

## Chair of Architecture, Sydney

The University of Sydney proposes to adopt the following course in connection with the newly-endowed Chair of Architecture:—

Examination of leaving certificate of High Schools in the following subjects:—Mathematics (trigonometry plane), algebra (bi-nominal theorem, geometry), English, French, or German, ancient and modern history, elementary plane and solid geometry, elementary physics, elementary chemistry, elementary free-hand and model drawing.

The subjects for the course in architecture should be—First year: Architectural drawing, freehand drawing, elements of architecture, elements of design, descriptive geometry, shades and shadows, perspective, physics (light, heat, electricity), inorganic chemistry (quantitative), mathematics, geology, construction.

Second Year—Architectural design, freehand drawing (antique), water-colour drawing, architectural history, construction, mathematics, petrology.

Third Year—Freehand drawing from life, architectural history, architectural design, historic ornament, construction (including graphic statics), water colour, sanitary science, mathematics.

Fourth Year—Design, freehand (life in colour), water colour, pen and ink rendering, history of sculpture, history of painting, professional practice (including ethics, jurisprudence, and business), special lectures (including town planning).

## Recent Building Patents

**Flushing Cistern.**—A patent, No. 2,195, has been taken out by C. Hodges and H. Jackson. To minimize noise and avoid the use of valves, the inlet cock is placed near the bottom of the cistern and the syphon bell is connected by a pipe to a push button which releases the air lock to start the action. The inlet cock 3 is closed by the ball float 4 when the water flows over the weir 6 and fills the chamber 5. A pressure on

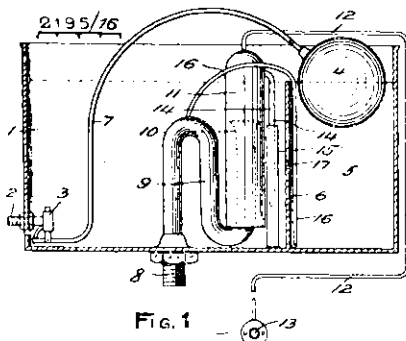


FIG. 1

the button 13 then releases the air from the bell 11 to start the syphon, the water being drawn from the chamber 5 through the pipe 16. An orifice 17 controls the depth of water which can be drawn from the chamber 5, and a pipe 14 admits air to the bell to stop the syphon when the water in the cistern falls below the required level.

**Angle Cover Plates.**—A patent, No. 1,970, has been taken out by J. Rose, of Victoria. To replace the usual staff stops for internal or external angles of weatherboard structures a cover-plate is creased longitudinally and provided with upper

and lower wings. For re-entrant angles the sides of the plate form an obtuse angle, and for exterior angles an acute

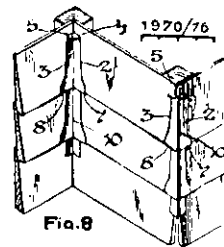
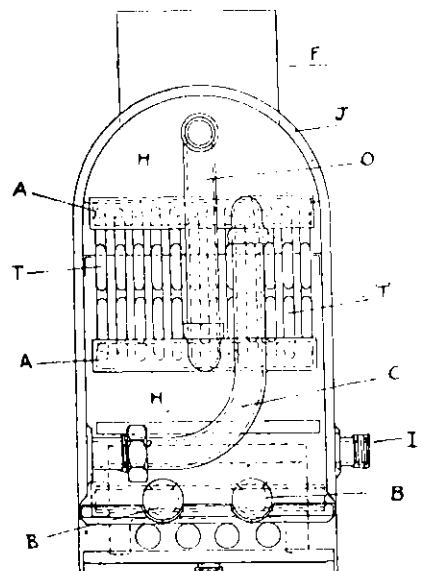
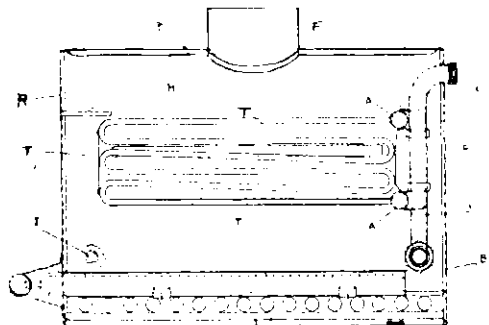


FIG. 8

angle. The lower wings 7, 8 of a cover are placed under the upper wings 4, 5 of the lower cover and nailed to the board.

**Water Heater.**—A patent No. 38,113, has been taken out by Jas. Lowe, Engineer of Auckland. The heater is formed with a water-container forming the sides and top of the combustion-chamber, in which and above the heat-generating means are a number of approximately horizontal water-tubes. The water-container is provided with an inlet, and a connection communicating with the approximately horizontal tubes, all



of which discharge their contents through a common water-outlet pipe. Any suitable form of burner may be employed, and removable end cover-plates are fitted to the device. A suitable outlet-flue is provided, either through the top of the water-container or through the top of the cover when same is employed.

**Cooler.**—A patent, No. 38229, has been taken out by T. Coulthard Mullions, Architect of Auckland. It consists of pumice concrete, reinforced or otherwise, and has a dished lid, the rim of which dips into an annular well, from which passages extend to the bottom of the vessel. The bottom of the vessel