(No Model.) 2 Sheets—Sheet 1.

W. P. CAHILL.

MOLDING FENCE POSTS AND MAKING CORES FOR SAME.

No. 580,928. Patented Apr. 20, 1897.

Fig. 1.

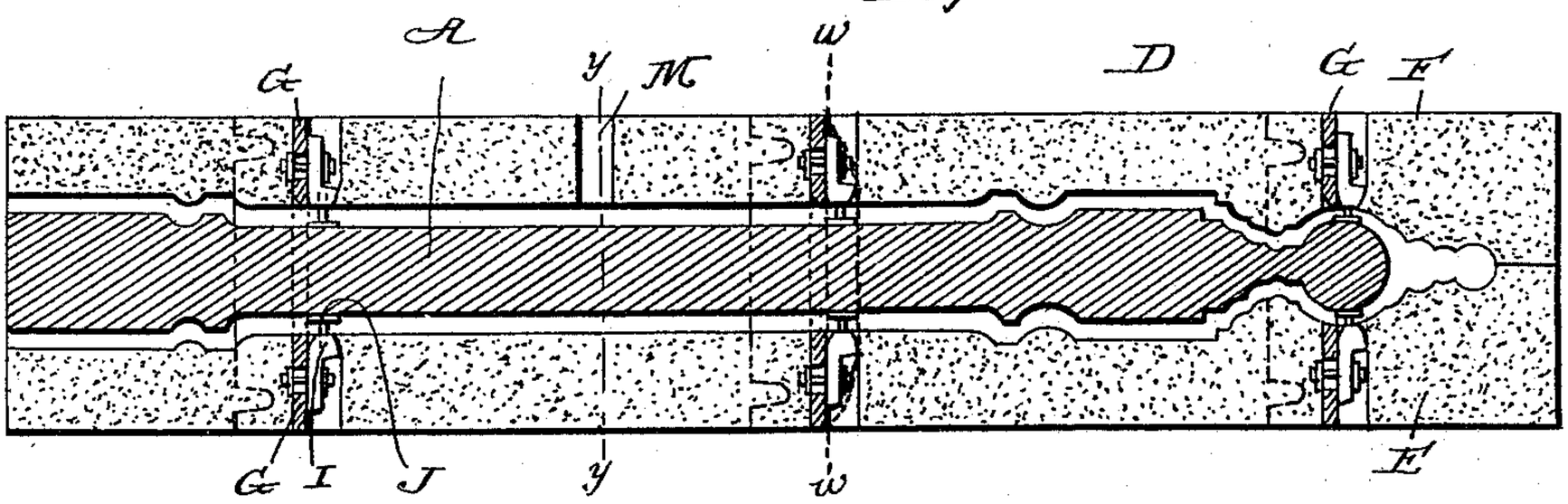
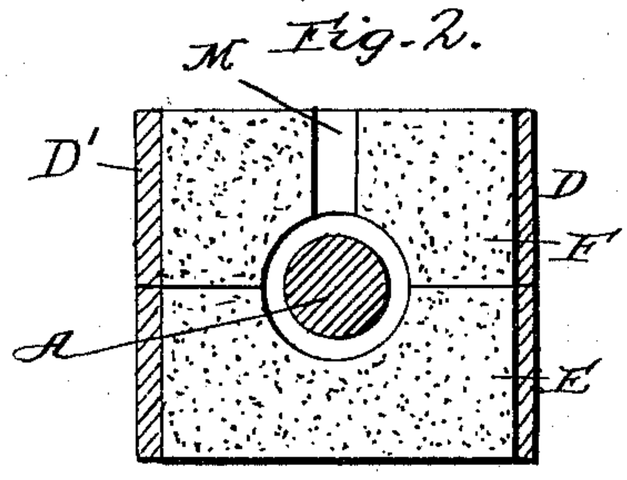


