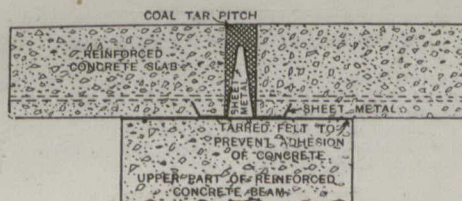


found in a monolithic concrete construction to a greater extent than in any other one material. By a roof of this description they mean, of course, one that is laid in place by putting the mixture of cement, sand and broken stone, when freshly made, into forms and allowing it to harden or set in a more or less homogeneous mass. As exponents of the concrete roof they add further that such a roof does not condense moisture on the under surface so much as other materials, with the exception of wood. The objection that is sometimes made to concrete roofs, however, that they are not impermeable to water, can, they claim, be overcome by mixing a good cement waterproofing compound with the top dressing of the concrete, providing also that the roof is designed to permit of expansion and contraction without causing cracks.

A type of expansion joint to allow for expansion changes is shown in the accompanying sketch. This shows that the space between the abutting ends of the concrete slabs contains a fold of sheet metal imbedded at each end into the concrete, but allowing for flexibility without giving a direct opening of any kind through the roof at the joint. A filling of coal tar pitch is employed to fill the joint flush with the roof surface, it being a flexible material, which is also counted to resist the leakage of water. It will be noted that the concrete beam on which the slabs rest was especially covered with tarred felt to prevent



EXPANSION JOINT.

adhesion of the concrete slab itself, so that the slabs can have the freedom of lateral movement to accommodate such changes as take place with changes in temperature.

CONCRETE RAILWAY TIES.

Concrete plays an important part in a new invention in railroad ties on which Harry J. Corell, of Mt. Jewett, Pa., has secured patents. Concrete blocks connected by forged steel bars and securely bolted to the rails, make up the principal feature of the ties. It is said that with these ties there can never be a case of spreading rails, so common with wooden ties. The invention may solve the problem which has been confronting railroad companies for years with regard to the securing of wooden ties, owing to the great scarcity of suitable oak and other tie timber. It is said that the new tie is practically no more expensive than wood and will last for a lifetime. For street car tracks in cities, these would be desirable, it is said,

because when they are once in place, the pavement would never have to be torn up to replace them. Each sleeper is approximately thirty inches long, twelve wide and twelve thick, and if necessary to guard against possible fracture, could be reinforced with metal rods laid in the blocks. Another feature, which is said to appeal to railroad contractors, is the fact that these ties can be made at any point along the line of road where little concrete block work could be set up.

METAL SHINGLE AND SIDING COMPANY HONORS PRESIDENT.

On the occasion of the opening of the handsome new offices of the Metal Shingle & Siding Company at Preston recently, the office and travelling staffs presented their president and general manager, Mr. C. Dolph, with a fine quartered oak office table. About two years ago the plant of the company was completely destroyed by fire. New buildings have since been erected, finished inside and out with metal. Much of the success of the company since its inception has been due to the business ability and tireless energy of Mr. Dolph.

ARCHITECTS DISSOLVE PARTNERSHIP.

Messrs. Curry, Sproatt & Rolph, the well-known Toronto firm of architects, are dissolving partnership, Mr. Curry retiring. The other gentlemen will continue in business under the old trade name of Sproatt & Rolph.

NEW ARCHITECTURAL FIRM FOR BRANDON.

Messrs. Hogle & Davis, architects, of Montreal, and Mr. David Marshall, associated with the above firm, have opened offices in Brandon, Man., where they will carry on business, Mr. Marshall being resident architect in charge. The new firm are in charge of the new Merchants' Bank Buildings at Brandon and at Arcola, Sask., and are also about to start extensive alterations on the Merchants' Bank Building at Carberry, Man.

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