hanging on and doing their best in adverse circumstances will reap their share of the prosperity. As already mentioned in these columns the probability of such building activity may be taken as a certainty, provided the National Government takes steps to secure supplies of essential materials which are not at present manufactured in New Zealand.

Federated Sawmillers.

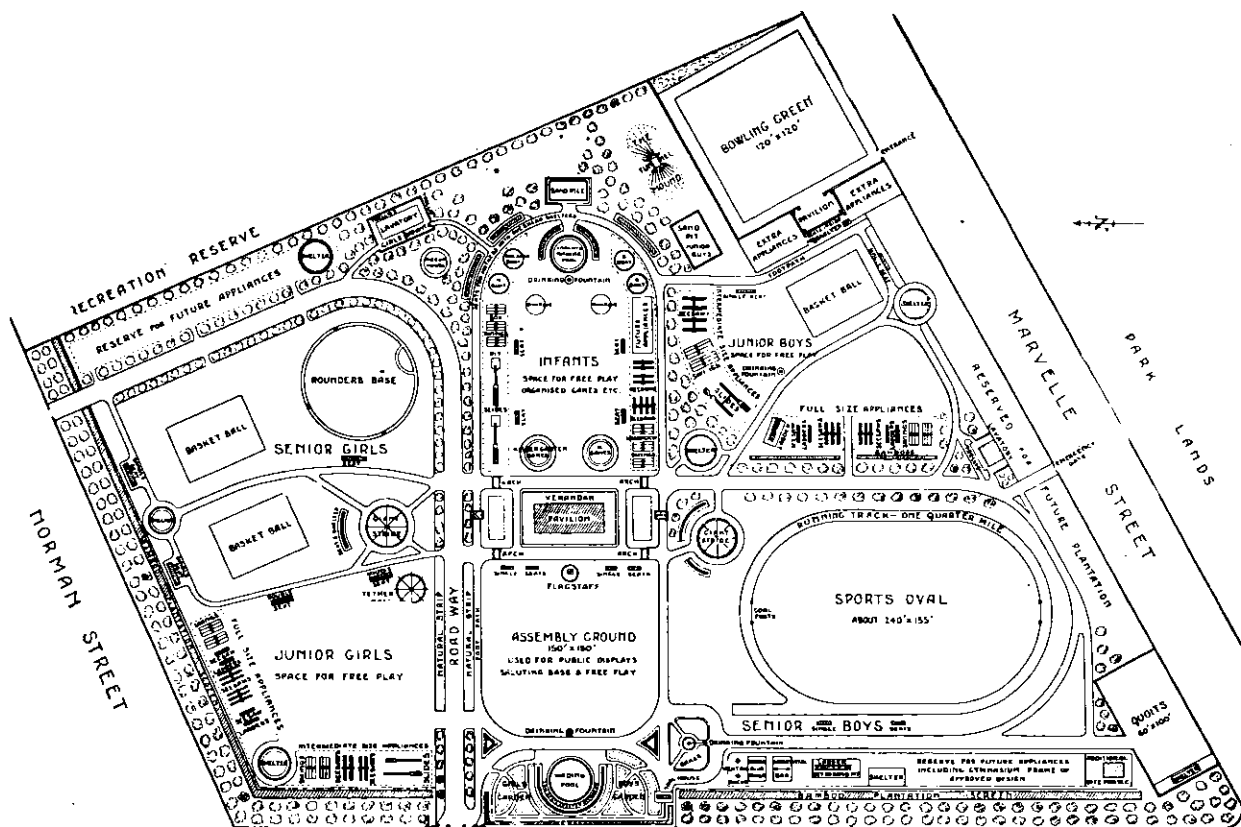
The importance of the timber milling industry in New Zealand has prompted us to include a special sawmilling section in "N.Z. Building Progress" commencing with this issue. This section will be conducted under the direction of the Dominion Federated Sawmillers' Association (Incorporated) and will be edited by Mr. W. T. Irvine, secretary of the Association. All matter intended for publication under this heading should be sent to Mr. Irvine at his Palmerston address (Box 328) not later than the 20th of each month for publication in the succeeding monthly issue. Contributors are asked to note that this address is more convenient than Mr. Irvine's Taihape address, as it enables him to deal with matters by telephone communication with Wellington, promptly. In this issue we publish the inaugural comments of the President of the Association. Succeeding issues of "Building Progress" will include in the new section other matter of a highly interesting nature.

BUILDING A PLAYGROUND IN ONE DAY

Port Pirie's Big Effort.

The building of a large playground for children and others, covering over ten acres of ground, with its full complement of equipment and its completion in one day by 3000 workers at Port Pirie, South Australia, marks a step forward by those interested in town planning and civic welfare generally.

and separating the central area from its suburban districts. Increased rents and building costs in recent years had created a housing problem before the war, but except for the original plan providing for streets $1\frac{1}{2}$ chains wide, little had been done towards meeting its problems in town planning or housing.



Children's Playground at Port Pirie, by Mr. Chas. C. Reade, Government Town Planner to South Australia. This Playground, with its buildings, shelters, etc., was built in One Day (Saturday, August 17th, 1918) by 3000 workers, giving their services free.

Port Pirie is an important seaport, situated near the head of Spencer's Gulf, 228 miles north of Adelaide by rail, and where are smelted vast quantities of tin, lead, silver, etc., mined from Broken Hill in the far interior.

The population of the town is over 10,000. It lies on the extreme edge of an old subtidal flat, exposed to the extremes of summer temperature. The site of the town is devoid of natural attraction and native vegetation is but sparse and scanty.

The town is one of a number of communities in South Australia, planned in earlier days by the Government with a wide belt of parklands enclosing

It grew instead under the influence of land and building speculators.

The Broken Hill Associated Smelters, Limited, is a new company with new ideals. It came into a legacy of antiquated works and a town dominated by nineteenth century ideas of industrial enterprise and social responsibility. Strikes and industrial discontents generally had become indigenous to the place and its people, likewise overcrowding, high rents, and social disabilities. Prior to 1914 high and increasing wages had failed to prevent a general speeding up of bad housing and living conditions, and their inevitable reaction on industry. These ex-

isting evils were multiplied when war came, and with it the need for increasing the output of munition minerals. The new company, however, came in with a sense of responsibility with a keen appreciation of the value of healthy well-paid workers decently fed, housed and possessing a civic interest for the welfare of their town and surroundings.

The company has now set to work to reduce the cost of living, and established economic advantages and social amenities for its employees. Co-operative stores are started. The cost of certain necessities has been reduced by eliminating the middlemen's profits. Others are to follow. Recreation clubs, hospitals, parks, etc., have been provided. A holiday camp across the gulf is now being planned and built. The works are rapidly becoming reorganised. Free meals for the employees, attendance bonuses, and other innovations have been accepted by the men. A start has been made with the building of houses in accordance with plans for a model suburb designed by the South Australian Government Town Planner's Department. Latterly has come the model playground, with its sensational achievement organised and carried through with brilliant success in one day.

The original project contemplated taking up an area of two or three acres on the parklands of Port Pirie opposite the principal school. But at the suggestion of the Department the area was increased to ten acres. The design of the playground by the Department and carried out by the Company, and its men, is reproduced herein.

Port Pirie is a place devoid of any means of recreation other than those provided by hotels, book-makers, and film houses. The shopping streets are the rendezvous of the people. In the height of summer weather when the temperatures in the daytime are up to 115 deg. and 120 deg. in the shade, and during the evenings when they seldom fall below 90 deg. indoor life is very trying. Beyond the street there is nowhere to go. The belt of parklands until recently was bare, hot, parched waste. The object of the playground scheme, therefore, was to provide a place of recreation for all classes, including the children, of whom nearly 1,500 are of school age. In place of a children's playground only, the town planner's scheme has been followed for a community centre of recreation where parents and children can all assemble, especially during summer evenings. Hence the plan provides for a central recreation pavilion, containing lecture hall, with movable walls, kindergarten, creche, etc., and wide verandahs on all sides. Adjacent is a shelter designed as a tea house and refreshment kiosk. The principal assembly ground (150 x 150) is equipped with flag-pole, seating, etc., for the purpose of public displays, saluting base and free play. Adjacent is the principal wading pool (40 feet wide) flanked by the boys' and girls' gardens. Hygienic drinking fountains, seats, and shelters for mothers are provided in the different portions of the ground. These are designed to give proper supervision of the respective areas, viz.:

(a) Senior boys' ground; (b) junior boys' ground; (c) senior girls' ground; (d) junior girls' ground; (e) infants.

In addition a bowling green, quoits ground, open air pictures, and other amusements are provided for older people.

The playground and its activities is controlled by permanent supervisors acting in association with a committee of management comprising representatives of the men, the local corporation (which owns the site), and the company.

The work of erecting the playground and completing its scheme of road, pathways, shelters, pavilion, appliances, etc., was a large undertaking. But the organisation was complete and efficiently done. At 8 o'clock in the morning the place was a medley of timber, uprooted palms (some 40 feet high) carts, horses, plows, scoops, tools, coppers, and people. By noon many hundreds of tons of earth, sand and gravel had been carted, and spread. The waste of parklands was filled, and transformed into an oasis of winding paths, fully grown trees, and flowering shrubs, and gardens. By 6 p.m. the playing appliances were all in position, the shelters completed, the fences and gates erected, electric lighting and water services installed, and the big pavilion finished. Likewise the wading pools, gardens, games and courts, etc., were an accomplished fact. Over 3000 men, women and children gave their services gladly. The enthusiasm was infectious. No person was to be permitted to wear his coat on the ground. A small army of ladies fed the workers with sandwiches, cakes, tea, and saveloys. The night descended on a great and completed work. On the day following (Sunday) it was formally opened and handed over after a special service of dedication in the presence of thousands of spectators. The whole effort was recorded by moving pictures, but it has left a more indelible impression on the minds and lives of the workers who carried the task through to its splendid realisation.

