W. G. Floyd,

Molders' Flask Clamp.

No. 52,983. Patented Mar. 6, 1866.

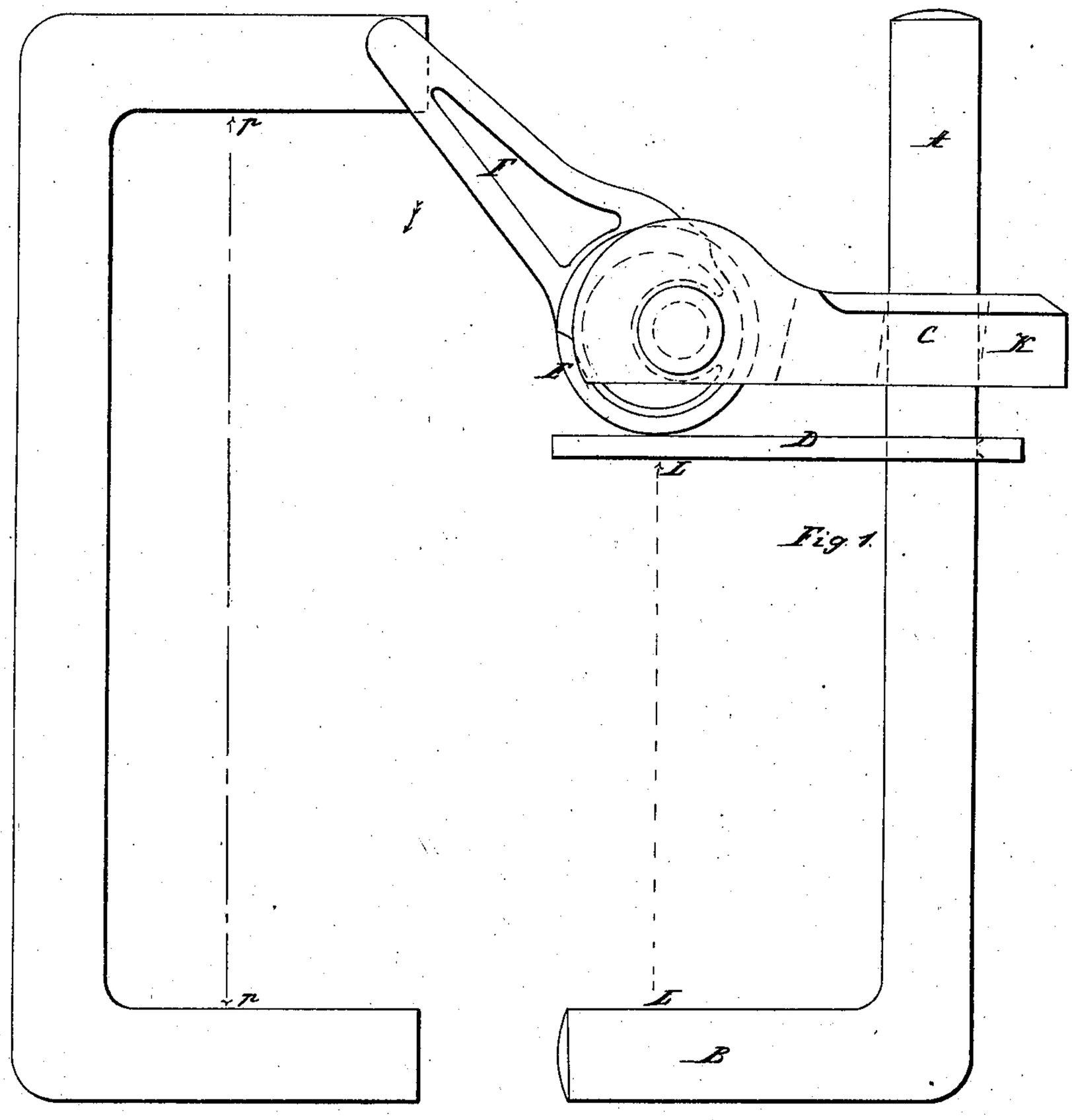

Fig. 1.

Fig. 3.

