

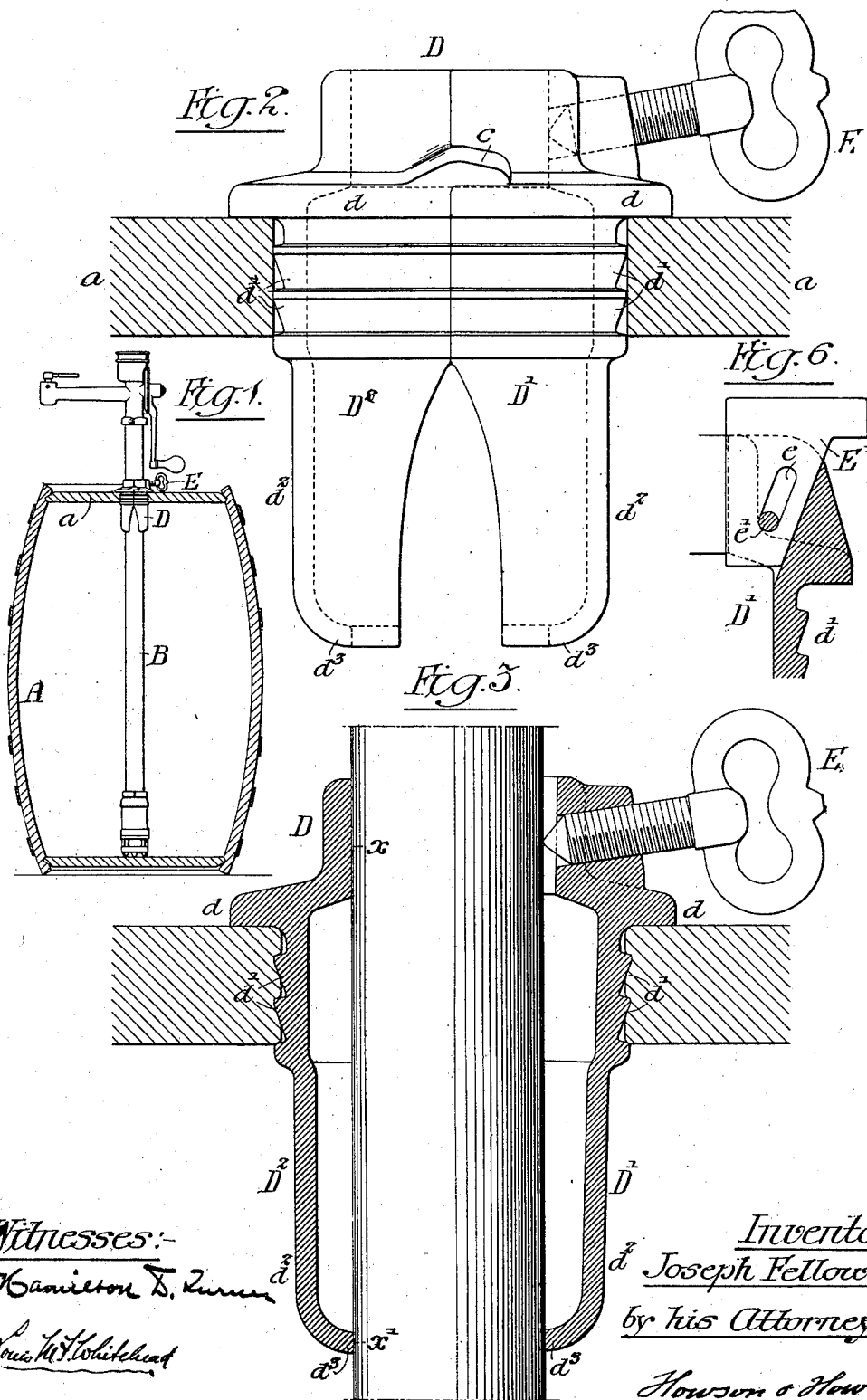
J. FELLOWS.

CLAMP.

(Application filed Nov. 17, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:-

Hamilton D. Turner

Louis H. Whitehead

Inventor:-

Joseph Fellows

by his Attorneys:-

Howson & Howson

No. 702,416.