The playground idea is really the outcome of the First Australian Town Planning Conference and Exhibition held in Adelaide during 1917, when a full-sized playground, properly equipped and supervised was one of the exhibits. A similar playground is now in course of preparation for the children living in the back lanes and overcrowded portions of the city of Adelaide.

Secondhand Roofing Iron £74 per Ton.

At a sale of timber and roofing iron in Auckland from the demolished portion of the University College buildings sales amounting to £600 were effected. Among the building materials sold was a quantity of roofing iron which fetched £74 per ton under the hammer. Before the war this iron sold at £18 per ton new.

"Is Mabel still devoted to that young man who owns the twelve cylinder car?"

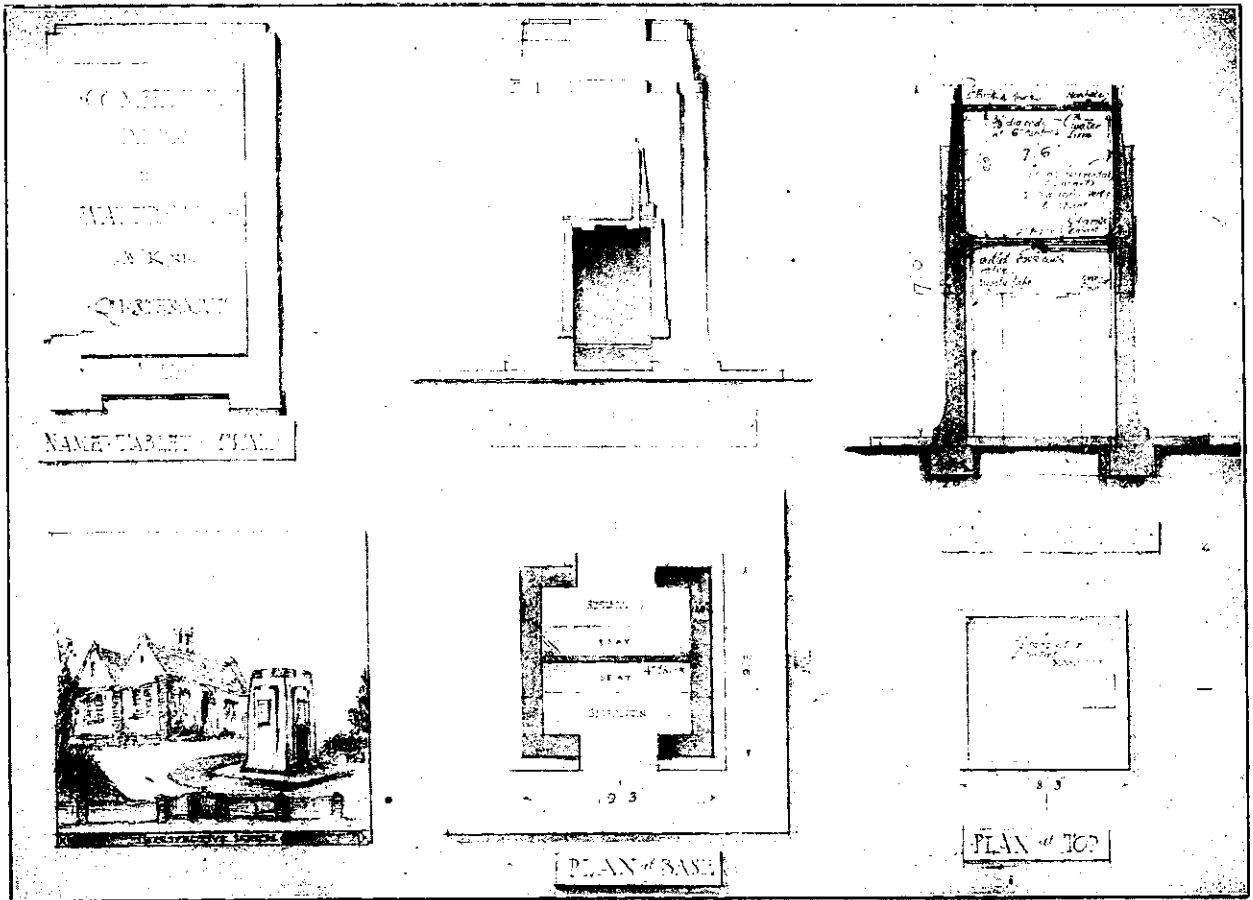
"No. She passed him up for an army aviator."—
"Detroit Free Press."

Competition for Water Tower in form of Memorial.

The competition set by the Christchurch Education Board for a Soldiers' Memorial in the form of a water tower drew eight designs, which have been adjudicated upon by Mr. W. M. Page, architect, of Wellington. A prize of £3/3/- was offered by the Education Board, and the adjudicator very generously gave his fee, £2/2/- as a second prize. The winning design "Konk," is by H. L. Hickson, Wel-

lington. Design "Tower," by G. F. Wilson, of Wellington, is placed second. We also publish the design "P.N.P.," by R. A. Patterson, of Wellington, which is placed third. The judge's report runs as follows:—

At a conference held at the Royal Academy a few months ago to discuss war memorials this aspect

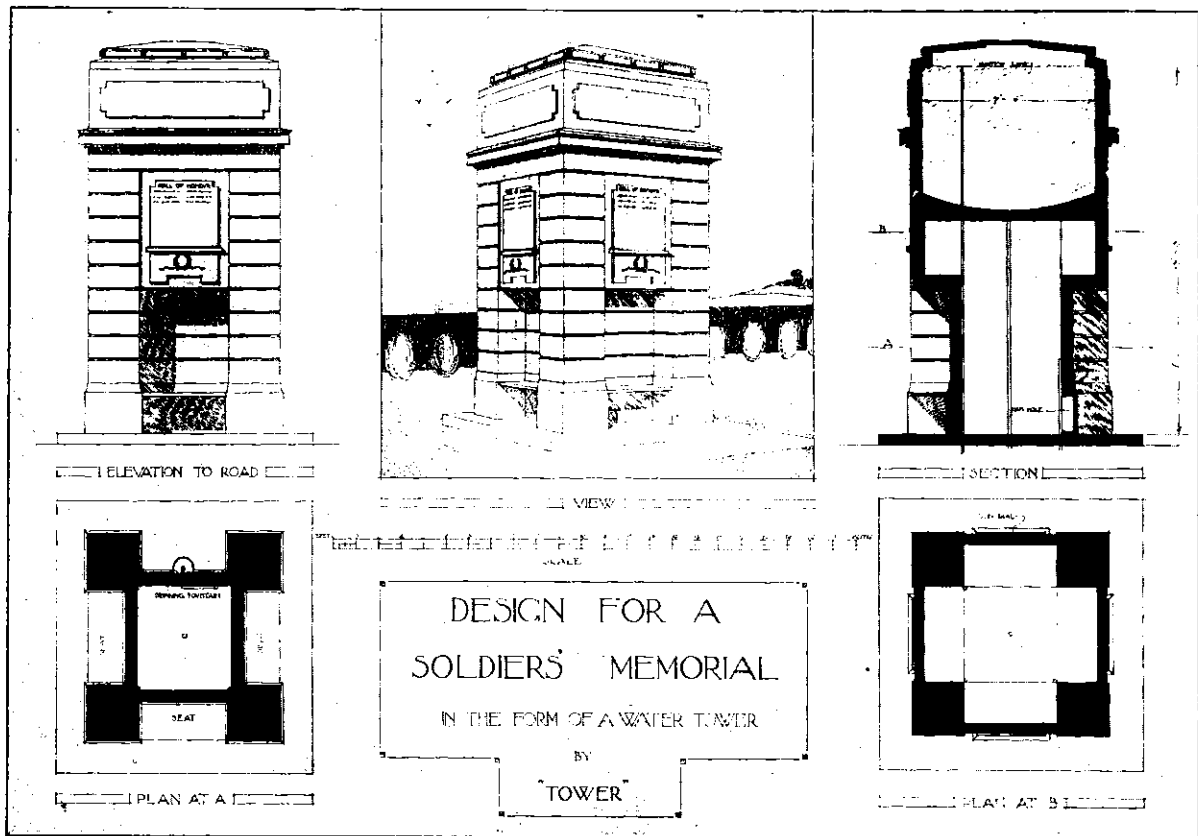


Winning Design, "Konk," in Water Tower Competition, set by Canterbury Education Board, by H. L. Hickson, of Wellington