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

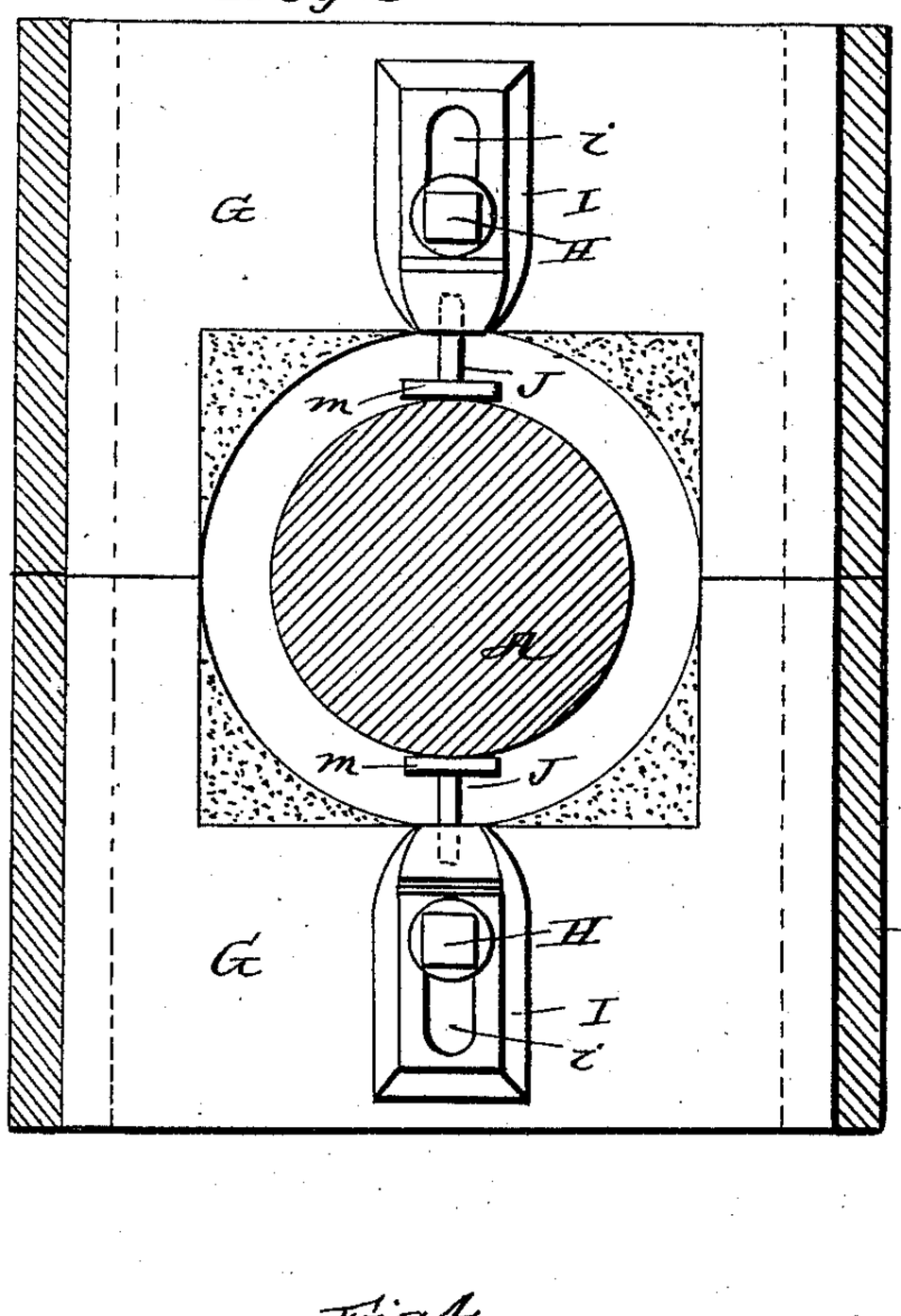


Fig. 5.

