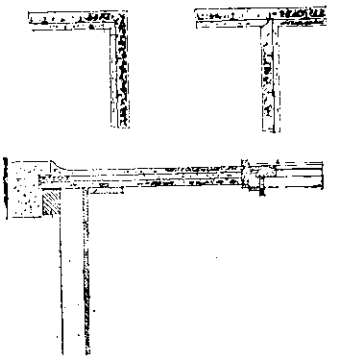
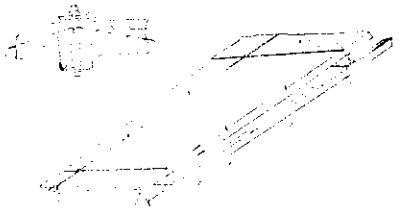
**Weight-Carrying Wall, Reinforced Concrete, without Boxing.**—A patent, No. 38,437 has been taken out by C. H. Mitchell, architect, Kouini road, Hataitai, Wellington, by means of which the



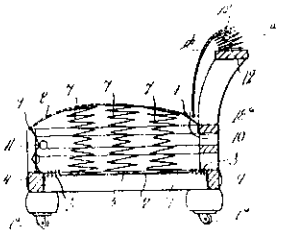
concrete substance is applied by means of either or both a trowel or a float, or their substitute, to the reinforcement, which is constructed to permit of such application.

**Concrete Roofing, &c., Slab.**—A patent, No. 39,817 has been taken out by J. A. Main, of Glasgow. In the construction of the slab of this invention a curve for the reinforcing material approximating to the catenary or natural curve of said material when suspended between two points of support is employed, and



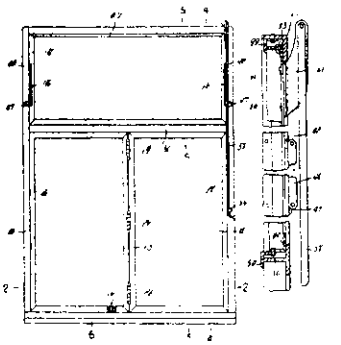
in this manner a thin slab of such a weight as to be easily handled is obtained, while a strength is obtained for the slab which is much greater than the strength of the usual flat or corrugated reinforced concrete slab of considerably greater thickness.

**Couch, Easy Chair.**—A patent, No. 38,828 has been taken out by D. P. Painter, of Springfield road, Christchurch. The frame of ordinary construction of a chair is mounted on castors in the usual way. Spiral springs attach to the back and front of the frame support transverse bars, and other spiral springs attached to the sides of the frame support a longitudinal bar. The spiral springs ordinarily used for seats of furniture are fixed to the top of the transverse and longitudinal bars, and over the springs a covering of woven wire is stretched. Wires



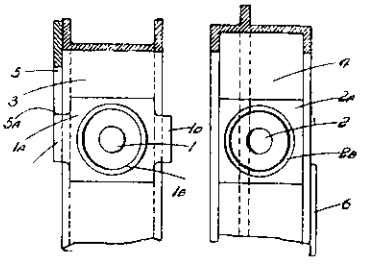
are threaded through the back, front, and side edges of the woven wires, the wires at the sides being attached to the frame by wire and spiral springs. Along the front edge of the frame a plurality of springs of special construction secure the maximum resistance without affecting the springiness of the seat. These springs are made with a coil or coils, each having a leg, one leg attached transversely to the frame and the other to the woven wire. Above the top rail of the back and sides of the couch a top rod is provided, having its ends attached to ferrules, which in turn are attached to springs fixed to a board forming the scroll ends of the couch. At the corners of the couch, corner wires bent to the required contour for the back and sides are lashed together, the woven wire where it abutts against the wires being cut to a template and afterwards bound to the said wires. The ends of the woven wire at the sides of the couch are cut off square and secured to the scroll-boards, the tops thereof being fastened to the said top rod and the bottoms thereof being fastened to a bottom wire and to one of the said corner wires. At intervals along the top rail, and attached to the top wire at the back and sides of the couch, spiral springs are fixed; and, between these spiral springs, springs having scrolls are fixed. The whole top edge of the couch is thus effectually sprung, so that no matter from what angle pressure is applied the couch will respond. When the framework above described is completed the canvas or underwork is tacked in position, and the stuffing and covering material applied in the usual way, but less in quantity owing to the continuous support derived from the woven wire. The scroll being formed with a moulded edge, over which the woven wire is stretched and fastened down, understuffing at these parts is dispensed with.

**Casement Window.**—Another patent window has been invented by Niels Nielson of 162 Khyber Pass, Auckland, No. 39,230. According to the invention, the casement-sashes and fan-light



frames and parts are made of iron or other metal, with roller bearings for the sashes and fanlight, and a combined handle and catch for closing and fastening the sashes.

**Window-Pivot.**—A patent, No. 38922, has been taken out by A. Woolnough of Dunedin, and comprises a spigot 1 and faucet 2 to form a pivot, made in two parts, 1A and 2A, let into each other, one part 1A being attached to the frame 3 of the window and the other part 2A to the window-sash 4, each to each and opposite, the part 1A having a protruding ring 1B on its surface, adapted to engage with and rotate in a corresponding circular groove 2B in the part 2A, the said ring 1B being of a diameter



greater than the distance left uncovered by the weathering-strips 5 and 6; the lug-pieces 1C and 1D of the part 1A being of sufficient length to reach from the terminal end 5A of the weathering-strip 5 on one side of the pivot to the terminal end 6A of the weathering-strip 6 on the other side of the pivot, and the protruding ring 1B is of such a depth as, when the window-sash is removed from its normal distance from the frame 3, the said ring 1B will remain in contact with the groove 2B in the opposite part 2A.