

(No Model.)

J. I. KINSEY.  
FLASK FOR MOLDING.

No. 435,040.

Patented Aug. 26, 1890.

Fig. 1.

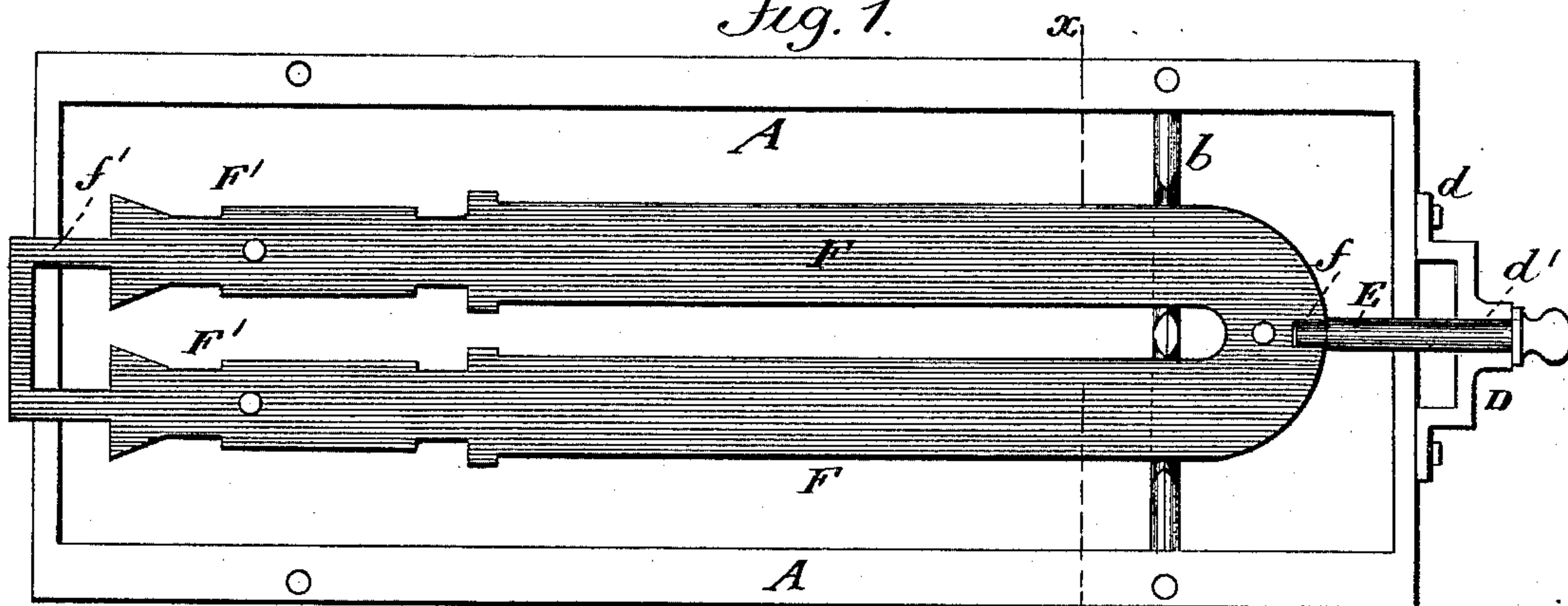


Fig. 2.