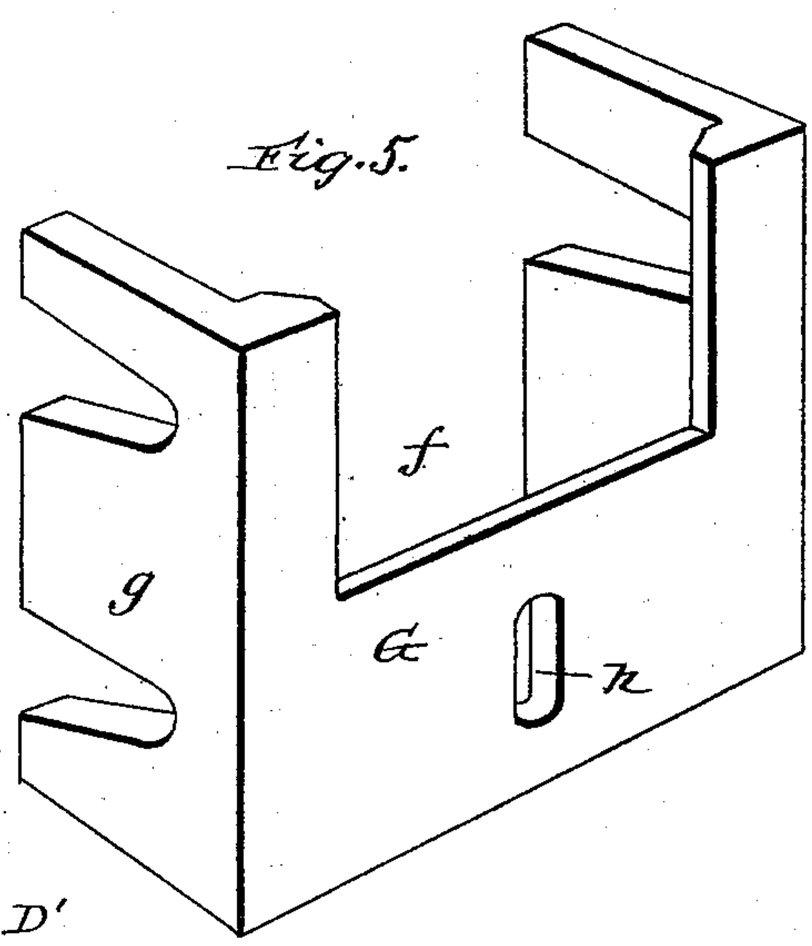


Fig. 6.

