

D. C. RIPLEY.  
Shaper and Finisher for Pitchers and Like Articles  
of Glassware.

No. 214,054.

Patented April 8, 1879.

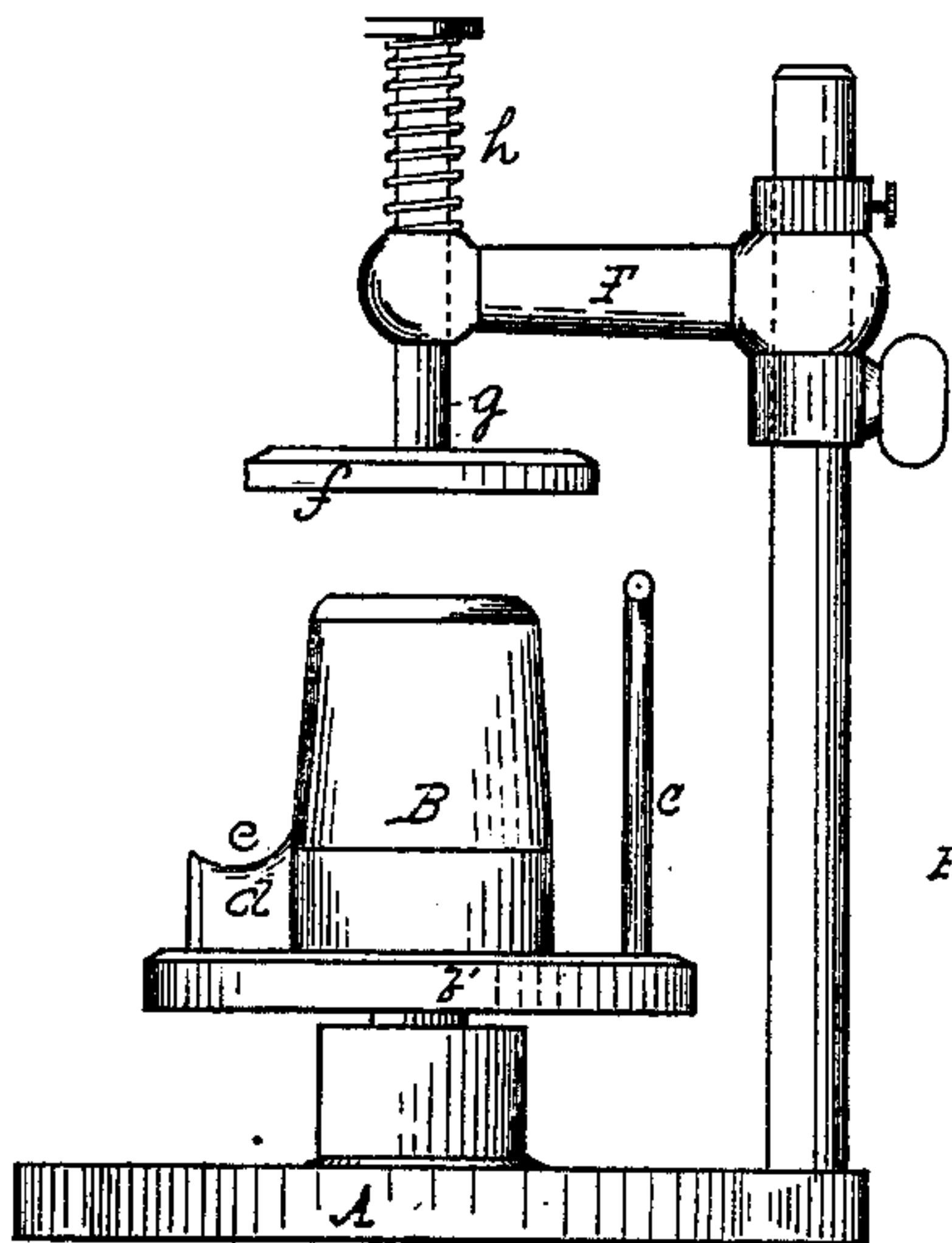


FIG. 1.