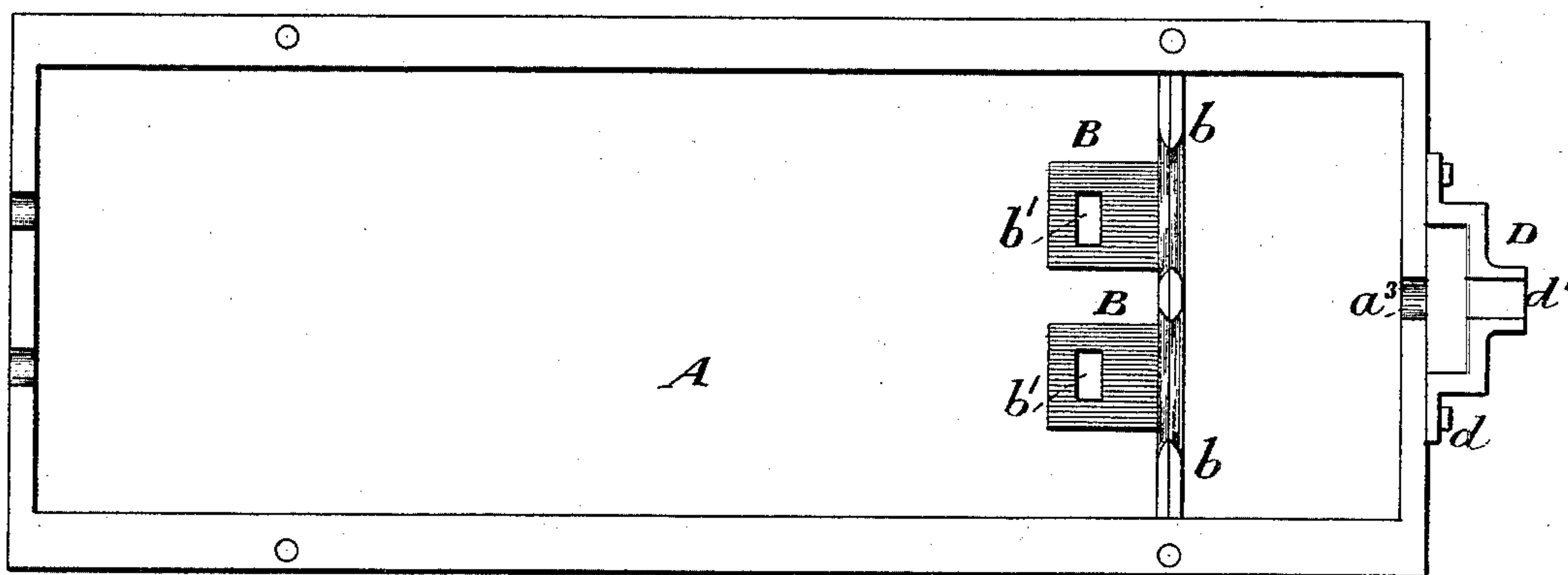


Fig. 3.