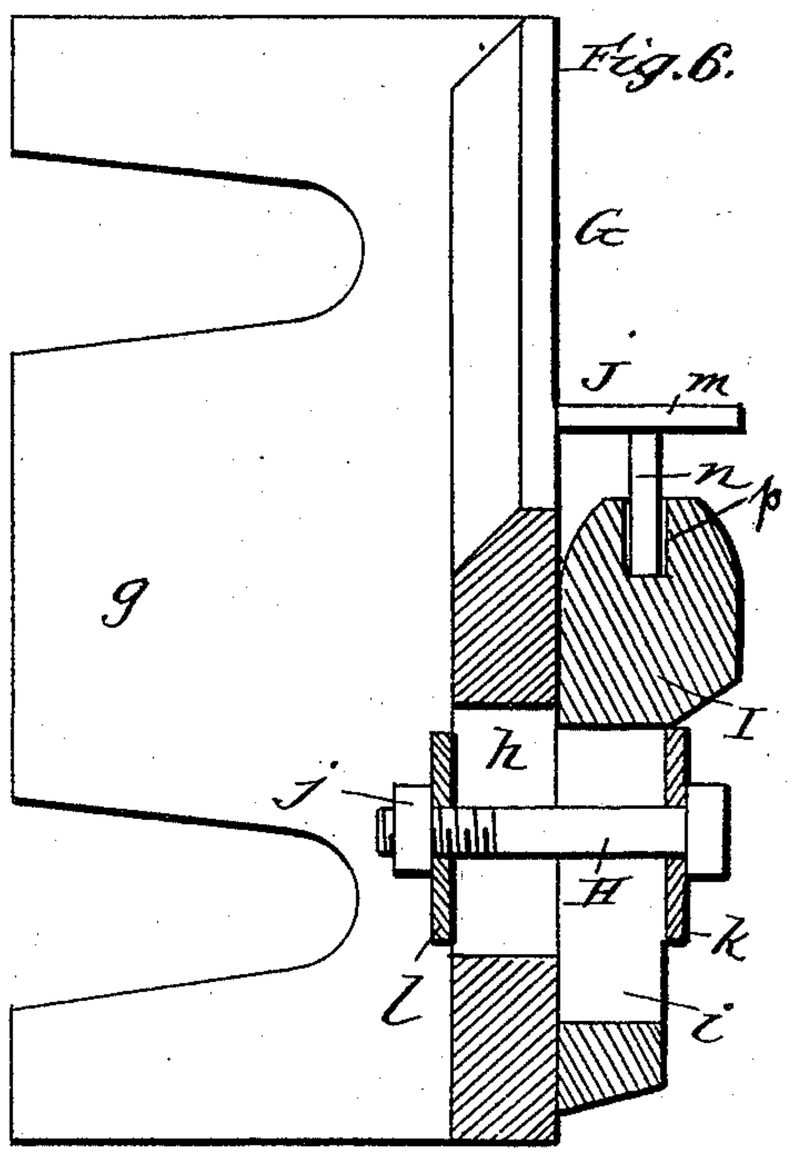
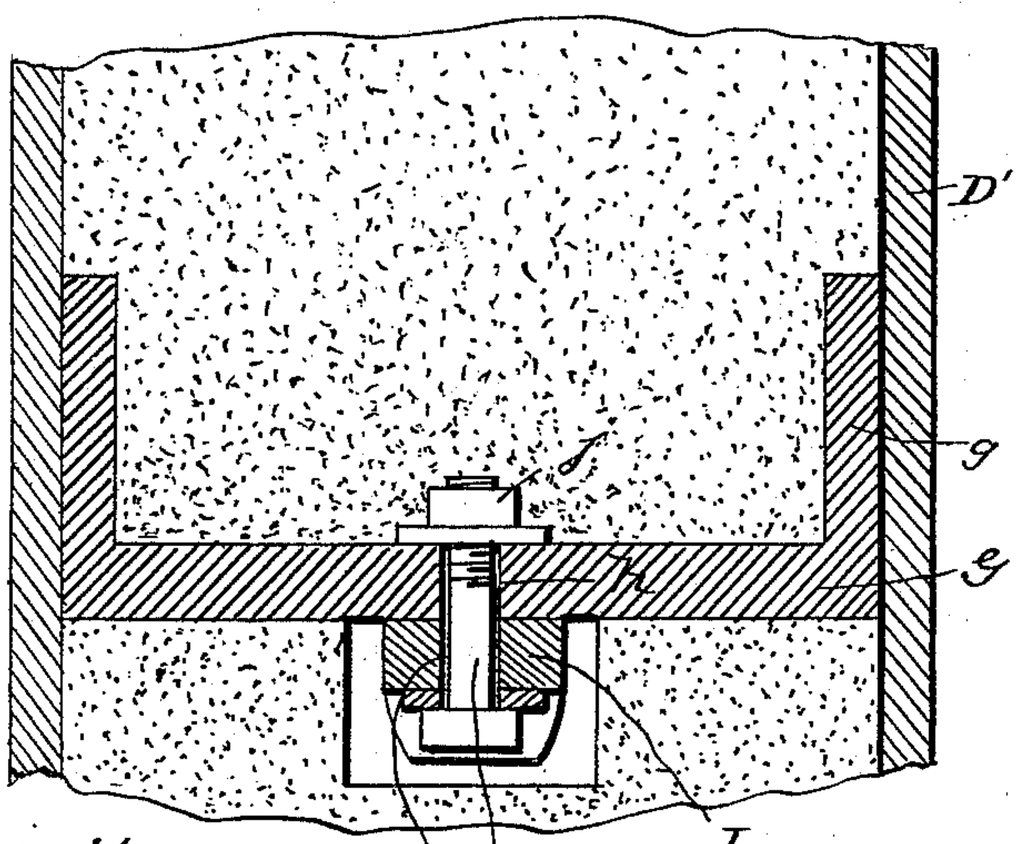


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM P. CAHILL, OF CHATTANOOGA, TENNESSEE.

MOLDING FENCE-POSTS AND MAKING CORES FOR SAME.

SPECIFICATION forming part of Letters Patent No. 580,928, dated April 20, 1897.

