

N. P. BOWLER.

Molds for Plaster Pipe Patterns.

No. 142,765.

Patented September 16, 1873.

Fig. 1.

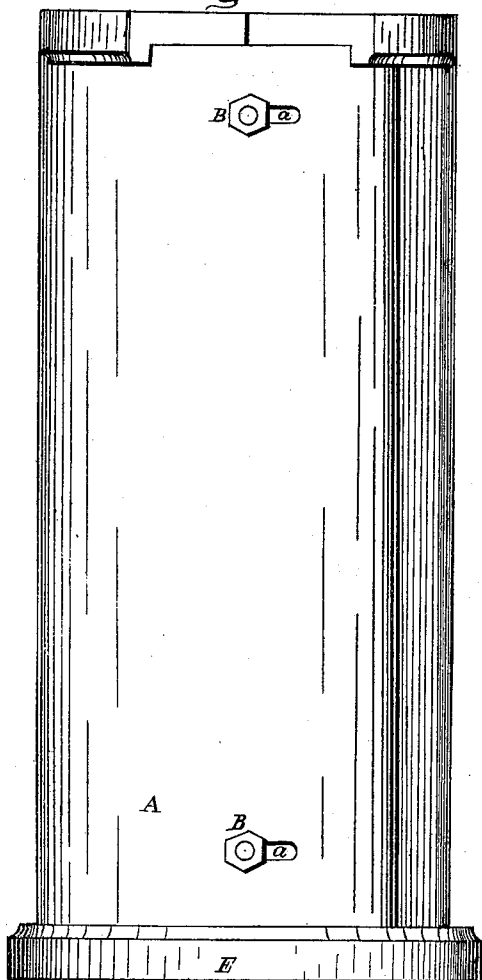


Fig. 2.

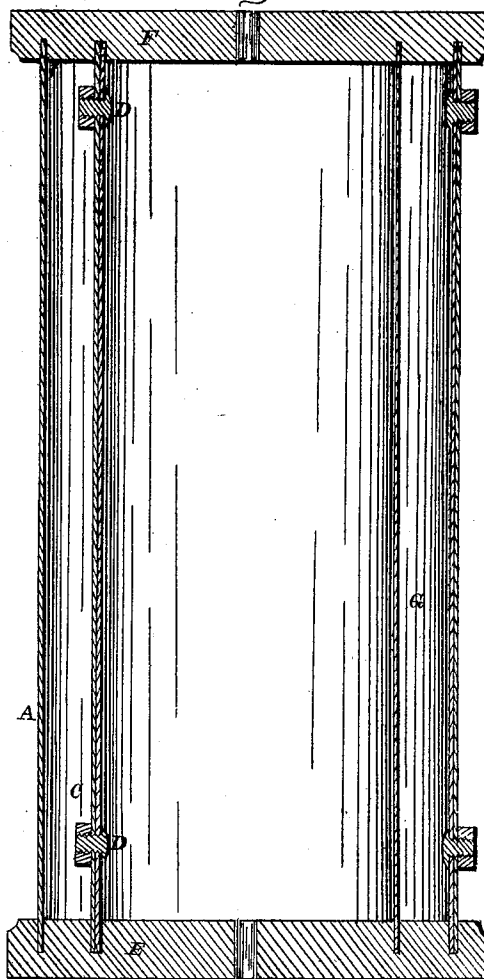
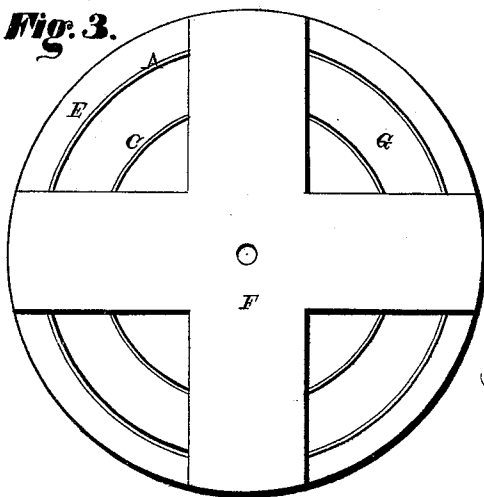


Fig. 3.



Witnesses.

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IMPROVEMENT IN MOLDS FOR PLASTER PIPE-PATTERNS.

Specification forming part of Letters Patent No. **142,765**, dated September 16, 1873; application filed March 28, 1873.

To all whom it may concern:

Be it known that I, NOADIAH P. BOWLER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Molds for Making Hawser-Pipes and other Pipe-Patterns, of which the following is a description, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side view of the mold. Fig. 2 is a vertical transverse section. Fig. 3 is a top view.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to a mold in which to cast patterns for hawser-pipes and other pipes; the object thereof being to make said patterns of plaster instead of wood, thereby reducing the cost of said patterns, and which are more easily and readily changed or modified in order to adapt them to peculiar purposes, in consequence of the soft nature of the material of which they are made, than are the ordinary wooden pipe-patterns.

Of the construction of the aforesaid molds the following is a detailed description: In the drawing, A represents a sheet-iron cylinder, the length of which is about that of the pipe required, and in diameter equal to the outside thereof. The ends of the sheet of which the cylinder is made lap over each other, and are thus secured by means of set-screws B. Slots *a* are cut in one end of the sheet in which the screws slide, the purpose of which is to give to the cylinder more or less taper, so that the mold or pattern cast therein can be drawn from the sand. Inside of said cylinder A, concentrically therewith, is arranged a cylinder, C, of the same material, and of the same length, but of less diameter, it being about that of the base of the pipe required. The ends of the sheet of which this cylinder is made also lap onto each other, which, in like manner, are secured by set-

screws D and slots *a* for a similar purpose as that specified of the outer cylinder above described. E is a board, in which are cut two concentric circles or grooves to receive the lower ends of the cylinders referred to, as shown in Fig. 2. The upper ends of the cylinders are, in like manner, held in grooves made in the cross F, Fig. 3. By this means the two cylinders are held concentrically, one within the other, as shown in the drawing, in which it will be seen that between the two cylinders there is an annular space or chamber, G, which space is about equal to the thickness required for the pipe.

The practical use of said mold is as follows: The annular space G referred to is filled with semi-liquid plaster, which, when hardened, is removed therefrom. The cast thus made will be a plaster pipe of the shape and size required for a pattern of a pipe.

This mode of making pipe-patterns is desirable for making patterns for hawser-pipes, as, in consequence of the soft nature of the material, the ends of the pipe can be easily cut to certain angles suitable to fit the bows of any one particular vessel; and the same pattern can be quickly and easily modified to fit the bows of others.

Pipes of different diameters are made by enlarging or diminishing the diameter of the cylinders of the molds, by forming other slots in the end pieces and adjusting the cylinders accordingly.

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

The metal cylinders A C, as arranged concentrically in relation to each other, in combination with the top and bottom E F, substantially in the manner as and for the purpose set forth.

NOADIAH P. BOWLER.

Witnesses:

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