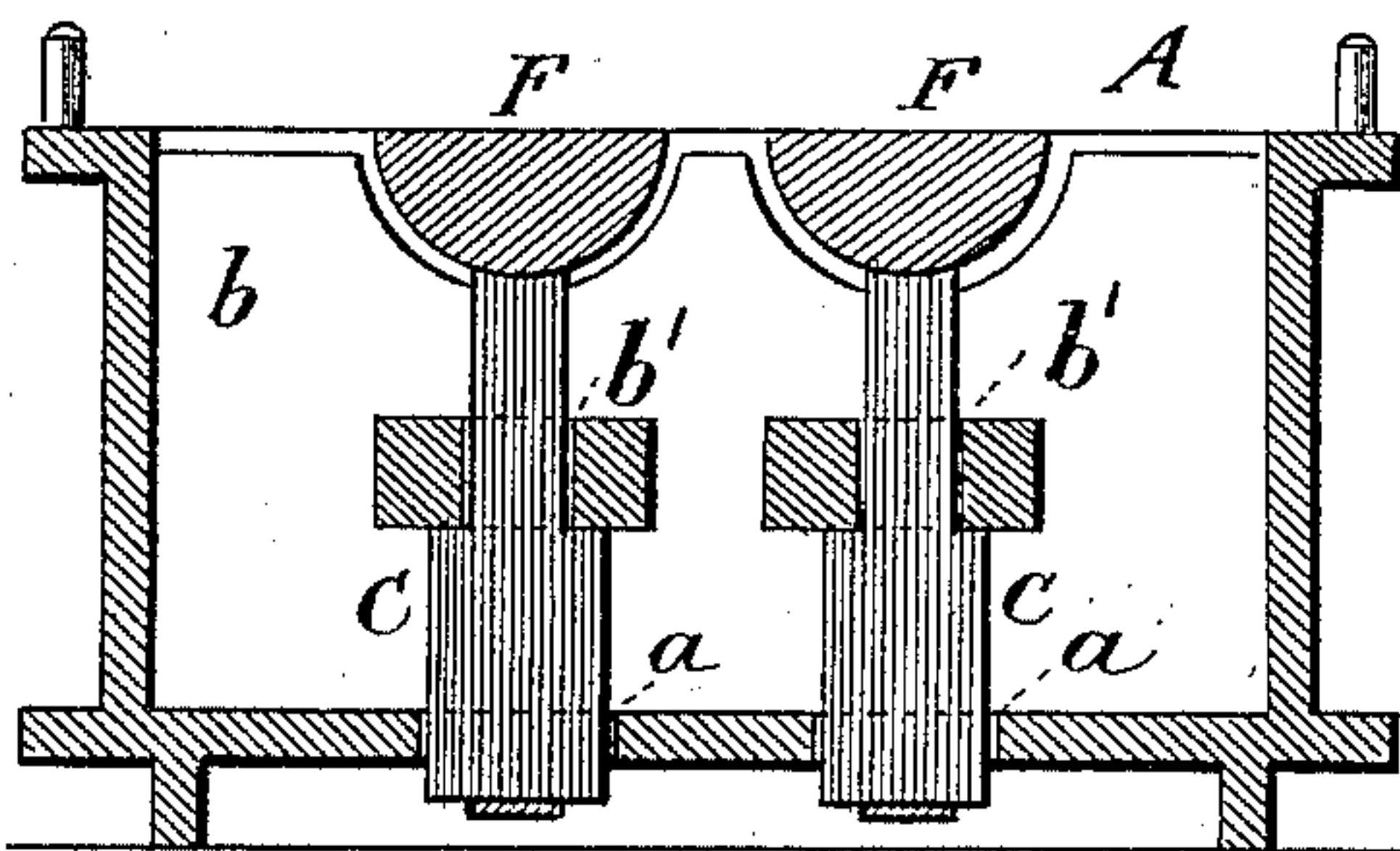
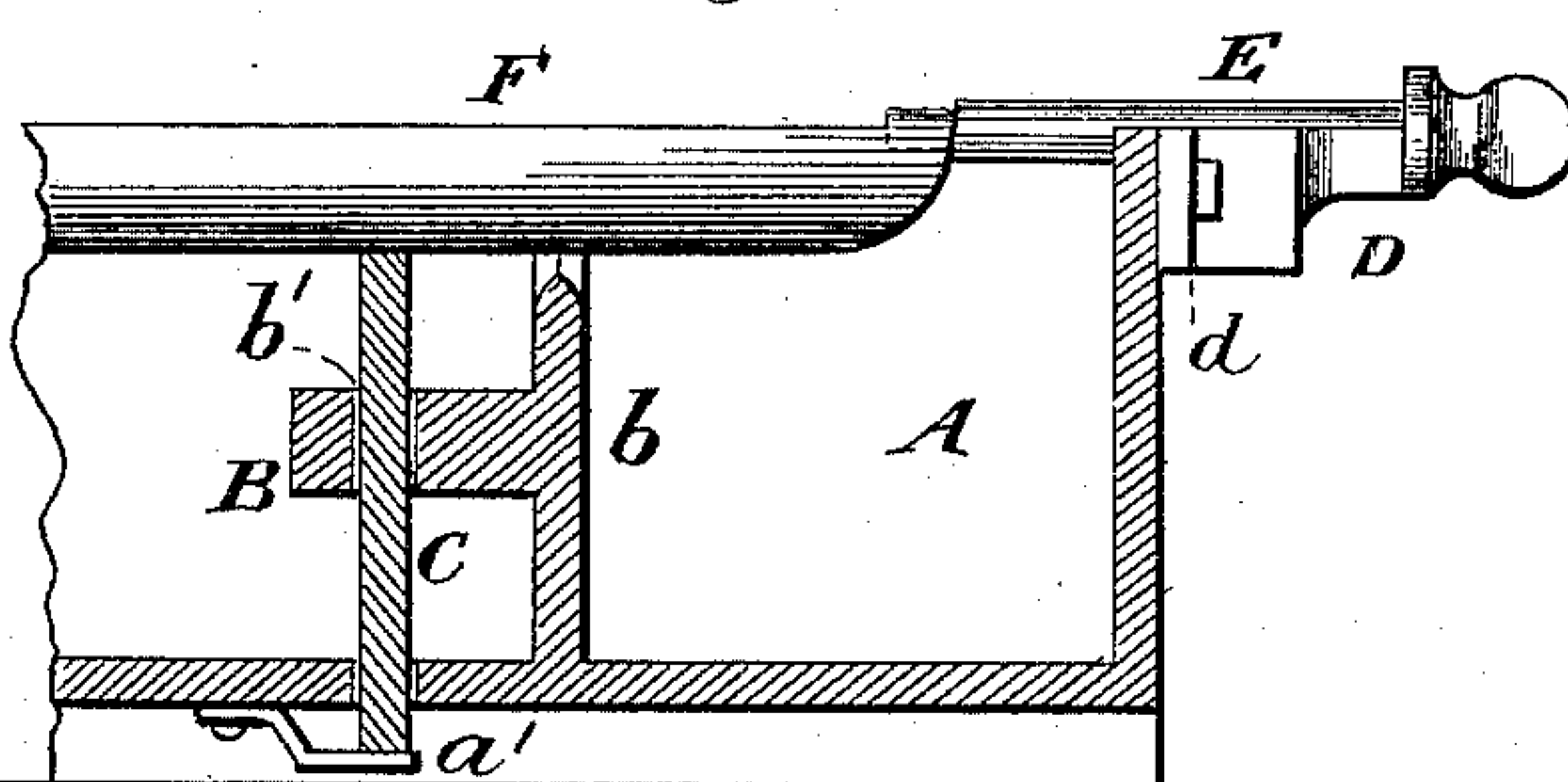


