

so extracted, together with a peculiar fusty odour, will announce the presence of dry rot.

Not only is it necessary to be sure that infected timber is not put into the work, but care must be taken that timber most liable to infection is avoided. Wet timber, unseasoned timber, and sappy timber should not be used. It should also be constantly borne in mind that all timber should be surrounded by a thorough circulation of air, and steps should be taken to exclude damp.

Wooden ground floors are particularly liable to attack. The ground surface should be sealed with concrete, especially over a clay subsoil. Dampproof course should be provided to the walls and the ends of joists should not be pinned in. Air bricks should be provided in the walls under the floors and on opposite sides, so that a thorough current of air may be obtained, and care should be taken that the air brick openings are not fouled by mortar droppings as the walls are built. I have seen air bricks completely blocked by the

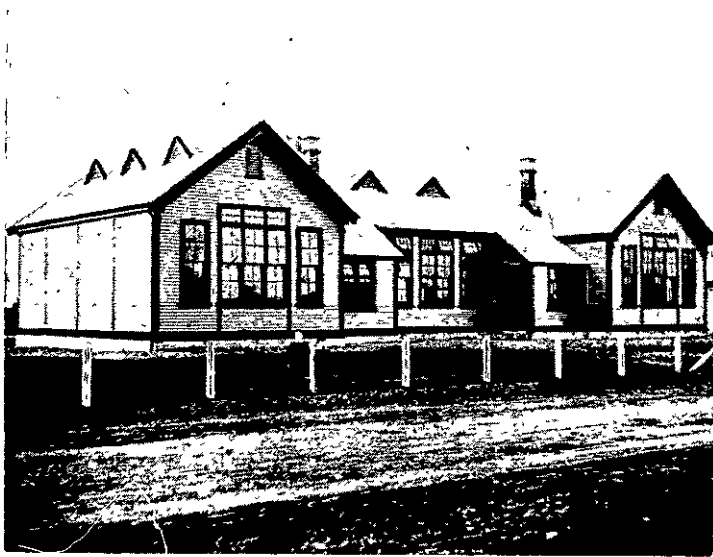
rooms with concrete floors. In such instances, two air bricks in each of the remaining and adjoining sides may be fixed and the air circulation, though not perfect, is usually adequate; but there is the instance, as in a row of cottages, where the front rooms have boarded floors and the kitchens behind them flagged or concrete floors. It is then only possible to fix two air bricks in one, the only, outer wall, and this is not by any means ideal ventilation.

In all doubtful cases it is a very wise precaution to use creosoted joists, or they may be coated with "Solignum." The latter may also be applied to the undersides of the boards with advantage.

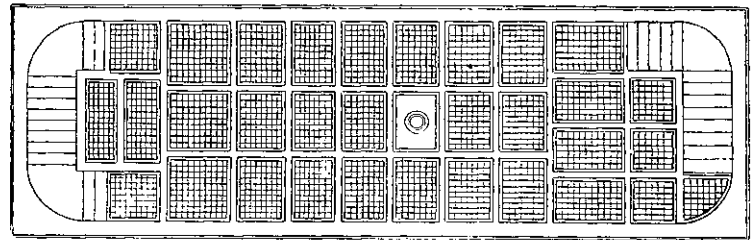
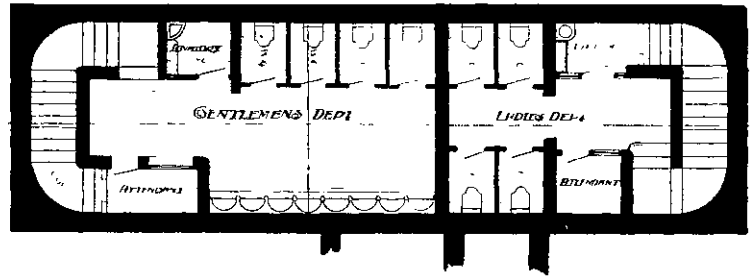
The use of linoleum on all floors subject to dry rot much increases the difficulty; but, provided a linoleum is laid on a floor without the edges being cemented down, and the floor is constructed of thoroughly sound material and the conditions of dryness and ventilation are perfect, there need be no fear of dry rot setting in. A floor composed of good materials but without ventilation and covered with an oilcloth,

Linwood School.