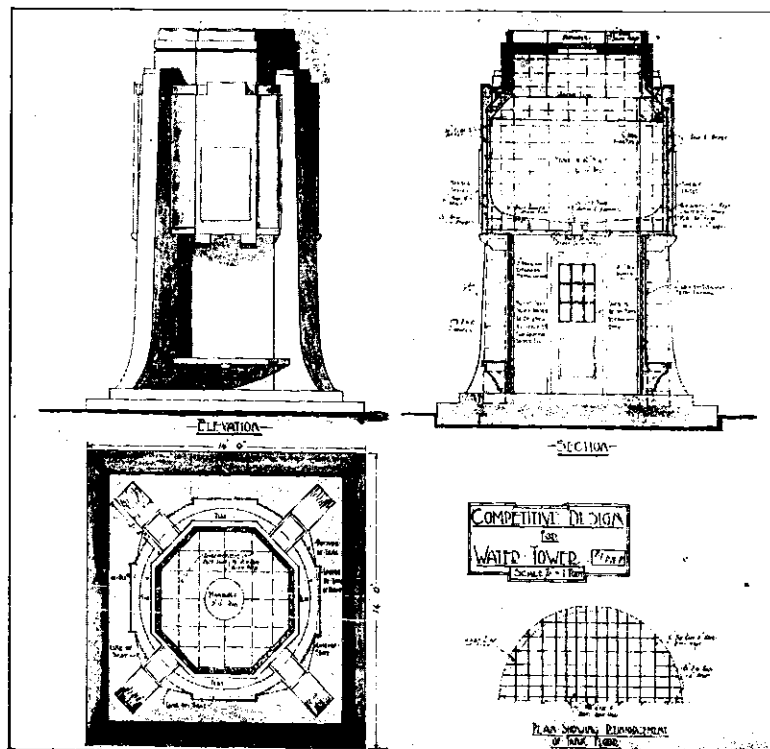
ington. Design "Tower," by G. F. Wilson, of Wellington, is placed second. We also publish the design "P.N.P.," by R. A. Patterson, of Wellington, which is placed third. The judge's report runs as follows:—

"The difficulty confronting competitors must have been to determine whether it was a water tower or a soldiers' memorial that they were called upon to design, and it is interesting to note that four competitors call it a "water tower," two call it a "memorial water tower," and two a "soldiers' memorial in the form of a water tower." The competitors have been further embarrassed by reason of the conditions stating that consideration will be

of the question was dealt with. The First Commissioner of Works in speaking in support of a movement to establish a central body of advice in connection with the erection of war memorials said he hoped it would succeed in saving the country from the erection of unsightly objects intended as memorials, and that "*utilitarian buildings for this purpose should be discountenanced in favour of artistic monuments.*" If the First Commissioner of Works entertains this view it should be easily comprehended by the average person that a water tank is not a very high or suitable form for a memorial to take. If a water tank is what is wanted let it be a water tank and do not make any attempt to make



Design "Tower," placed Second in Water Tower Competition, by G. F. Wilson, of Wellington.



Design "P.N.D.," by R. A. Patterson, placed Third in Water Tower Competition.



it appear to be a memorial. If, on the other hand, it is desired to erect a memorial, let it be a memorial and nothing else. The truth is that these things are valued by their bulk.

Concrete is not a suitable material for a memorial. A memorial cannot be worthy unless it be of good material and unless skilful labour has been expended upon it. Hence a small memorial may be in every way worthy. Pugin said, "Let every man build to God according to his means, but not practice showy deceptions," and this expresses in a phrase what I have endeavoured to explain.

Regarding the designs I should like to say a few words. "P.N.P.'s" design is frankly a water tank. It would entail rather elaborate shutterings, and would be improved by lengthening the lower part by several feet. I should say that "P.N.P." got his idea from a design which appeared in "The Building News" in 1912. In "Tablet's" design the deep entablature is displeasing. The idea makes a charming treatment for a well or fountain (see the one at Basin Reserve, Wellington), but to superimpose a water tank is not good. "Konk's" design is suitable in character for the material, and is, I should say, a second attempt; the design marked "Aqua" being the first. It would be improved by dispensing with the shelters—they are only poky little places—and closing up the doorway in front and having only a small door in back wall, using the space under the tank for tools, etc. The design by "Tower" would also be improved by omitting the seats and recesses and using the whole space under tank for a tool-house. In the design by "Aqua" the seats, shelters and fountain should be omitted and the openings closed. The same remark applies to "Anzia" and "Pen." The closing up of the openings adds very materially to the dignity of the design. "Pen's" design is simple and straightforward, but to any one familiar with traditional Gothic work it is unsatisfactory and would be very uninteresting in execution. "Anzia" should arrange his inscription tablets in the centre, not on the piers. "Simplex" is rather elaborate. Concrete is bad enough, but when it is coloured it is impossible, and the pictures would give the thing rather a paltry appearance."

(Signed) W. M. PAGE.

Institute of Architects

At the annual meeting of the Wellington District Branch of the New Zealand Institute of Architects, held on the 11th inst., the following officers were elected for the ensuing twelve months:—Branch chairman, Mr. John S. Swan; vice-chairman, Mr. W. Gray Young; branch committee, Messrs. Kean, Dawson, Haughton (re-elected), Jones, James, Lawrence and Luff; Dist. treasurer, Mr. W. Fielding; Dist. secretary, Mr. P. H. Swan, Woodward Street, Wellington; Hon. auditor, Mr. W. Beauchamp-Platts.

President's Address.

At the annual meeting of the Wellington District Branch of the New Zealand Institute of Architects the retiring chairman, Mr. Charles A. Lawrence, said:—"I once more address you from the chair under the cloud of this great war, and I am glad to say that, though we still have a long way to go, and probably many hard experiences to pass through, there are clear indications that the Allies are now on the road to victory, and to I trust a just and lasting peace. It may be well to recall that, at about this time last year we received the news of the great losses at Passchendaele Ridge and the repulse before Cambrai, and had at Salonica and in Palestine what were thought to be armies of occupation only. We can, however, rejoice at this time at the great progress that has been made by our troops under the command of General Allenby in Palestine, the withdrawal of the Bulgarians from hostilities, and the remarkable advance that has been made on the Western front. The latter being all the more remarkable after our reverses in March and April of this year.

It is clear, I think, that from these successes a great lesson can be learned and that lesson is the value of unity and mutual dependence. When the Allies were under divided control little progress was made, but by united action and placing all their resources under a single command a welcome change has taken place. This is a lesson I think we, as a body, might seriously take to heart and endeavour to so guide our affairs that what is done should be done for the good of the profession as a whole, and individual members should remember that there are others in the world besides themselves who should be allowed to live.

Owing to the war, building operations have been considerably curtailed, and consequently our profession, in common with architects the world over, have been hard hit. Probably, in this country, we have suffered least, or as little as any in this respect up to the present, but I am afraid that, with the scarcity of some materials, the enhanced cost of others and the shortage of labour there is likely to be less done in the immediate future than in the past. The fact that the Government has seen fit to place a limit of £3000 on works which may be put in hand, without a special permit, is a serious handicap, and will, I have no doubt, put a stop to all large works which are not of public benefit or which may be necessary for storing our produce. As far as I can see there is little likelihood of this restriction being removed until peace is declared, but of this I am convinced that this restriction, as well as others which may have been necessary during war, must be removed at the earliest possible moment. It therefore behoves us to take steps to see that the Government are fully siezed of this. We know from past experience, when powers such as this are taken, there is a tendency for them to become permanent.

Having placed such restrictions upon building and in conjunction with the increased cost of building, I am of opinion that the Government is unwise in allowing the unrestricted export of timber to

Australia. This exportation is causing a great shortage in the local market and has at the same time materially added to the cost of the smaller buildings. I am told that ships are leaving the West Coast loaded up with timber, while it is impossible to have our own needs supplied, and that millers do not seem to care about local orders, as they are doing so much better in supplying the Australian market. There is another aspect of this case which should not be lost sight of, and that is our timber supplies are not inexhaustible, moreover the available trees are getting far back into the hills (which means increased haulage), and no steps are being taken for reafforestation. I will not pursue this subject further as it will be brought forward for discussion during the evening.

Though we are still in the midst of the war and it is impossible to tell when the end will come, whether it may be soon, or long deferred, it is very necessary that we should look forward and place our house in order, that we may the better be enabled to meet the problems which will confront us when the long-looked-for peace comes. Some of these problems may be entirely new, and we shall have no precedent to guide us. How and when is the present Government control of building to be removed? Is it to be gradual, or will the coming of peace automatically put an end to it? How is the serious shortage of building materials to be dealt with, and how are soldiers to be repatriated? These and many other problems confront us and their solution will require careful consideration.

The question of building materials is one which concerns us very closely, and will I think be one fraught with great difficulties when the enormous damage, caused by the enemy, comes to be made good. So that the Belgians, French and others of our Allies may be repatriated an enormous quantity of materials will be required in these countries, and I am of opinion that in this far-off Dominion we may have difficulties in having our wants supplied. It would therefore appear that we, as a community, will have to become more self-reliant and proceed with the manufacture of our own necessities.

The repatriation of our soldiers is also a question which will require very careful consideration. A few days ago I saw in the newspapers that classes were now being held on our returning transports, and amongst the subjects taught was that of architecture. I am quite in accord with the scheme that the soldiers, who have done so much, should be given educational benefits as will give them every prospect of earning a living. I cannot see, however, that the time that is devoted to instruction on the transport (two hours per day for say fifty days) is sufficient to allow more than a very rudimentary knowledge of the subject to be given. If a soldier, on return to civil life, is to follow the architectural profession as a means of livelihood, we know that much more will be required of him than he can obtain in that time unless he has had previous training. I am afraid the authorities hold the opinion that all that is required of an architect is that he should be able to draw a few lines on a piece of paper. The sooner this idea

is dispelled the better it will be for the profession and the returning soldier.

I am of opinion that the time has now arrived where a committee or committees should be set up to consider these and other questions. If such committee or committees be appointed they should act in conjunction with representatives from the allied professions and trades, as these questions apply to all interested in the manufacture, use and importation of building materials and training of students and juniors.

