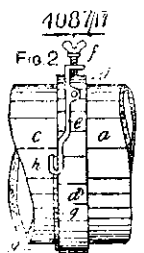


Patents of Interest to Builders.

Concrete Pipes, Joining.—A patent No. 4087 has been taken out by W. R. Hume, of South Australia, for rendering the joints of concrete pipes water-tight under high pressure, a plastic cement, composed of animal pitch, resin, sulphur, and oil, is forced between the abutting pipe ends, which are held in alignment by an adjustable ring and surrounded by a concrete collar.

With the first length of pipe *a* and collar *d* in position, semi-dry cement and sand is rammed half way round the inside of the collar by a laterally curved rammer and is then screeded. On the end of the pipe *a* is placed a ring of cement, made by heating 100 lbs. of animal pitch to 350° F. with the addition of 46 lbs. of resin, then incorporating 10 lbs. of sulphur after cooling to 300° F., and finally adding 12 gallons of oil to render the mixture plastic.

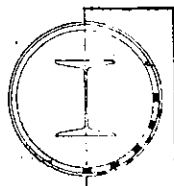
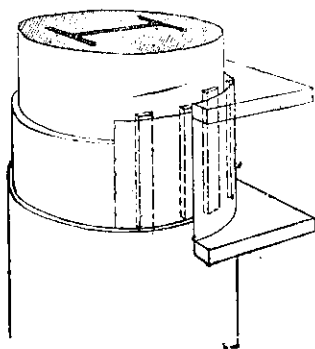


The adjacent pipe *c* is placed in abutment and held in alignment by the lower portion *g* of the adjustable support *e*, while the cementing material is rammed flush with the collar end.

To ascertain if the joint is at the centre line of the collar, an iron flanged band with hinged gauge arms may be attached to one of the pipes.

In a modification, the parts *e* and *g* of the supporting ring, instead of being looped at *h*, are hinged at one side and provided with a drop loop at the opposite side.

Concrete Decoration.—A patent No. 39450 has been taken out by Mr. J. Campbell, Govt. Archt., for an artificial Breccia or decorative permanent finishing material for concrete or brick



columns forming and applying *in situ*. The method consists in applying a finishing layer of decorative concrete cast *in situ* by the use of an outer and inner mould securing the retention of the

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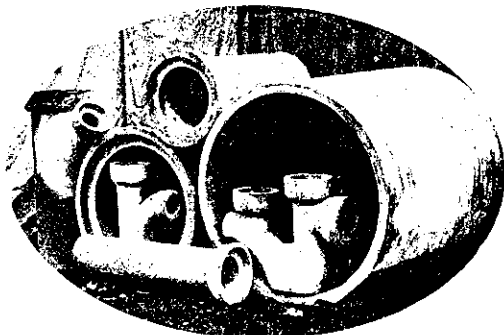
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