Application filed February 20, 1896. Renewed March 22, 1897. Serial No. 628,747. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. CAHILL, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Molding Fence-Posts and Making Cores for Same; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in molds, and more particularly to that class designed for casting iron fence-posts and the like; and its novelty and advantages will be fully understood from the following description and claim when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a longitudinal central section of the mold, the core being shown in its proper operative position. Fig. 2 is a transverse section taken in the plane indicated by the line *y y* of Fig. 1. Fig. 3 is an enlarged transverse section taken in the plane indicated by the line *w w* of Fig. 1. Fig. 4 is an enlarged detail section taken at right angles to Fig. 3. Fig. 5 is an enlarged perspective view of one of the cross-bars of the mold-flask; and Fig. 6 is an enlarged section illustrating one of the cross-bars of the mold-flask and the manner of connecting the chaplet-holder, and also showing one of the chaplets in position in the holder.

In the said drawings similar letters designate corresponding parts in all of the views, referring to which—

D indicates the improved mold for casting the fence-posts and similar articles. This mold may be formed in the usual manner with a suitable pattern and may be of any material suitable to the purpose, and it comprises the nowel E and the cope F, as illustrated. The said nowel and cope are respectively provided at suitable intervals in their length with three (more or less) flask cross-bars G, which are cast or otherwise formed, preferably in one piece, of iron or other suitable material. These flask cross-bars G conform in shape to the shape of the nowel and cope in cross-section, and they are arranged transverse of the nowel and cope, as shown in Figs. 1, 3, and 4, and are recessed, as indicated by *f*, to form openings for the reception of the pattern and afterward for the reception of the core. The said flask cross-bars G are further provided at their opposite vertical edges with the angular flanges *g*, which are notched, as shown, and at points above and below the recesses *f*, and preferably in their vertical centers, they are provided with the vertical slots *h*. These slots *h* are designed to receive the bolts H, which also take through vertical slots *i* in the chaplet-holders I and are designed to adjustably connect the said holders with the flask cross-bars, as better illustrated in Fig. 6 of the drawings. The bolts H are preferably headed at one end and provided with nuts *j* at their opposite ends, and they are further provided, as will be seen, with washers *k*, which bear against the chaplet-holders, and with washers *l*, which bear against the flask cross-bars, as illustrated.

J indicates the chaplets, which are designed and adapted to engage and properly hold the core in the mold. These chaplets respectively comprise a disk or body *m* and a stem *n*, and the said stems are removably placed in sockets *p* in the inner ends of the holders I, as better shown in Fig. 6 of the drawings, for a purpose which will presently appear.

In the practical operation of the mold the chaplet-holders of the flask-bars are properly adjusted and adjustably fixed according to the thickness of casting desired. The core A is then placed upon the chaplets of the nowel E, and the cope F is then placed upon the nowel, so that the chaplets of its flask-bars will engage the upper side of the core A and so that its sides and ends will be flush with those of the nowel, as shown in Fig. 1. The mold is now ready for use, and the molten metal is introduced through the gate M, formed in the cope, as shown in Figs. 1 and 2. When the casting is sufficiently cold, the cope is lifted from the nowel and the casting, together with the core therein, is removed. The mold is then re-formed by placing the pattern and ramming the flask-sections with green sand, and after it is formed new chaplets are placed in the chaplet-holders and a new core is placed in position to be held by the chaplets, when the mold will be ready for casting another post.

As will be readily observed, the chaplets

are adapted to hold the core without the aid of any other devices, and it will therefore be perceived that the mold may be quickly and easily gotten ready for a second casting after the first is completed, and so on.

In virtue of the cross-bars and the chaplet-holders being both provided with vertical slots and connected by bolts, as described, it will be observed that the chaplet-holders may be adjusted to a great extent in various directions and may be adjustably fixed in various positions to accommodate cores of various shapes and sizes.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the flask cross-bars having the flanges *g*, and provided with the recesses *f*, in their contiguous edges and also provided with the vertical central slots *h*, the chaplet-holders having longitudinal slots *i*, and also having sockets in their inner ends, bolts taking through the slots of the flask cross-bars and chaplet-holders and provided with nuts, and chaplets having stems adapted to be placed in the sockets of the chaplet-holders, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM P. CAHILL.

Witnesses:
JOHN J. MAHONEY,
F. H. CALDWELL.