When you did me the honour, an honour which I assure you I appreciate, of electing me for a second time to this chair, I made some good resolutions which I am afraid I have not been able to fulfil as I should have liked, but circumstances have in a large measure prevented this. Little did I think, when I again accepted office as chairman of this Branch, that the members of the Council of the Institute would see fit to place men in the highest office it is in their power to bestow. This honour, which I highly appreciate, carries with it numerous responsibilities and a large amount of work, more work probably than the ordinary members of the Institute are aware of, and this has to some extent prevented me from giving as much attention to the affairs of the Branch as I consider the office warrants. I have also to regret that the vice-chairman, through pressure of business, was unable to grant me relief under Branch Rule No. 3, a relief I would have gladly welcomed, as the demands of the presidency necessitate almost daily attention to matters of routine in addition to attending numerous meetings.

One of the first official duties was that of attending and presiding at the inaugural meetings of the two new Branches (Wanganui-Taranaki and Hawke's Bay-Gisborne) which were held in Wanganui and Napier respectively at the beginning of this year. As these two Branches are an offshoot of this Branch members may be glad to know that these two new bodies give every indication of success by the good work they are doing.

During the past session there has been very little business to bring before you, so that it has not been necessary to hold more than the number of meetings laid down by the regulations. Early in the year Mr. W. S. La Trobe, an hon. Fellow of the Institute, delivered before the members of the Branch a most instructive and interesting lecture on "Statics." I trust that Mr. La Trobe may be enabled to have his address published in pamphlet or book form, as I am sure his diagrams would be found most useful by members of the profession.

The attendance at Branch meetings generally has not been quite so good as the Branch officials have the right to expect, and in expressing my thanks to those members who have attended, often at personal inconvenience, I would like to ask those who stay away if they are taking a fair share of the work of the Institute. Matters which are dealt with by the Branch are for the good of the whole of the members, and while it is not possible for all to be actively engaged in the government of a Branch, it is expected that they will assist the committee by attend-

ing and making known their wishes and desires on matters placed before them. This is but a reiteration of my former claim for unity and cohesion, as it is only by such methods that the Institute can advance, either as a corporate body or as separate, and I trust successful, individuals. I would therefore ask the general body of members to mark the appreciation of the committee's labours by attending such meetings as are called, and helping forward the business of the Institute with their advice and co-operation.

I am pleased to see that the Government have at last agreed to give a site for the Technical College which I trust will allow of this vexed question being finally settled. Though good work has been done in the past in the present buildings, they are now inadequate for a city of the size of Wellington. It is to be hoped that the site now given will be found suitable and of sufficient extent to allow of proper playing areas; that the necessary money will be forthcoming; that the building will be suited to the needs of the rising generation and at the same time be an ornament to the city.

In conclusion I desire to place on record my appreciation of and thanks for the valuable services rendered by our Hon. secretary (Mr. F. H. Swan). The Secretary's hands would be strengthened and his labours rewarded if members will lay to heart my remarks about attendance. I also desire to thank the members of the committee for their advice and kindly co-operation during the past year, and trust that my successor in office may have as pleasant a period of office as I have had; that peace may be concluded during his term and that business will return speedily to its usual channels."

A New Road Material.

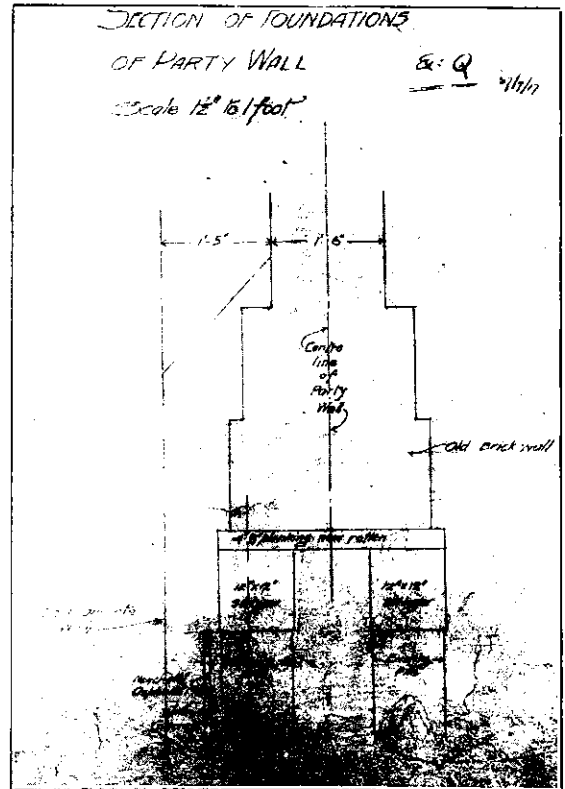
A new material for roads is suggested by an Auckland business man, who wrote to the City Council recently as follows:—"During a recent visit to Australia I was impressed with the progressive policy of the Adelaide City Council, and also the New South Wales Government, in adopting a new road-making material, which I was informed has resulted in a large saving compared with concrete. The preparation they have adopted is a composition consisting of tar chemically treated. This preparation is mixed with shingle, or even slag, and after being laid down it gives a longer life than concrete, and does not create dust when in use."

"The nature of the material to be used in road formation," said Mr. Gunson at a Council meeting, "is an open question with the Council. It is not at all certain that concrete will be employed. It is purely a question of price. If there are any other preparations which the city engineer, after investigation, is prepared to recommend, the Council has an open mind on the subject. A permanent material which gives a good road surface must be used upon our principal thoroughfares without further delay, as the present position is unsatisfactory with regard to both macadam surfaces, which are costing a great deal in maintenance, and the intolerable dust nuisance. These are the main points that govern our selection of material."

Grand Picture Theatre Dispute, Auckland

A great deal of interest has been taken by the public generally in the dispute between the owners of the Grand Picture Theatre defendants in the action, and the contractors, Messrs. Johns and Sons plaintiffs.

In the course of this dispute it was alleged (inter alia) "That the architect in breach of his duty and without consulting or informing the defendants in any way, unfairly allowed the plaintiffs to make serious deviations and serious omissions from the



Copy of Original Drawing prepared by Bartley & Patterson, at the Supreme Court, made by B. C. Chilwell, August 30th, 1916, in the presence of Mr. Fitzherbert, Solicitor.

Exhibit "Q" Section of Foundations of Party Wall.

specifications, particularly in regard to the foundations, with the result that the said building is at present in an unsafe and unsatisfactory condition and is liable to inundation from water." An allegation that a building such as a picture theatre, constantly used by the public, is unsafe is a matter of serious concern, and if such had proved to be the case it is difficult to imagine the limit that public censure would take on the parties responsible.

It is, therefore, a matter for gratification that the outcome of long legal proceedings has been not only to vindicate the safety of the building but to uphold and enhance the reputation of the architects, Messrs. Chilwell and Trevithick, and the contractors, Messrs. Johns and Sons.

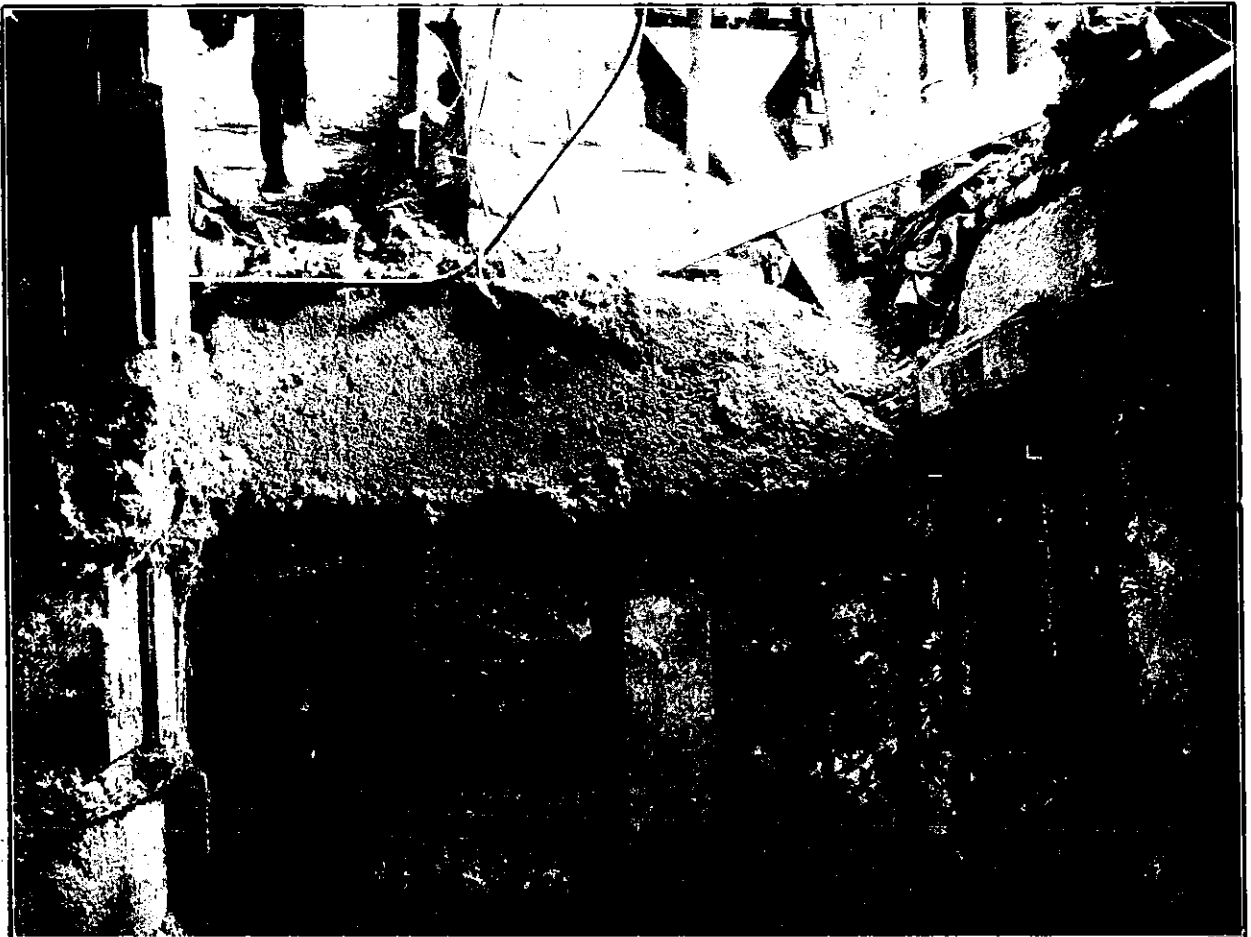
Now that the case is finally disposed of we are at liberty to make reference to some of the details of the dispute. We draw our reader's attention to the various drawings, etc., appearing in this issue. Exhibit "Q" is a reproduction of a drawing produced in court on behalf of the defendants in support of their allegation of unsafety which was admitted by Messrs. Bartley and Patterson, the professional witnesses who submitted it, to have been drawn to show the position in which they considered the wall was placed and as they understood it was constructed, from information received.