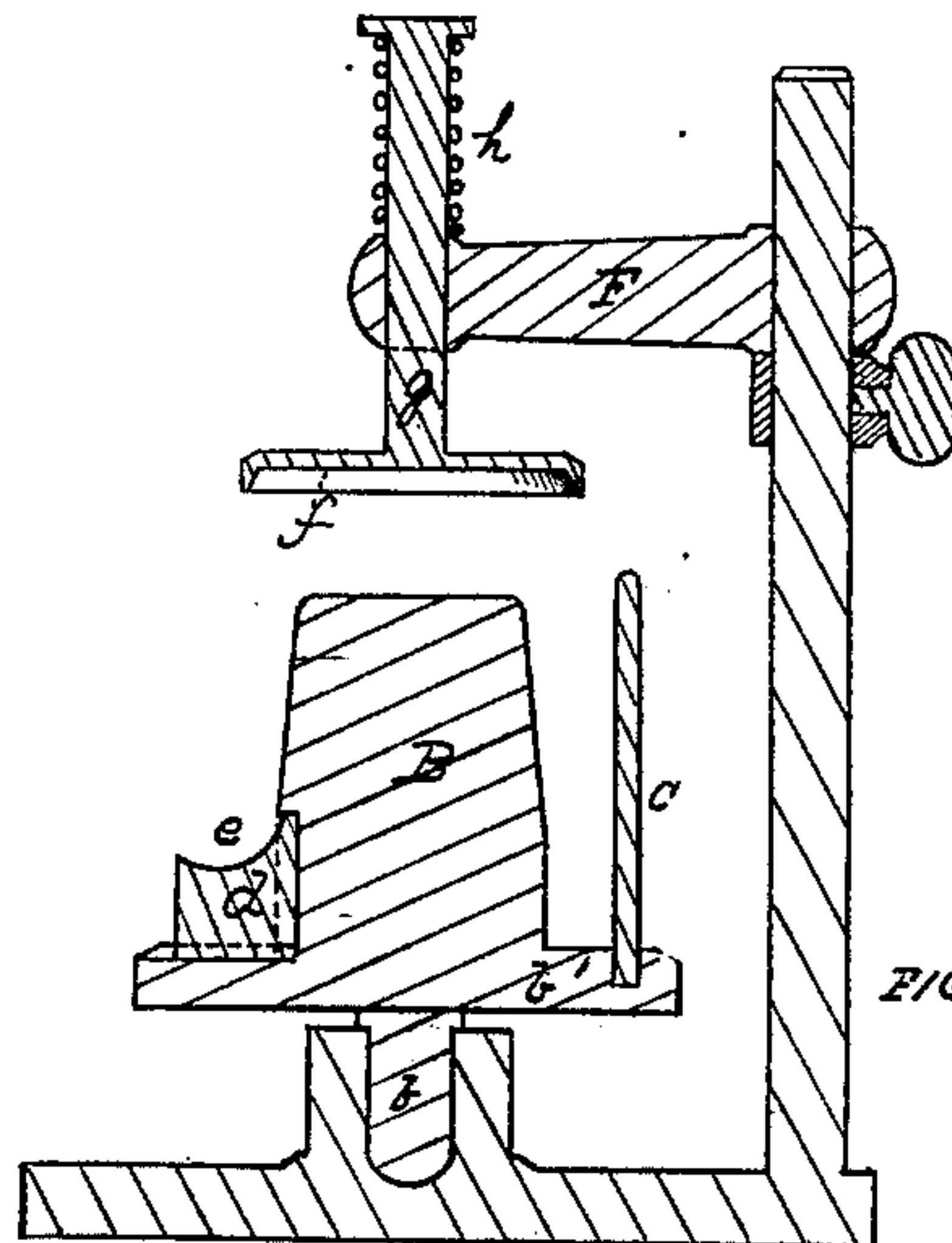


FIG. 2.