This school has been built on the Woodham road, North Linwood, Christchurch, and consists of three large rooms, and two spacious corridors. The present building forms the front portion of a school designed for future extensions to accommodate up to 500 pupils. The structure is of wood, with high concrete foundation, and is in every way an up-to-date building. The architecture is simple, as behoves the Government grant allotted for the purpose. The rooms are lofty, well ventilated by Tobin tubes, louvered roof ventilators, also at the eaves, and windows, the sashes being hung with the Austral "Magie" sash balance, and the fanlights opening outwards, provide a plentiful supply of fresh air, which can be easily regulated. The lighting is from the left, with supplemental lights from the right in the two large rooms. The schoolrooms are dadoed 4ft. 6in. high with figured red pine, and the whole of the walls, etc., are painted in light, cheerful shades, and wall blackboards of hypoplate are suitably provided. The furniture installed is of the Board's latest type of dual desk, having separate seats for each pupil, with hinged desk tops (these desks obtained a certificate of merit in the late N.Z. Exhibition). The present seating to accommodate 240 pupils has been taken up within a few weeks of the opening of the school. Architect, G. W. Penlington.



NEW SCHOOL, NORTH LINWOOD, (Christchurch)
(G. Penlington, Architect).



UNDERGROUND CONVENIENCES, CATHEDRAL SQUARE, (Ch.Ch.)
C. Dawe, Architect. John Porter, Contractor.
Floor Plan above. Ceiling Plan below.

last joist on each side of a floor. The bricks should be fixed lower, or the joists made to run the other way.

In the absence of ventilation, and in the presence of damp, and particularly when the favourable conditions are increased by the proximity of stoves or kitchen range providing warmth, the germs of dry rot attack the timber, and become rooted in its surface, feeding upon and decomposing its fibres, and the gaseous products of decomposition which are given off but add to the favourable conditions. Dry rot once established spreads with great rapidity and is very difficult to get rid of, even when all decayed parts are removed and the conditions as to ventilation and dryness improved. In one or two cases which have come to my notice, a sound floor was eventually obtained by removing every vestige of timber and sweeping out the space beneath the floor, which was then coated in every part with hot limewash before fixing the new joists and flooring. The ventilation had been previously attended to, but before the drastic measures just mentioned the dry rot which destroyed the first badly-ventilated floor immediately attacked the second floor which was laid down.

The ventilation of floors is not in all cases an easy matter, for many rooms exist which have on two of the four sides other

was in such a state that, within three years of laying, the legs of the furniture went through both the linoleum and the boards; the joists also were in a very unsafe state. In the case of another floor where some unseasoned timber was used with no ventilation at all, and a linoleum was laid, dry rot was rampant in from six to twelve months. From the underside of this I stripped off a paper like fungus growth, which was very tough, and came away in pieces, over a foot super., but after a few hours' exposure to the air, the pieces I stripped off broke down into powder. The wood underlying the fungus growth had a brown, burnt appearance, and could be crumbled to pieces with the finger and thumb.

Another instance is of an unventilated floor that had been down twelve years, and was not linoleum covered, which was so dry rotten that I went through it with both feet.

It is, of course, impossible to foretell the life of a floor under all sorts of variable conditions, of bad material, and want of ventilation. Its life is very short, however. But if every care is exercised in these matters, a good floor will last a great number of years, even if covered by a linoleum which does exclude a certain amount of air, as, indeed, does a carpet, or any other covering.

The new premises which have been erected on Lambton quay for the Wellington Trust Loan & Investment Company, Ltd., consist of a building four floors high. The ground floor is occupied by the company's offices, and fitted throughout with cedar fittings; the ceilings are by the Carrara Ceiling Co., Ltd. The other floors are suitable for offices, with strong rooms, with all necessary conveniences, and installed with electric light. The front elevation facing Lambton quay is sixty feet high, and is constructed of blue stone to the ground floor window sills, the remainder being finished with pressed brick and cement facing. The roof is covered with "Eternit" slates. The cost of the building totals about £5500. Penty & Blake, architects, designed the building, and supervised the erection of the structure. With the exception of two rooms and strong-room, the building is fully occupied. Contractors, Trevor & Sons, Ltd.; lighting, Cederholm and Tolley.

Tenders are being called in Blenheim for the erection of memorial school buildings by John S. Swan, architect, Wellington, to close October 1st.

Tenders will be called in a few days for the erection of a brick chapel at Masterton for St. Bride's convent. Architect, John S. Swan.

The contract for additions to "Longwood," Featherston, has been secured by W. Benton & Sons, of Featherston. Architect, John S. Swan.

The contract for repairs and painting to Wellington Club, The Terrace, has been secured by Mr. Jennings. Contract price, £280. Architect, John S. Swan.

There has just been completed a very pleasing seaside cottage at Plimmerton, for Mr. Wellsman. Architect, James Bennie; contractor, W. Hutchings.