Figs. 1, 2, and 3 show the actual construction of the foundations.

The apparent object of exhibit "Q" was to convey the impression that the work was not carried out in accordance with the specifications and that the wall, on the assumption that it had been constructed as shown on such drawing was unsafe. Mr. Bartley, one of the witnesses, stating in evidence that "He and Mr. Patterson had prepared the plan produced," that "The concrete goes about 4 inches under the foundations and 2 inches under the brick wall." From the drawings shown of the actual construction it will be seen that the basement which ac-

cording to the theory of the defendants' witnesses was supposed to support the whole building was in reality little more than a floating shell, the building itself and the party wall being each supported on independent foundations on the solid rock.

The evidence proved that there were no facts to go upon to warrant such an allegation, as both the defendants in their evidence before the referee deny that they ever said anything to warrant any allegation that the building was unsafe, and both the professional witnesses in cross examination denied that they had made any allegation of unsafety. The submission of such a drawing as is shown in exhibit "Q" is, to say the least, not consistent with these denials. At the application for judgment, on the finding of the referee, in the Supreme Court (which was some eighteen months after the allegation of unsafety had been given publicity) the plaintiffs' counsel pointed out that a paragraph in the statement of defence to the effect that the building was unsafe was not supported by evidence, and defendant's counsel admitted that this was so and acknowledged that the building was safe and said that he had been misled on the point and that was the reason for the inclusion of the statement."



Grand Picture Theatre—Fig. 1. Photo taken by Mr. Beattie, February 4th, 1915.

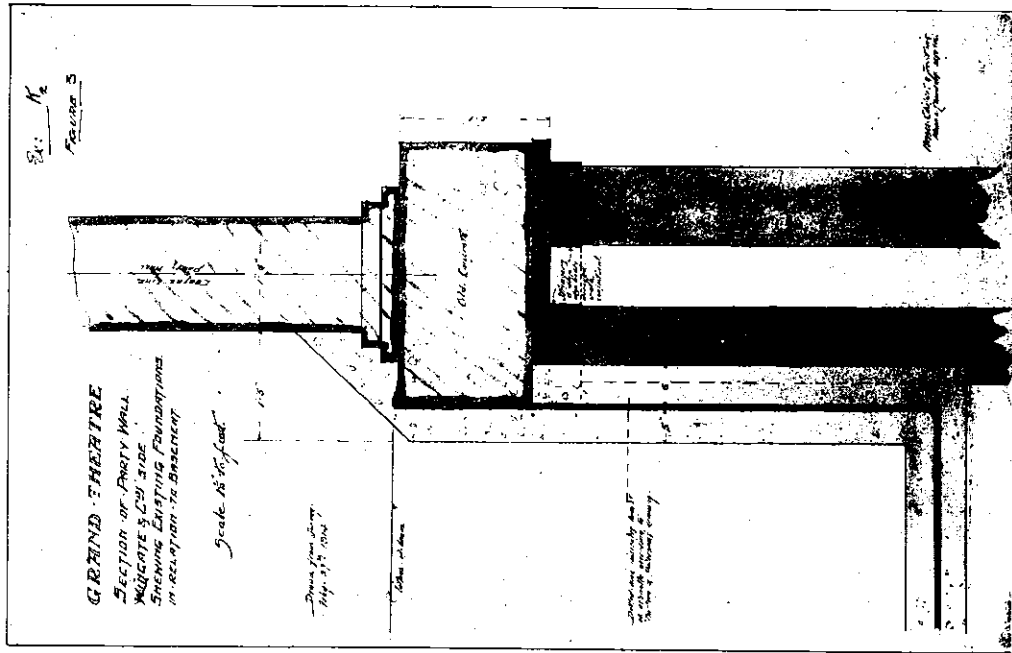


Fig. 3. —Section of Party Wall.

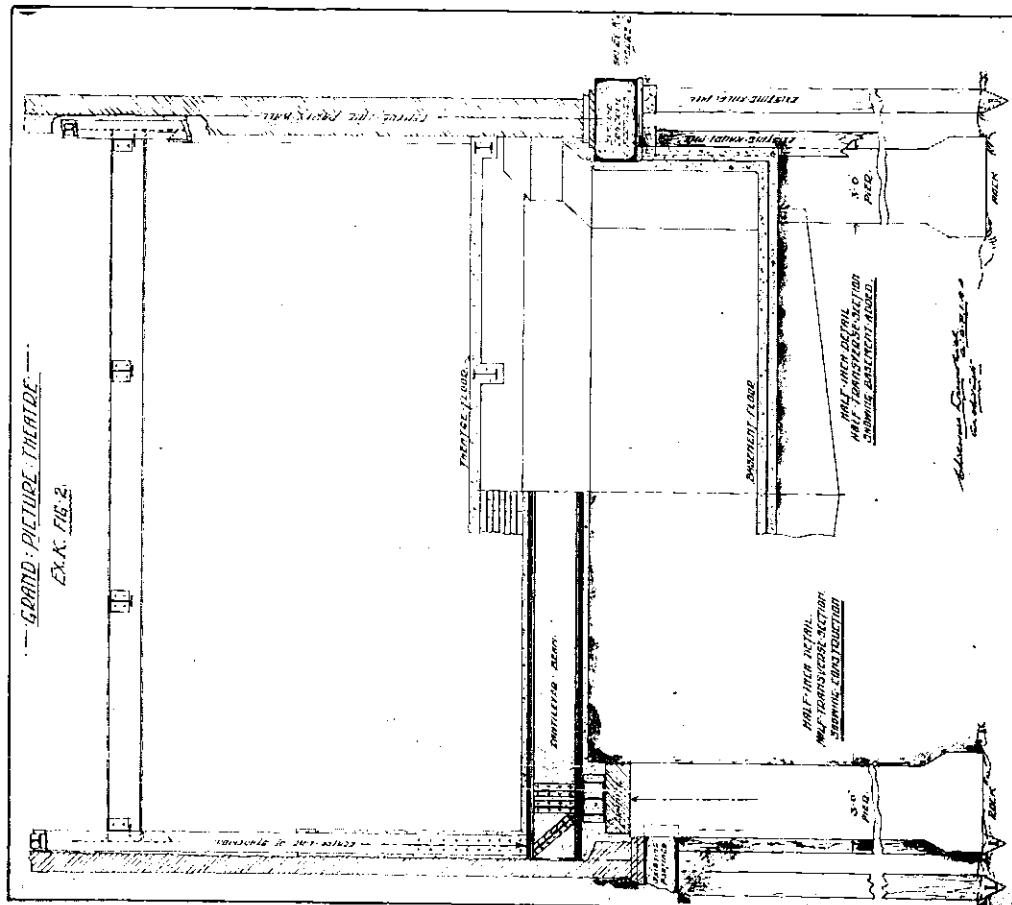
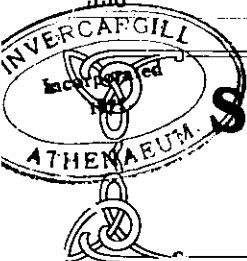


Fig. 2. —Grand Picture Theatre, Auckland Half-inch Detail.





SAWMILLING SECTION.

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

Editor: Mr. W. T. IRVINE.

A Few Words by the President of the Sawmillers' Association, Mr. W. J. Butler

"We are made for co-operation, like feet, like hands, like eyelids, like the rows of the upper and lower teeth. To act against one another, then, is contrary to nature, and it is acting against one another to be vexed and turn away."

Marcus Aurelius.

It is with considerable pleasure that the Executive of "The Dominion Federated Sawmillers' Association (Incorporated)" presents this first issue of our trade "Journal" to the sawmillers comprising that federation, and to the trade generally. Mingled with that feeling of pleasure is one of earnest hope that our "Journal" may prove as beneficial to our members as we desire, and as we have every reason to believe it will be.

The need of some official organ has been felt ever since, during the process of our evolution from discordant individuals to a more harmonious body, we became incorporated in our present Federation. Unfortunately, however, something more than the recognition of such a need is required in order to fill the void; and though the Executive's attention has been engaged on this question for several months, we have only recently been able to complete all necessary arrangements.