Fig. 4.



Witnesses:  
A. Ruppert.  
E. Frue.

Inventor:  
John I. Kinsey  
by W. W. J. Howard  
Att'y

# UNITED STATES PATENT OFFICE.

JOHN I. KINSEY, OF EASTON, PENNSYLVANIA.

## FLASK FOR MOLDING.

SPECIFICATION forming part of Letters Patent No. 435,040, dated August 26, 1890.

Application filed November 4, 1889. Serial No. 329,114. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN I. KINSEY, of Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Flasks for Molding, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 The object and nature of my invention will be fully described and set forth in the following specification and claims.

15 In the drawings, Figure 1 is a plan of one section of a flask, showing the pattern in position. Fig. 2 is a similar view showing the pattern removed. Fig. 3 is a transverse section on the line  $x x$ , Fig. 1. Fig. 4 is a vertical longitudinal section of a portion of Fig. 1.

20 Similar letters of reference indicate similar parts in the respective figures.

A represents one section of the flask, it being of course understood that the other section would be a duplicate of the one illustrated and described.

25 B B are guides supported on a bar or partition  $b$ , extending across each section of the flask. The guides B are provided with openings  $b'$  for the reception of the guards or supports C C. One side of each section of the flask is also provided with openings  $a$  to admit the insertion of the guards or supports C C, and close to the openings are pivoted the catches or clamps  $a'$ , adapted to swing over the openings  $a$  and support the guards C C in the openings  $a$  and  $b'$ .

35 At one end of each section of the flask a guide D is removably secured by means of the lugs  $d$ . Each guide is perforated at  $d'$  for the passage of a pin E, and is so arranged that the pin will occupy an equal space midway of the top edge of the end wall of each section, said walls being provided with a semi-circular recess  $a^3$  to receive it. When the two sections are brought together, the pin will pass through the central point of the end wall of the flask.

45 F represents the pattern.

Other portions of the apparatus will be referred to in the following description of the operation.

50 To form the mold for a bent pipe, I proceed in the ordinary way, and in order to insure the centralizing of the pattern in the flask a hole  $f$  is made centrally in the U-shaped end of the pattern, into which the pin E enters after passing through the guide D and the end of the flask. At the same time two guards C are inserted through the openings in the side of the flask and the guides B, and are supported in proper position by the pivoted catches  $a'$ . The U-shaped end of the pattern is supported on the guards C and the other end by means of a staple  $f'$ , which connects the extensions F' of the pipe-pattern proper.

60 While I have illustrated and described my invention as applied to molds for bent or U-shaped pipes, it is evident that it is equally adapted for use in forming molds for a great variety of castings.

Having thus described my invention, I 70 claim—

1. The combination, with a flask and a pattern provided with a hole centrally in one end, of guards or supports passing through opposite sides of the flask to support the pattern, and a pin passing centrally through one end of the flask and engaging the hole in the pattern, substantially as and for the purpose specified.

2. The combination, with a flask having a bar or partition extending across each section and perforated guides secured to said partitions, of guards or supports passing through opposite sides of the flask and through the guides, and a pattern resting on or supported by said guards, substantially as and for the purpose specified.

85 In testimony whereof I have hereunto set my hand and seal.

JOHN I. KINSEY. [L. S.]

Witnesses:

W. B. SOLLIDAY,  
SYLVANUS DIEHL.