

No. 801,915.

J. ROBINSON.

PATENTED OCT. 17, 1905.

MOLD FOR CULVERT, SEWER, AND OTHER PIPES.

APPLICATION FILED DEC. 22, 1904.

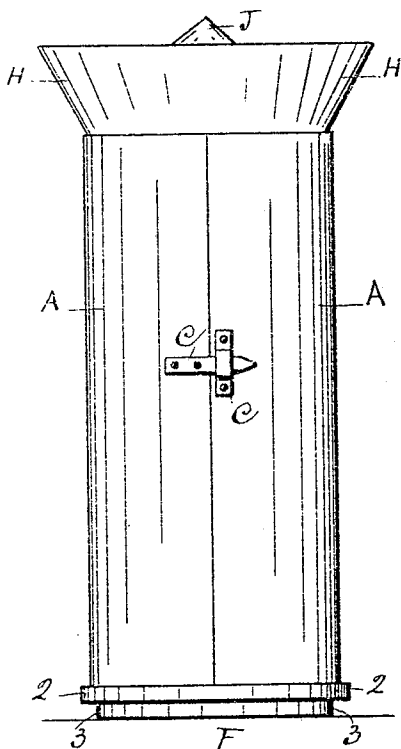


Fig. 1.

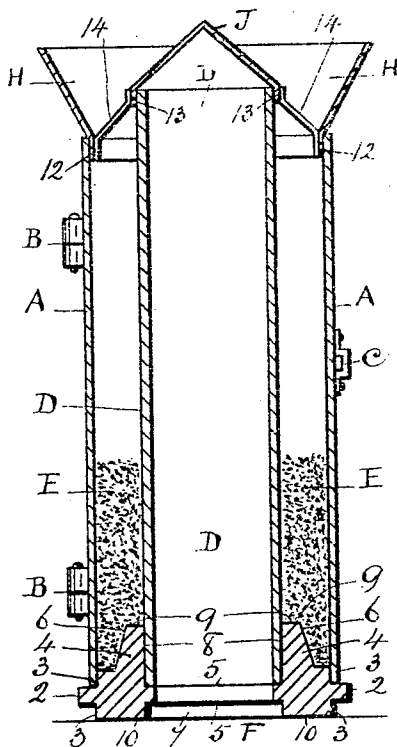


Fig. 2.

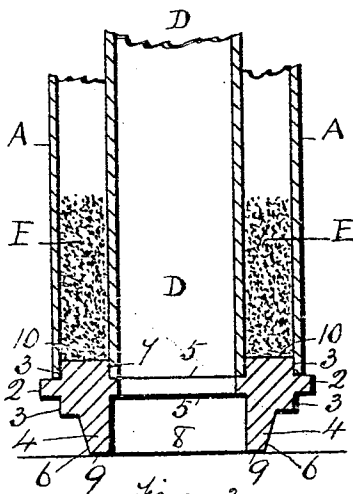


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN ROBINSON, OF HAMILTON, CANADA.

MOLD FOR CULVERT, SEWER, AND OTHER PIPES.

No. 801,915.

Specification of Letters Patent.

Patented Oct. 17, 1905.

Application filed December 22, 1904. Serial No. 237,984.

To all whom it may concern:

Be it known that I, JOHN ROBINSON, a citizen of Canada, and a resident of Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented new and useful Improvements in Molds for Culvert, Sewer, and other Pipes, of which the following is a specification.

My invention relates to molds for culvert, sewer, and other pipes in which a reversible base is introduced to support a hinged sheet-metal cylindrical body part and core and a removable flared top for said body part secured to a canopy-top for the core.

The objects of my invention are, first, to provide a mold having a removable and reversible base adapted to form pipes with telescope ends and pipes with flat ends; second, to provide a mold with a flared top and the hollow core with a canopy-top to afford facilities for filling in the concrete between the body part or outer shell and the core, and, third, to provide means to center the core with the shell. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the mold with the base in position to form a telescope end to the concrete pipe. Fig. 2 is a sectional elevation of the same, showing the longer end of a pipe. Fig. 3 is a sectional elevation of the lower part of the mold, the removable base part being reversed to form a flat or plain end to the pipe.

Similar characters refer to similar parts throughout the several views.

In the drawings the body part or outer shell of the mold is indicated by A and is made of sheet metal in halves, which are hinged together at B and fastened at the opposite vertical joint, as at C. The shell A, the hinges B, the fastening C, and the vertical hollow core D are not new.

E is the concrete pipe between the shell A and the core D.

In Fig. 2 of the drawings the base F is circular and has an annular flange 2, on which stands the lower end of the shell A. The inner part of said lower end fits around the annular step-flange 3 of the base F. An upwardly-extending rim 4 extends from the flange 3, the inner side of which fits the outer part of the hollow core D. The lower end of said core rests on the internal flange 5, which is in horizontal line with the flange 2. The outer part

6 of the rim 4 is less in diameter than the diameter of the inner side of the shell A in order to form space between the shell A and said rim for the telescope end of the molded pipe E.

It will be noticed in Fig. 3 of the drawings that the base F is reversed or upside down and standing on the rim 4. The shell A in this view is shown standing on the flange 2 and around the annular step-flange 3 of the base; also that the lower end of the hollow core stands on the internal flange 5 and in the annular opening 7, similar to the annular opening 8 of the base. The upper surface 9 of the base in Fig. 2 of the drawings forms a shoulder for the telescope end of the pipe E, and the same surface 9 in Fig. 3 of the drawings is the standing bottom of the whole molding device. The upper surface 10 of the base in Fig. 3 of the drawings is the lower end of the molded pipe E, and the same surface 10 in Figs. 1 and 2 of the drawings serves as the standing bottom of the whole molding device.

It will be noticed that the lower end of the shell A and the lower end of the core D are on the same plane. This feature is important in that the upper ends of the shell and the core shall be the same distance apart and in the same relative position to each other whether the base F is placed as in Fig. 2 or as in Fig. 3 of the drawings.

The upper end of the shell A is provided with a flared mouth-top H, having a lower annular flange 12, which fits into the upper end of the shell A and loosely connected therewith. The upper end of the hollow core D is covered with a canopy J with lower annular flange 13, which fits loosely around the outer part of the core, thereby completely covering the upper end of the core. The flared mouth H and the canopy J are secured together by means of a number of brace-straps 14, which are rigidly connected to said flared mouth H and canopy J and are adapted to be lifted or removed together from off the mold. The brace-straps 14 serve the purpose of placing and retaining the upper end of the core D in an exact central position with the shell A. This feature is important in order to produce a pipe of equal thickness around the body thereof. The flared part H of the top of the shell serves to facilitate the entrance of the soft material composing the concrete pipe while the same is being molded, and the

canopy-cover J serves to prevent any of said material from entering the hollow part or opening of the core.

What I claim as my invention, and desire 5 to secure by Letters Patent, is—

10 A mold for concrete pipes, comprising a cylindrical shell in two parts vertically joined together, hinges on one vertical joint, and a fastening on the opposite vertical joint, a removable open and flared top resting on the shell; an annular flange on the lower part of the flared top loosely inserted in the shell; a central vertical cylindrical core in and ex-

tending above the shell, a canopy resting on and covering the top of the core, an annular 15 flange on the lower part of the canopy fitting around the upper end of the core, and brace-straps rigidly secured to the annular flange of the flared top and to the annular flange of the canopy-top to centrally locate the upper 20 part of the core in the shell.

JOHN ROBINSON.

Witnesses:

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