Not the least of the difficulties met with was the appointment of an editor. After numerous futile efforts in other directions the Executive returned to their first choice—the secretary of the Federation, Mr. W. T. Irvine—who, with many misgivings on his part as to his being able to devote to it the attention which he felt it needed, consented to fill the editorial chair upon the assurance of every member of the Executive being given that their individual assistance would be bent towards easing the load. The qualifications called for, i.e., technical knowledge of the sawmilling industry, an inherent interest in the welfare of that industry and literary ability, are abundantly possessed by our Editor; and members are to be congratulated in having secured his interest in that capacity.

To those readers who may not be acquainted with the constitution of The Dominion Federated Sawmillers' Association it would be well to point out that its objects are not confined to the protection and advancement of sawmilling interests, but specifically embrace the improvement of labour conditions within the industry, and also the improvement of facilities for cheapening the supply of timber to the community—consistently with a due regard to a fair return for the capital and labour involved.

Amongst other benefits that the Federation has bestowed on sawmillers generally, is the fact that

it has been largely instrumental in obtaining an adjustment of income tax assessment, whereby the proceeds derived from the conversion of standing timber are recognised as the realisation of a capital asset, and not as a taxable income as heretofore.

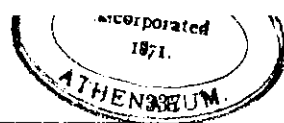
On the other hand, when the dairying and other industries within the Dominion became nervous respecting supplies of white pine and other requisite timbers, and when those industries became so excited in their demands as to insist on the necessity of prohibiting the exportation of all New Zealand timbers, the Federation requested the Premier to convene a conference between the sawmillers and representatives of those industries needing white pine. It was then shown that much of the clamour was due to a lack of consideration for all interests involved. Following that conference the Federation submitted to the Government a scheme for the control of white pine, which, while ensuring supplies to domestic requirements, would not unnecessarily hamper the exportation of any surplus, or of such classes or grades of timber as could not be absorbed in New Zealand. The new timber regulations, which have for their object the protection of supplies of timber to our primary industries, are essentially the outcome of the Federation's labours.

Apart from assisting the continuation of such beneficial work as outlined above, it is felt that only good can result from a wider recognition of the Federation and a fuller appreciation of its aims.

Through the medium of this "Journal" it is thought that sawmillers will be induced to exchange ideas for the purpose of improving their methods of production, and of effecting economies in the distribution, or marketing, of their products. Therein lies industrial and commercial efficiency.

Articles bearing on the above subjects as applied to sawmilling will be welcomed by the Editor; and any discussion thereon that may be evoked cannot but be beneficial to "our readers" and, incidentally, to all who are dependent in any degree upon a supply of timber.

A subject that may well come within the province of this "Journal" is "Forestry"—seeing that the continuity of our industry depends directly upon some scientific control of the sources of our raw material. In this connection it is felt that if a keener interest were taken in forestry by sawmillers the danger of forestry operations becoming too conservative may be avoided. It is, indeed, probable that the practical views of sawmillers, which may find expression in this "Journal," will lead some of our forestry enthusiasts to recognise that any "Conservation or Preservation" which does not aim for utilisation fails to keep step with National Efficiency.



While we are thus launching our "Journal," while we are, as it were, watching our bark gliding down the ways with ever-increasing speed, and while we join in the kindly greetings that we feel sure will herald her advent on the ocean of literature—we feel confident that, whatever storms may beset her, she will ride triumphantly onwards carrying a spirit of concord and a promise of mutual prosperity to all those in whose interests she has been launched.

W. J. BUTLER.

Notes.

We understand quite a number of millers have not yet sent in their returns to the Board of Trade, which are required to be furnished under the new timber regulations, and as this is bound to delay the work of the Board and the Timber Industry Committee they are strongly urged to fill in and return the schedule without delay.

The Board of Trade has invited the Federation to nominate four members—two from the North and two from the South Island—to comprise the saw-millers' section of the Timber Industry Committee, whose names in turn will be submitted by it to the Minister in charge for his approval. This, in our opinion, is only a fitting recognition of the work the Federation has put in to assist the Board and the Government in formulating a scheme for the regulation of the industry. Much time and thought has been freely given by the Executive and especially by the President towards the initiatory work necessary to be done, and whether they recognise it or not non-associated millers are under a deep obligation to the Federation.

Apropos of the shipping problem, a remarkable incident has come to our notice in connection with a vessel loaded with oils and benzine for Wellington and Melbourne. Arrangements had been made to put on board a million feet of pine and rimu, principally the latter—on the discharge of the Wellington cargo, but cable advice has been received from the owners on the Pacific coast that the vessel must proceed to Melbourne with her part cargo, or, if necessary, she must take in sufficient ballast to stiffen her. No doubt the Shipping Board of Control in the U.S. have reasons of their own for such a course of action, but seeing the freight on a million feet would run into £4,000 from Wellington to Melbourne, the decision seems inexplicable if not ludicrous.

Germany has shown great foresight in the preservation of her forests, which cover one-fourth of the area of that country—and employ thousands of people in their working and development. They also supply raw materials for many industries and pay 4 per cent. on the capital expenditure, after providing for all expenses. From examples such as this it would appear the Government of N.Z. are going on right lines in introducing a policy of re-forestation, but the practical working out of the scheme

will require most careful handling if the country is to derive a lasting benefit from the measure. Unless it can be clearly shown to the contrary one would think that the planting of quick growing Pacific Coast and other firs would give the most speedy return.

The question of re-forestation is now being seriously discussed in America, and an agitation is going on to introduce legislation for the purpose of carrying it out. Enormous tracts of bush country have been denuded on the Pacific Coast, and notwithstanding the general impression that the forest country is practically illimitable, unless some such step is taken in the direction indicated, it can only become a matter of time when restriction of export and conservation for home needs will be applied there.

We are indebted to Mr. Nankervis (Messrs. Gannan and Co., Ohakune) for an article on the "Cost of Production," which will appear in the "Journal" as opportunity affords, and comments thereon will be welcome, as it is only by discussion and elaboration of points of view as they occur to others that the best results can be obtained. This is a matter of the utmost importance to all sawmillers, and although the cost of production would probably not be the same in any two instances, if a standard system were adopted it would go a long way towards placing the industry on a thoroughly sound commercial basis.

ASSOCIATE, CO-OPERATE.

(By Pippin.)

Whether one reads New Zealand, Australian, American, or other literature on the fruit industry, one sees an insistence on two needs—association, co-operation. Hence these verses:—

If you would like a profit rate
To keep your home in decent state,
Associate.

If you would like to dodge the fate
Which smites the foolish, soon or late,
Co-operate.

To scare the wolf from orchard gate,
And free yourself from care's black weight,
Associate.

Don't dubiate, don't hesitate,
Don't stupidly procrastinate;
Co-operate.

Associate, co-operate,
And keep your system up-to-date.
Co-operate, associate,

The time has passed for dull debate:
Associate, co-operate.

If we alter "fruit" to "timber" industry there is a salutary lesson in the above lines that might well be laid to heart by those who think they can play a lone-hand with advantage to themselves.

W. T. I.

Costs of Production of Sawn Timber.

A Treatise on Pre-War and Present-Day Figures.

By W. R. NANKERVIS
(Messrs. Gamman & Co., Ohakune).

How often of late have we heard discussions on the above subject? If a sawmiller takes his seat on the Main Trunk train anywhere from Auckland-Palmerston, he is likely to meet a fellow member of the South Auckland or Rangitikei Associations and in very many cases the main topic of discussion will be the ever-increasing cost of production.

We hear such a lot of talk and protest as to the high prices timber has reached, and we admit the selling rates to-day are considerably in excess of lists ruling in pre-war days. Some people even go so far as to suggest that the Government should step in and fix prices and stop export altogether. In the belief that this agitation may some day result in action being taken, it behoves us to be prepared with facts and figures to prove that sawmilling is not such a gold mine as is oftentimes suggested, and that the present selling price of timbers is justified.

Also, it is very certain that not every sawmiller knows what his timber is costing to produce, and very often can only tell at the end of his half-year by taking his debits and basing a cost per hundred on his sales in super. feet.

As one who has been interested in the industry during the past eight years or so, not as a practical man, but as the man behind the scenes, it has been a pleasurable task to devote a good deal of spare time (and overtime) to get down to facts, and endeavour to show to what extent costs have risen and to what extent we have been justified in raising prices.

At the outset it should be pointed out that the figures have been taken from books and papers of a mill very favourably situated to mill sawn timber cheaply, not as cheaply perhaps as some, but certainly close to the top of the list in this regard. The system on which our costs are based is one used by a much larger concern than ours: and we believe that it is about as near perfect as can be got; but this point is open to argument.

Basis.

What is the basis of a cost account? It is the foundation, and the foundation is the DAILY or MONTHLY SAWN TALLY. Nothing is so important as this, for without a correct tally the other figures of our costs are useless. Not many mills, however, are able to get at this without having a man absolutely on the spot doing nothing else but tallying the output. Where a mill rails each day's cut away separately, the difficulty is overcome, but this happens in few instances. Nowadays, when men of any kind for a mill are very hard to get it is not possible to spare a tallyman for this work alone, so to get it we have to look for other ways of getting at our basis. In our case we had to take a

test, and we found that our mill skid tally of logs (Moor's Measure; formula, "diameter of small end less 4in. for slabs, squared, multiplied by half the length and divided by 8") taken on the breaking-down gave us equivalent to our sawn tally after deducting 5 per cent. Having satisfied ourselves on this point, we are able to proceed further, and now take up our actual costs.

Royalty.

We hold that this is the first charge against the cost; in most cases this has to be paid before timber is removed.