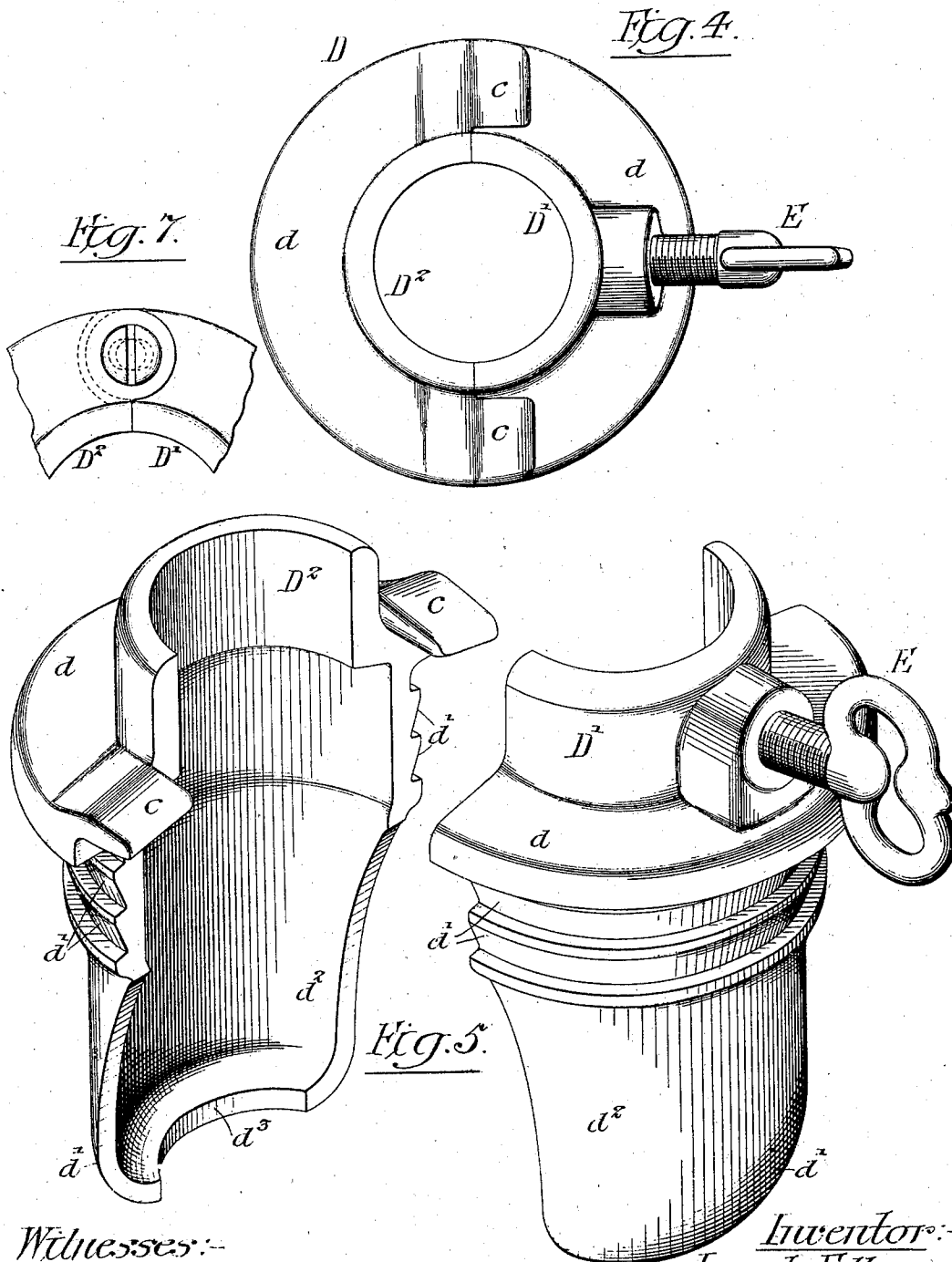
Patented June 17, 1902.

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UNITED STATES PATENT OFFICE.

JOSEPH FELLOWS, OF PHILADELPHIA, PENNSYLVANIA.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 702,418, dated June 17, 1902.

Application filed November 17, 1900. Serial No. 36,852. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FELLOWS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Clamps, of which the following is a specification.

The object of my invention is to provide a suitable clamp for rigidly securing a pump to a barrel.

10 My invention is especially applicable to pumps which are used for pumping molasses from barrels; but it will be understood that the clamp may be used for securing any tube or rod to a support.