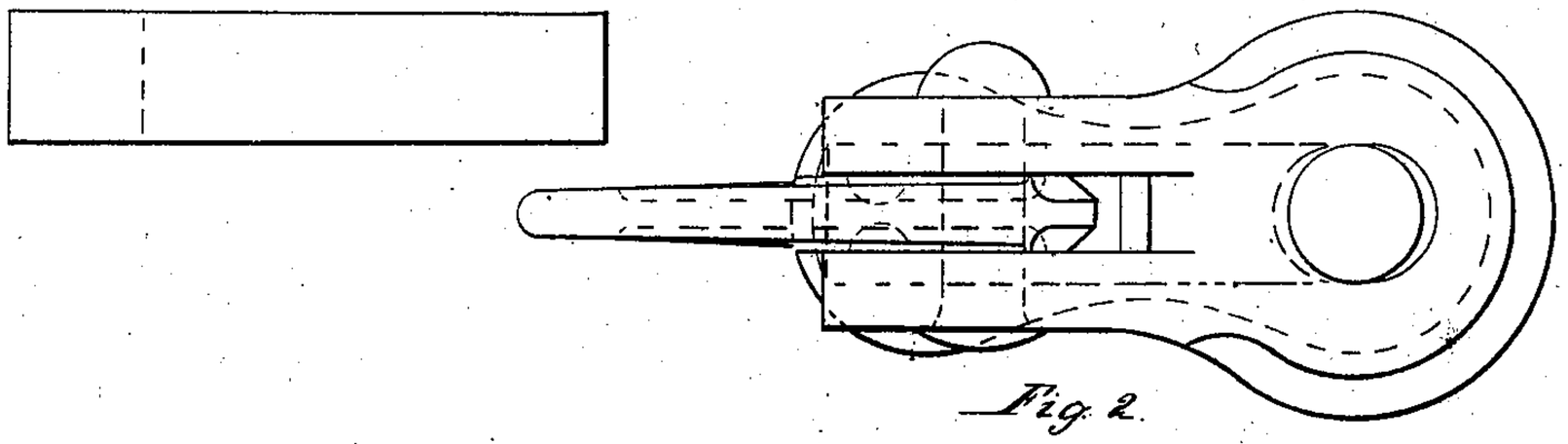

Fig. 2.

Witnesses:
Frank J. Bell
Edwd McGorum

Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM G. FLOYD, OF BROOKLYN, E. D., NEW YORK.

IMPROVED ADJUSTABLE CLAMP.

Specification forming part of Letters Patent No. **52,983**, dated March 6, 1866.

To all whom it may concern:

Be it known that I, WILLIAM G. FLOYD, of the city of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and useful Improvement on Foundry-Flask Clamps, of which the following is a full description of the construction and operation of the same, reference being had to the annexed drawings, making a part of the specification, in which—

Figure 1 is a longitudinal elevation. Fig. 2 is a view of plan, showing surface, &c. Fig. 3 is the present style of clamp.

The staff A, Fig. 1, is composed of a plain piece of round or square iron, with a foot, B, at bottom end, which catches under the bottom of the flask or mold, as usual in the present style of clamps. The staff A can be any required length, or can consist of the present style of clamp if the end has been broken off.

D is an iron plate or follower, and answers the double purpose of a foundation for the cam E to jam on, at the same time holding the staff A in its place to keep the cam E from rolling. The iron nut K has a round or square oblique hole through it at C a little larger than the staff, and which consequently permits the nut to slide down the staff A by its own weight, at the same time being always ready to bind or clamp as soon as the cam E strikes the plate D.

Fig. 3 is the style of clamp in present use, and cannot be made to take in so many sizes of flasks or molds without prying, blocking, wedging, and hammering, as will be seen by the letters P P, Fig. 3, which points are the same as letters L L in Fig. 1.

I claim superiority in my improved style of clamps over others now in general use for the reasons set forth, as follows:

First, it will fit a greater number of different-sized flasks or molds.

Second, it can be applied quicker and taken off quicker and with less damage to a flask or mold, as a whole set or the usual number for a flask or mold can be applied while the same number of the present style of clamp can be selected from the usual pile as they are generally kept in well-regulated foundries.

Third, my improvement dispenses with pinch-bar, hammer, blocking, and wedges, the first of which destroys the flasks, the second endangers the mold, the third, if piled too high, will tumble, and the fourth is usually a scarce article around a foundry.

Fourth, my process is simple, always ready for any flask, no more likely to get out of order than any other, and can be applied to a broken clamp of the old style without welding.

It will be seen that a square hole in the nut will answer for round iron as well as square.

By raising the staff A with one hand, allowing the foot to go under the flask, as with the present mode of clamping, placing the plate or follower D on top of the flask, so that the points L L are opposite and the cam E on top of plate, throwing the handle F back toward the staff and letting the nut drop as low as it will, then pushing the handle over in the direction of arrow, the whole becomes securely fastened.

I do not claim the staff A, Fig. 1, with the foot B turned on bottom end.

What I do claim is—

The nut K, of iron or other metal, with the round or square beveled hole C and cam E, in combination with the said follower D, for the purpose herein mentioned, and for other purposes, as shown in drawings, or otherwise as set forth in specification.

WM. G. FLOYD.

Witnesses:

ED. MCGOWAN,

FRANK J. BELL.