It is rather different to the profit and loss charges dealt with later and we have in recent years looked on royalty as a charge against our trading account. There is no need to go more fully into this matter except to point out that whereas £7 to £10 per acre was the average value of mixed bush some 10 years ago, the cost to-day on Government valuation is £20—just double. The cost of royalty per 100 will be based on the average yield per acre, and as the cost per acre is known this is easily calculated.

(To be continued.)

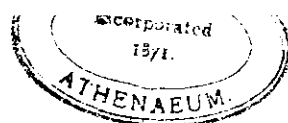
Here and There.

In an Australian newspaper a reference is made to the fact that the Nestle and Anglo-Swiss Condensed Milk Co. in August embarked upon the erection of a chocolate factory that will entail a total outlay of about £300,000. The extensive building, machinery and equipment are being erected on the banks of the Parramatta River at Abbotsford, near Sydney. This estate previously constituted the home and grounds of Sir Arthur Renwick.

Another important disbursement is being made by Nestles at Dennington, Warrnambool, where exists what is probably the biggest condensed milk factory in the world. There they are building a dining-hall for the accommodation of the employees at a cost of no less than £20,000. A similar refectory is to be established at Abbotsford. The scheme is to provide hot nourishing meals at mid-day. There will be no obligation upon the employee to purchase, but no profits are to be made, and the food will be issued at cost price. Recreation rooms will also be erected.

The new chocolate factory will give employment to 700 people. It is interesting to learn, moreover, that not only will the boilers cost from £15,000 to £20,000 and be made in Australia, but that the refrigeration plant, entailing an outlay of another £23,000 will be constructed there too. Certainly colonial manufactures are rapidly coming on, and are now indeed attaining dimensions of much magnitude.

The matter of allowing the erection of a large dried milk factory in New Zealand is now under consideration by the Government, and it is possible that permission to build will be withheld, as the Anglo-Swiss Milk Trust it is considered will stifle our local industry.



Notice to Sawmillers !

WHEN you want any PRINTING done, don't forget that the Publishers of your "Journal" have a complete up-to-date plant capable of executing any branch of Printing, including :

**Sawmillers' Catalogues
Timber Price Lists
Letterheads
Pamphlets
Billheads**

in fact, anything. A note to the Publishers :

Messrs. HARRY H. TOMBS, LTD.,

8 Farish Street :: WELLINGTON

will bring a prompt reply.

Building Notes.

AUCKLAND

The foundation stone was laid last month to the chapel for New Orphans Home at Papatōetoe. The new building is to cost £1,200.

It is expected to officially open the new building for the Y.W.C.A. about the middle of this month.

A poll of ratepayers of the borough of Pukekohe on the proposal of the Borough Council to borrow £2,500 in order that a site for a technical high school might be purchased and presented to the Education Department, resulted in the scheme being approved by 98 votes to 15. The Franklin County Council has agreed to accept a half-share of the liability in respect to the annual payment of interest and sinking fund for the loan.

The proposal to abolish the Nelson and Napier Street Schools and to erect a new up-to-date building on another site, was briefly referred to at the meeting of the City Schools Committee. It was stated that Mr. T. G. Price, architect, had accompanied the chairman of the committee on a visit of inspection of the schools and the proposed new site. Mr. Lilly suggested that in order to stimulate public interest in the committee's endeavours to provide up-to-date and healthy schools for children a public meeting be held. Mr. Price might be asked to give an address on school buildings generally and make a particular reference to the schools controlled by the committee. The suggestion was agreed to.

A reduction in building permits issued during the year ended March 1918 was recorded by the City Engineer in his Annual Report. He says the value of buildings for which permits were issued was £154,758, as against £274,097 in the previous year. The difference is accounted for, to some extent by the fact that the previous year's figures included £49,000 for the new market buildings.

Dealing with street maintenance, the report states that the year's allocation for this work was the largest that the city has made. The mileage of the streets to be maintained is now 155, or, exclusive of Grey Lynn, 132½, over 850,000 square yards of roadways and footpaths had been tarred and sanded, representing an aggregate area of 176 acres.

Messrs Chilwell & Trevithick, A.A.R.L.B.A., called for tenders last month for alterations to premises at Mt. Eden for Messrs. R. & W. Hellaby.

The Auckland Hospital Board called for tenders for additions to Public Hospital, Whangarei, Mr. Farrell architect.

Messrs. Mahoney & Son called for tenders for the erection in brick of a factory at Epsom.

The Education Board are calling for tenders for the erection of a new school at Okarewa.

Messrs. Ed. Mahoney & Son call for tenders for residence in wood at Devonport.

The Defence Dept. are calling for tenders for the erection of three work-shops at Pukerua Hill, Rotorua.

CHRISTCHURCH

The local Fruitgrowers' Association has completed arrangements with the Government for the erection in the city of a co-operative fruit and egg cool store, to have a capacity of about 1,000 cases. A communication from the Director-General of Agriculture states that the Government has now approved of the desired advance of £9,000 towards the erection of the proposed store, the advance being by way of loan under the Fruit Preserving Act. In view of this decision, and of the fact that the response from fruitgrowers to the request to take shares in a co-operative concern with a £10,000 capital has been satisfactory.

We are glad to note that a petition is being signed freely to present to the Attorney General demonstrating the necessity of granting permission to erect a Solar Salt Works at New Brighton. This project being a local industry should be gone on with at once. It would assist to revive interest in building which is much needed at present, and provide salt much cheaper than it can be imported.

It is understood that the authorities in Wellington have approved of the sketch plans of the alterations to be made at the Christchurch Hospital for the housing of the New Zealand Orthopaedic Unit. The sketch plans are now in the hands of the architect, who will prepare the working plans and the specifications. As soon as these are ready the work of effecting the alterations will be pushed on as quickly as possible so that the Chalmers Ward at the hospital may be ready for the Unit which is at present en route to the Dominion, when it arrives.

Work on Bowen House, the building being erected in Rolleston Avenue, near the corner of Gloucester Street, for the accommodation of boarders at Christ's College, is progressing satisfactorily, and it is anticipated that the building will be ready by Christmas. It will have accommodation for sixty boys. The top floor will contain three big dormitories and a small one, sewing and suit rooms, and a linen press. The ground floor will comprise a big common room and changing room, four small studies and the office. The building has been so planned as to permit of its extension in brick to Gloucester Street, to replace the present wooden building which is being used for school boarders.

Messrs. Collins & Harman called for tenders last month for the erection of a hospital at Oxford for the North Canterbury Hospital Board, but when the tenders came in the cost of the lowest was considerably above the estimated amount that the construction of the building has been held over in the meantime.

The same architects called for tenders for the erection of a morgue, and in this case a tender of £2,330, being about £170 below the estimate was accepted. The successful tenderer being Mr. Joseph Taylor.

Messrs. England Bros. invited tenders for a new fever ward for the Ashburton Hospital and Charitable Board last week and Mr. J. S. Guthrie called for tenders for converting S. and Theatre into shops and offices.

DUNEDIN

The tender of Messrs. Wood & McCormack for £2,975 was accepted by the Otago Hospital and Charitable Aid Board last month for the erection of shelters for consumptives at Waikari. Other tenderers were: Fletcher Bros., £3,005; Thomas Ferguson £3,086, and O'Sullivan & Bailone, £3,171.

Some six months ago a meeting of rate payers of North-East Harbour was held, when a committee was set up to devise ways and means of erecting a public hall. All arrangements were completed, and it was thought advisable to form a society, having for its object the expenditure of the money accruing from the

hall to some useful purpose. Last week a meeting was held, and the original Hall Committee became merged into the North-East Harbour Improvement Society. Mr. W. Rowlands was elected chairman, and 25 members were enrolled at an annual fee of 2/6. A commencement will be made this week with the erection of the hall.

A Press Association telegram states that the executive of the Wellington Red Cross received a letter from the Governor-General on Thursday night in regard to the suggestion by Surgeon-General Henderson that the Red Cross should consider the question of erecting work-shops for orthopaedic treatment. One is to be started at the Consumptive Sanatorium at Hatma, and it is proposed to establish functional work-shops at Wanganni Convalescent Home, the Christchurch Surgical Hospital, the Masterton Hospital, the Dunedin Convalescent Home at Montecillo, Invercargill, and the extension at Hanner.

The contract for additions to the Otago Dairy Producers' Cool Storage Co's present building, adjacent to the Victoria Wharf was secured by Mr. J. A. McKinnon whose price was £3,453 12 6. Twelve tenders were received for the work. Mr. Leslie D. Coombs, A.R.I.B.A., architect, states that the new store will be brought out from the present building on the town side, and that it will be 132 ft. long and 55 ft. wide. It will be constructed on the same lines as the other store. The old store held roughly, about 16,000 crates, but as the new one will be a little higher it is estimated that it will have a capacity of about 19,200 crates. A start will be made immediately on the building, and it is expected to be completed by the middle of December.

Mr. J. A. McKinnon's tender of £3,453 12 0 has been accepted for an addition to the Otago Dairy Producers' Cool Storage Coy's Cheese store at Dunedin, Leslie D. Coombs, A.R.I.B.A., architect.

Messrs. Fletcher Bros. tender of £1,088 has been accepted for a building for the Waitaki Dairy Coy. at Station St. Dunedin. Leslie D. Coombs, A.R.I.B.A., architect.

Mr. J. L. Hamilton's tender has been accepted for a new shop front and verandah at No. 43 George St., Dunedin, Leslie D. Coombs, A.R.I.B.A., architect.

Messrs. Fletcher Bros.' tender of over £2,200 has been accepted for a new building at No. 39 George St., Dunedin, to be occupied by George Ritchie & Co. Leslie D. Coombs, A.R.I.B.A., architect.

