schemes of decoration, all planned by the firm's architect, and the firm is ready and willing, even anxious to stand or fall, by them. They go further, even, for, like some politicians, they declare that "these are our unalterable sentiments and designs, but if you prefer others, just trot them out and they shall be made in our factory." Which means that the firm is prepared to turn out work according to any design that may be sent in to them for the purpose. That was what the firm did for the ceilings of the Sydney Town Hall and of the Wellington Town Hall, for example.

Such is the factory started by Messrs Briscoe and Co. the other day. We publish illustrations of the exterior and of the group of persons in whose presence the Mayor of Wellington declared the place open for business.

To show the future that awaits the enterprise, we have given some illustrations of the works in Sydney (the drop-hammer room and the guillotine room), together with various examples of the decorative work in situ. The order of the processes is as follows. Artists design the schemes and patterns, under the supervision of the chief architect of the firm. Modellers put these designs into plaster, and moulders turn them into metal. These are the dies used under the drop-hammers as above described. It takes three separate departments to turn out the dies, and there are several long galleries in which thousands of the dies are stored ready for issue at a moment notice. The painting and the embossing follow, as described, the difference being numerical, more machines and more noise, the latter being in the Sydney works, where twelve are going at top speed all together (at Redfern), deafening. It is noteworthy that, before the embossing, every sheet is overhauled carefully and nothing in the least degree out of order permitted to go on.

Then come processes more complicated, A department is busy with the making of the stamped parts of plans requiring building up, those ceilings, for example, which give the idea of great weight with deep shadows, and elaborate ornamentation of centre pieces and other devices. Another department is occupied by tinsmiths—skilled metal workers—who build up the parts stamped. The work is very elaborate and extensive, and requires great skill. In addition, there is an engineer's department, in which all repairs are effected to machinery, and new machines made as required; there is a carpenters' and joiners' department, in which is made the elaborate woodwork often required in the decorative schemes ordered from the firm. There are packing sheds and show rooms, offices, board rooms and the rest. The administrative and factory buildings cover two acres at Redfern, and have frontage to three streets. They are provided with electric light, and the most up-to-date conveniences of all kinds, and power is supplied by a "Diesel" 95 B.H.P. oil engine, the only one in use in Australia.

There are 260 hands; they have from the first been on the best terms with the firm, their hours being 44. The Wunderlich were the first in Australia to establish a true eight hours factory day, and there is a provident fund liberally subsidised by the management. The maximum ruling wages have always been paid, and the firm has a library of technical works to which the whole staff has access, and it encourages study by paying half the night class fees of those who choose to take that method of self improvement.

If an industry with "points" like these does not succeed in the Dominion it will be for no defect of its own.

THE WUNDERLICH FACTORY, NEWTOWN.

Increased Mileage on Pneumatic Tyres with Decreased Pressure.

On this subject, to which we devoted, recently, considerable space, the well-known Mr. S. F. Edge writes:—

Sir,—As you are probably aware, I have made very considerable experiments to find out, firstly, whether reduced pressure decreases the speed of the vehicle fitted with pneumatic tyres or not, secondly, whether decreased pressure decreases or increases the life of the tyre. The first series of tests prove that reduction of pressure in the tyres makes practically no difference in speed.

The second series of tests prove that you can use your tyres with less pressure than was commonly thought, and, therefore, the whole car rides more easily and smoothly, and at the same time the tyres actually last longer. The tests have all been carried out on the road on my own six-cylinder Napier.

The weight of the car complete, as I generally drive it, was a shade under 35 cwt. The result was that with 60lbs. pressure in the front tyres (880 x 120) they ran 88 per cent. further than when the pressure was kept at 70lbs. to the square inch, and when the pressure of the back tyres (895 x 135) was reduced from 85lbs. to 70lbs., I got an increased mileage of 49.9 per cent. It is, therefore, clearly proved that reduced pressure means greater comfort on a motor car and less expense in tyre bills.

I am now carrying out experiments with still lower pressures, but owing to the distance one has to run, it takes a considerable time to obtain results.

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A Reply to Mr. F. Edge.

(J. A. Maclinch.)

I feel it a duty to disagree publicly with Mr. Edge's recommendation to inflate pneumatic tyres to a low pressure. His argument may apply to himself as an expert, but it will certainly cause great trouble and expense to the ordinary motorist, because, unfortunately, he deals with the question of inflation from the point of view of an expert driver, and, having driven with him, I must say that one can hardly feel any motion or side play when he is at the wheel. This, however, was when he kept his tyres inflated, and I have not recently had that pleasure, but I very much doubt if even he, as an expert, can prevent the side play with slack tyres, although he most unconsciously in his driving studies momentum and side strains every yard he goes The average motorist cannot be expected to do this, and he ought to consider the enormous unnecessary strain upon a slack tyre when turning a corner, caused by the swaying of the car, which creates a sawing action upon the edges of the cover by the rim.

These excessive strains, added to the undue wear, caused by the extra hinging of the tyre when driven insufficiently inflated, are exceedingly severe on the tyre and costly to the user.

When a car turns a corner at a fast speed with a slack tyre, the rolling action and side strain are much greater than when turning on hard tyres, because once a car starts to roll sideways on its tyres, it takes a great deal more to stop it than if checked in the first movement sideways, which checking does take place with a fully inflated pneumatic tyre. For the same reason, one is much less liable to side slip with a properly inflated pneumatic tyre, which grips the bed of the road than with a soft, flabby tyre, which the car rolls on and drags sideways with it.

For these reasons I entirely disagree with the advice given, and I think that it is a matter of great importance to all motorists that the following recognised scale should be strictly adhered to as most suitable and economical.

Section, 66mm.—To carry 600lbs. per wheel. Air pressure: Back tyre, 70lbs.; front tyre, 65lbs.

Section, 85 mm.—To carry 660lbs. per wheel. Air pressure: Back tyre, 80lbs.; front tyre, 70lbs.

Section, 90 mm.—To carry 900lbs. per wheel. Air pressure: Back tyre, 85lbs.; front tyre, 70lbs.

Section, 100mm.—To carry 1000lbs. per wheel. Air pressure: Back tyre, 85lbs.; front tyre, 75lbs.

Section, 105 mm.—To carry 1050lbs. per wheel. Air pressure: Back tyre, 85lbs.; front tyre, 75lbs.

Section, 120 mm.—To carry 1300lbs. per wheel. Air pressure: Back tyre, 95lbs.; front tyre, 90lbs

Section, 135 mm.—To carry 1400lbs. per wheel. Air pressure: Back tyre, 100lbs.; front tyre, 95lbs.

Over 180,000 acres in Ceylon are planted with rubber. The total acreage under tea is unchanged. Tea and rubber are interplanted over 60,000 acres, and cocoa and rubber over 12,000 acres.

The Japanese Government has raised the wages of artisans, engineers and shipwrights employed in the Government dockyards to 1s. 3d. per day.