

## Flat Roofs.

With the march of modern improvements the important question of roofing construction and roofing materials comes in for its share of attention. The fine building recently completed in Wellington for the D.I.C. has a flat roof constructed on the P & B method, one of the well-known products of the Paraffine Paint Company, of San Francisco. The illustration on page 233 shows very clearly a portion of the roof, while the figures in the picture serve to convey an idea of the great area covered.

The foundation of P & B roofing is a strong canvas thoroughly saturated with P & B compound, a pure mineral backed by saturated felt and heavily coated on the surface with the same pure mineral. The result is a roofing material absolutely water and weather proof, and secure against the attack of the corroding influences which injure iron and other metallic roofings. Owing to its insulating qualities this roofing has the advantage of keeping the space underneath warm in winter and cool in summer.

After the roofing is laid it is treated with a coat of Floatine, also a pure mineral substance produced by the Paraffine Paint Company, put on hot; and while in that condition fine gravel is spread over the surface, thus forming a fire-proof concrete roof.

Where space is valuable, as in Wellington and other New Zealand cities, flat roofs (the space on which can be used for various purposes) are a desirable innovation—another point in favour of this method of roof-construction. If a fire should originate in the interior of the building the flat roof can be immediately flooded, and if the fire should burn through the supports of the roof a large body of water is immediately released on to the flames, and should a fire break out in premises in the vicinity the P & B flat roof admits of the firemen working their hoses from this elevated position, thereby commanding an influence over the flames which would be otherwise impossible, and enabling them to protect the building from the roof on which they are operating.

We also illustrate a P & B flat roof on Mr. H. P. Rawson's residence situated at the corner of Wellington terrace and Woodward street; this roof commands a very extensive view over the entire harbour and appeals to us as quite a necessary adjunct to residences situated in our elevated suburbs.

## The Grand Hotel, Wellington.

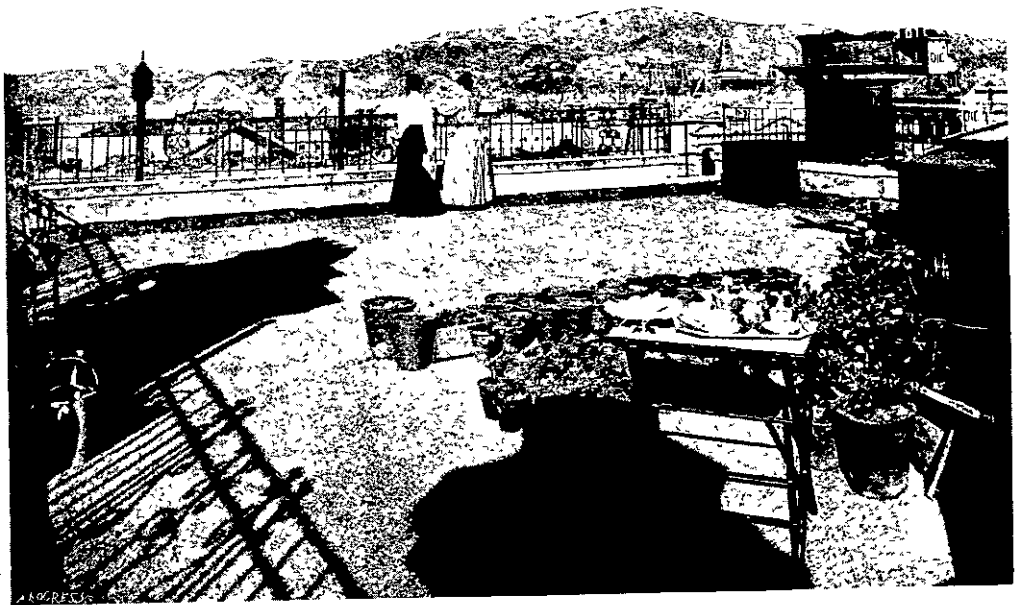
The new Grand hotel in Willis street, Wellington, now advancing rapidly towards completion, is one of the tallest buildings in New Zealand, and apart from its height will rank with the finest hotels in Australasia. From the broad parapet that forms a substantial wall to the winter-garden roof of the Grand to the pavement is a drop of 110ft., while the ornate centre-piece that adds the finishing touch to the sky-line of the structure reaches another five feet. It seems only a short time since passers-by gazed on that ramshackle wooden structure known as the Western (and at one time the Commercial) hotel, on the same site. Now there stands a magnificent fire-proof structure boasting seven floors, without counting the basement and the winter garden, which is really a floor-roof.

The staircase (which winds up and up through a well in the centre of the building) or the electric elevator, according to the disposition of the visitor, will be gained from Willis street by passing through



RESIDENCE OF MR. H. P. RAWSON, WELLINGTON.  
[Hardie Shaw, Photo.]

what will be a spacious and handsomely furnished lounge. It is claimed that this staircase—the usual force blast in a big building during the progress of a fire—is absolutely fire proof. At present the stairs are there in the rough, but there is no sign of timber anywhere—they are just steps of



RESIDENCE OF MR. H. P. RAWSON: THE P AND B FLAT ROOF.

[Hardie Shaw, Photo.]

solid breeze concrete, supported by heavy steel joists and runners of 56lb railway iron. The staircase ends away above the city, seven stories up, in a large glass house, or conservatory, which invites the full play of the sun's rays from all quarters, and inside which the atmosphere occasionally is eight or ten degrees warmer than below in the shady street. It is understood that this unique apartment will be utilised as a winter tea room or sitting-room. From the winter-garden roof a magnificent panorama of the city and harbour is presented, extending on every hand to the hills

give way within the next week or two to all that is smartest and best in culinary appliances. There are several large sitting-rooms looking out on to Willis street on each of the floors, the finest being on the first floor, with French doors leading out on to a broad concrete balcony constructed on the most stable lines. On the same floor in the front is a children's dining-room, a writing-room, and a spacious smoke-room, destined to be one of the most comfortable places in the palatial hostelry.

The Grand hotel—a product of the times and a domestic symbol of the progress of the city—has a frontage of 76ft. to Willis street by a depth of roof. Its impressive facade is heavily ornamental,



NEW RESIDENCES AT ORIENTAL BAY,