Messrs. Mason & Wales, Salmon & Vanes, E. W. Walden, and Leslie D. Coombs, architects, have been invited to submit designs for a memorial to Otago Old Boys who have fallen in the war.

HAMILTON

Messrs. Warren & Blechynden called for tenders last month for the erection of an Infectious Diseases Ward at Hamilton.

TIMARU

Last month a new building was completed, the St. Saviour's Orphanage for boys on Morgan's Road. It is now proposed that the building should be leased to the Government for five years.

WELLINGTON

The much discussed question of a Technical School site was settled last month by the Government granting a site in Mount Cook area. Mr. Hanan said that the dedication was conditional on the granting of £11,000 by the Wellington City Council towards the cost of the buildings; the council had already promised £10,000 of that sum. The question of providing money for the building had yet to be discussed by him with the Minister of Finance. Mr. Hanan made the point clear that Cabinet so far had been concerned with only the question of a site. The Minister mentioned that the site would not have much ground suitable for recreation, but it was considered that the adjacent Basin Reserve would meet that need. Some levelling would be required. Help in this work had been promised by the Justice Department in 1916.

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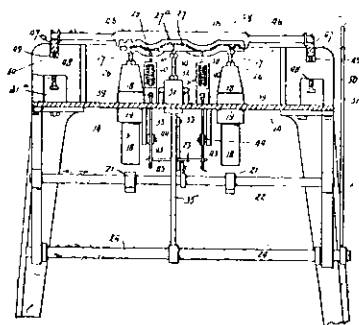
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Patents of Interest to Builders.

Concrete-Roofing-Tile Moulding Machine.—A patent, No. 39541, has been taken out by W. T. Cowperthwaite, Mt. Eden, Auckland. This invention relates to that known class of machine for moulding concrete roofing-tiles in which a pallet is employed to form the lower portion of the moulding-die and the concrete is spread over such pallet by means of a strickler worked to and fro along the pallet and formed in such a manner as to shape the upper side of the tile. In these machines the pallet is supported within a table-frame,



and rests upon rods that are adapted to rise and lift the pallet so that it may be lifted out of the machine, and which rods then receive the pallet for the next tile and are lowered to lower it into the table. The strickler is supported on guide-bars extending longitudinally along the respective sides of the table, and which position such strickler at the required height above the pallet (when the pallet is in position) to obtain the necessary thickness for the tile. The present invention has been devised mainly with the object of providing means whereby nail-holes may be formed in the

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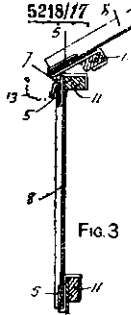
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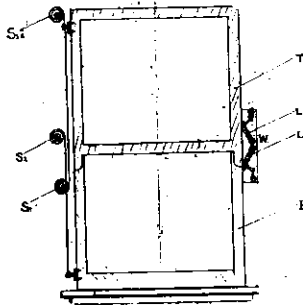
top flange of the tile to allow of it being nailed to the roof-battens, and whereby a hole may be formed in a fillet extending across a portion of the lower side of the tile, to enable a wire tie being passed through to fasten the lower end of the tile to the roof-battens. The invention also provides an attachment whereby the top surface of the tile after moulding and while still in the machine may move a layer of red oxide or other colouring-powder spread over it in an even and simple manner. Additional features relate to the manner of constructing and operating the pallet-carrying rods, and the means for regulating the height of the strickler guide-bar.

Fastener for Roofing.—A patent, No. 5,218, has been taken out by W. G. Stocker of New South Wales, for a fastener for roofing



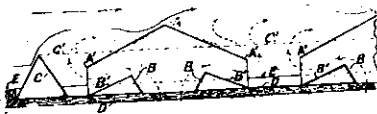
sheets. To secure roofing sheets 8 or the like to battens 11, a strip of metal is bent to engage a batten and to form a hook 5 which supports the overlying sheet.

Window Fastener and Lock.—A patent, No. 38,770 has been taken out by Henry Carter, Victoria street Hawera, which consists of the combination of a pawl or pawls having a constant



tension against the sash, levers and links connected to said pawl or pawls for releasing tension of said pawl or pawls against said sash, and a spiral spring or springs maintaining a constant force from sash to sash-frame.

Exhaust Ventilator.—A patent, No. 39,169, has been taken out by H. I. M. Ross, of Dunedin, which is for use as a



wall extractor of vitiated air, and is composed of a number of planes having caps in front of them, and a breakwind-device at each end.

Flushing Cistern.—A patent, No. 40,275, has been taken out by G. D. Fort, of Auckland. The cistern is provided with a cover that is of such a depth as to extend to the level of the water provided for by the float valve, and which cover is formed with recesses in its under-side to receive the ball of the float valve and the top bend of the discharge-siphon,

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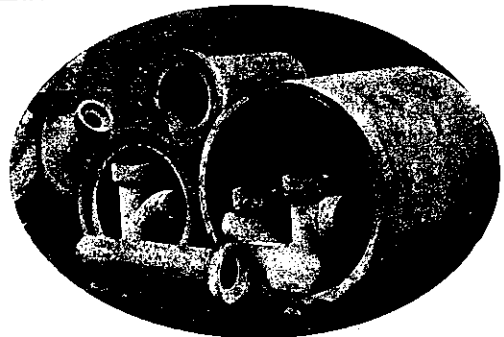
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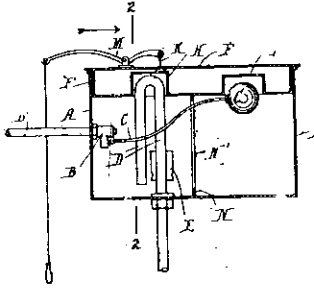
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which necessarily extend to higher levels than the topmost level of the water. It is also provided with an opening through it to permit of the passage of the discharge-valve lifting-chain, and this valve is arranged within a guide or sleeve that keeps it in position above its seat in all circum-

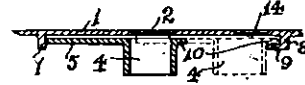


stances. The cistern is also provided with a divisional plate extending across it, at its middle, this plate having a vertical slot to act as a guide for the lever of the float valve and thereby to keep such valve from lateral movement, while the plate itself serves to assist in keeping the water in the cistern from being agitated.

Wood-Wool Manufacture.—A patent, No. 39,273, has been taken out by L. E. Hill of Putaki, Murchison, for a new material. The process is carried out by first cutting the veneers from blocks of wood of any desired kind, such wood being either in the dry or green condition. The veneers are then cut into lengths of any desired size, and are stacked one upon the other with their grains running in the one direction, and, if necessary, clamped together to form a firm mass. The veneers thus arranged are then placed within any desired construction of machine by means of which their edges may be fed up to knives that pass across such edges along the grain of the veneer

and thereby produce the miniature shavings that constitute wood-wool in the general meaning of the term. A suitable form of machine for this purpose is one constructed on the chaff-cutter principle—that is, with knife-blades on the arms of a wheel passing in their rotation across the edges of the stacked veneers, the veneers being continually fed up to the blades during the operation. This provides for the expeditious and cheap production of the wood-wool, and for any wood, no matter how tough its fibre, being treated in the machine.

Cooking Range.—A patent, No. 38,939, has been taken out



by J. A. Sargent of Hawera, for a cooking range. According to this invention, the range has an opening for the admission

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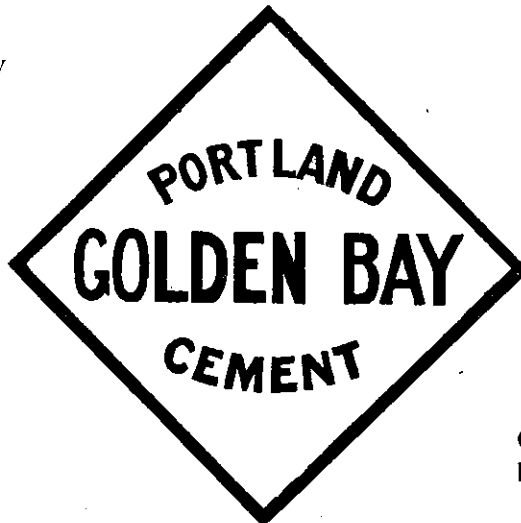
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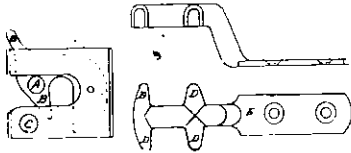
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of fuel formed in its upper plate, such opening not being placed directly above the firebox. Beneath the opening is a receptacle so arranged and constructed as to receive the fuel and discharge it into the firebox. The fuel is fed into the receptacle, and the receptacle is then moved by sliding until the slide is over the firebox, when the contents will be liberated and deposited into the firebox. Instead of the receptacle being made to slide longitudinally, it may be a rotating device.

Door and Gate Fastener.—A patent, No. 39,027, has been taken out by John H. Johns, and Walter G. Killworth of Tasmania. According to this invention, the hole A in catch B admits the insertion of a padlock, which prevents the catch being raised until unlocked. The hole C in the lower jaw of frame of fastener which is attached to door post or jamb admits the insertion of a padlock, which engages the ears of flanges D on



the latch E or part of fastener which is attached to door or gate, thus preventing the door or gate being opened until the padlock is withdrawn and removed. The ears or flanges D on the latch E are suitably placed and shaped to automatically cover all screw-holes or screws in the part of fastener which is attached to door post or jamb immediately door or gate is closed.

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