15 In the accompanying drawings, Figure 1 is a view of a barrel and pump, showing the clamp in position. Fig. 2 is an enlarged view of the clamp set in a hole in a barrel before being tightened. Fig. 3 is a sectional
20 view showing the clamp secured to the head of the barrel and to the pump. Fig. 4 is a plan view of the clamp. Fig. 5 is a detached perspective view, and Figs. 6 and 7 are views of modifications of details.

25 Referring to Fig. 1, A is a barrel, B is a molasses-pump, which is inserted through a hole in the head *a* of the barrel. The bottom of the pump has, preferably, one or more spurs which enter the lower head of the barrel and hold the end of the pump in position.
30

D is the clamp for securing the pump to the upper head of the barrel. The clamp passes between the edges of the opening in the head and the pump-tube. The clamp is made in
35 two sections, D' D². Each section has a flange *d*, a ribbed portion *d'*, and an extension *d*², which enters the barrel. This extension has a flange *d*³, which bears against the pump-tube. In the section D' is a set-screw E. This set-screw bears against the
40 pump-tube and forces the sections D' D² apart, as shown in Fig. 3. On the flange *d* of the section D² in the present instance are lips *c c*, which overlap the flange *d* of the section D' and hold the sections in position. The ribs
45 of the portion *d'* of each section are preferably made as shown in the drawings, the lower edge of each rib being tapered more than the upper edge, so as to prevent the
50 pump being lifted off of the bottom of the barrel when once in place.

It will be noticed in referring to Fig. 3 that

there are two points *x x'* where each section of the clamp bears against the pump-tube, and between these points the ribbed surface 55 *d'* bears against the edges of the hole in the barrel-head. Consequently when the set-screw E on the section D' is turned, its end presses against the pump at *x*, and the other bearing-point *x'* acts as a fulcrum, and as the 60 clamp is expanded its ribs *d'* are forced into the wood of the barrel-head, thus holding the pump rigidly in the barrel.

Other means than the set-screw E may be used for spreading the clamp. For instance, 65 a wedge E', Fig. 6, may be used, the wedge having a slot *e*, through which a securing-pin *e'* passes, so that it will not become detached. After the clamp is in position the wedge can be driven so as to force the section D' out 70 against the edge of the opening in the barrel-head.

In Fig. 5 I have shown the clamp made of two independent sections; but they may be secured together by a chain or by a loose pivot, 75 as in Fig. 7.

While I have shown ribs to engage the head of the barrel, it will be understood that any suitable projections may be used on the clamp which will engage the barrel and prevent the 80 pump moving when once secured in position.

I claim as my invention—

1. The combination in a clamp, of two sections, each section having internal bearing-points at top and bottom only and a single 85 external bearing-point between the two internal bearing-points, one of the internal bearing-points on one section being adjustable, substantially as and for the purpose specified. 90

2. The combination in a clamp, of two sections adapted to be inserted in the hole in a barrel, and to encircle a pump, each of said sections having an outer bearing-surface engaging with the barrel, an extended portion 95 engaging the pump, and means for forcing one of said sections out at the top, the lower bearing acting as a fulcrum whereby the clamp is securely fastened to the barrel and to the pump, substantially as described. 100

3. The combination in a clamp for securing pumps to barrels, of the two sections adapted to be inserted in a hole in a barrel and encircling a pump, each of said sections having a

flange, and a ribbed or roughened portion directly under the flange to engage the barrel and having an extended portion, the lower edge of said extension bearing upon the pump, 5 and means carried by one of said sections for forcing the upper portion of the said section out, thus expanding the clamp and securing the pump to the barrel, substantially as described.

10 4. The combination of a clamp made in two sections, each section having a flange, a ribbed portion under the flange arranged to engage the barrel, the upper edge of each rib being abrupt and the low edge inclined, each section 15 having an extension with an internal rib arranged to bear against the pump, and means carried by the upper portion of one of the sections for forcing the upper end of said sec-

tion away from the pump, and against the barrel whereby the clamp secures the pump 20 to the barrel, substantially as described.

5. The combination of a clamp made in two sections, each section having internal bearing-points at top and bottom and a single external bearing-point between the two internal 25 bearing-points, and a set-screw at one end of the clamp for forcing that end outward, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 30 two subscribing witnesses.

JOSEPH FELLOWS.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.