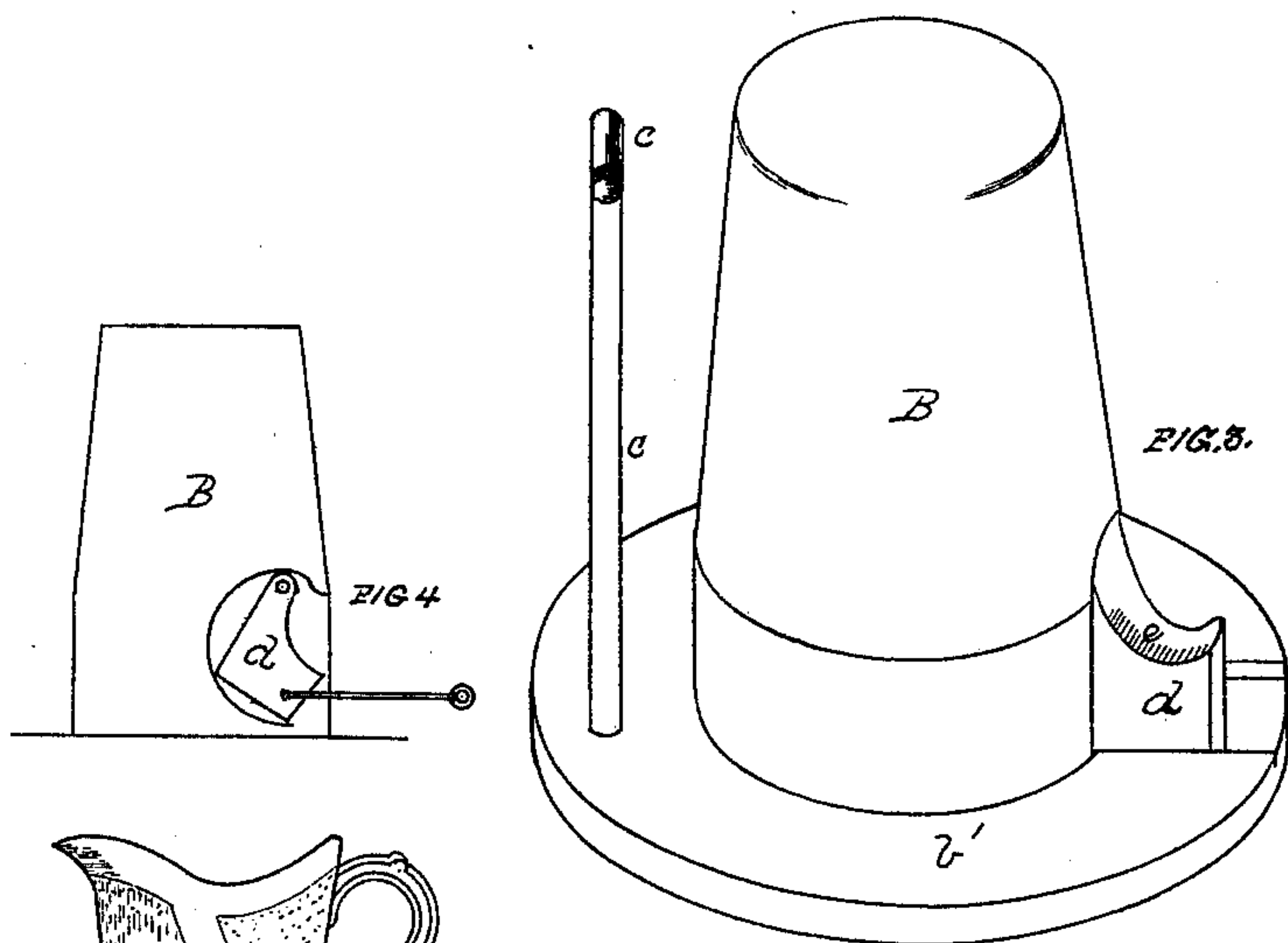


FIG. 3.

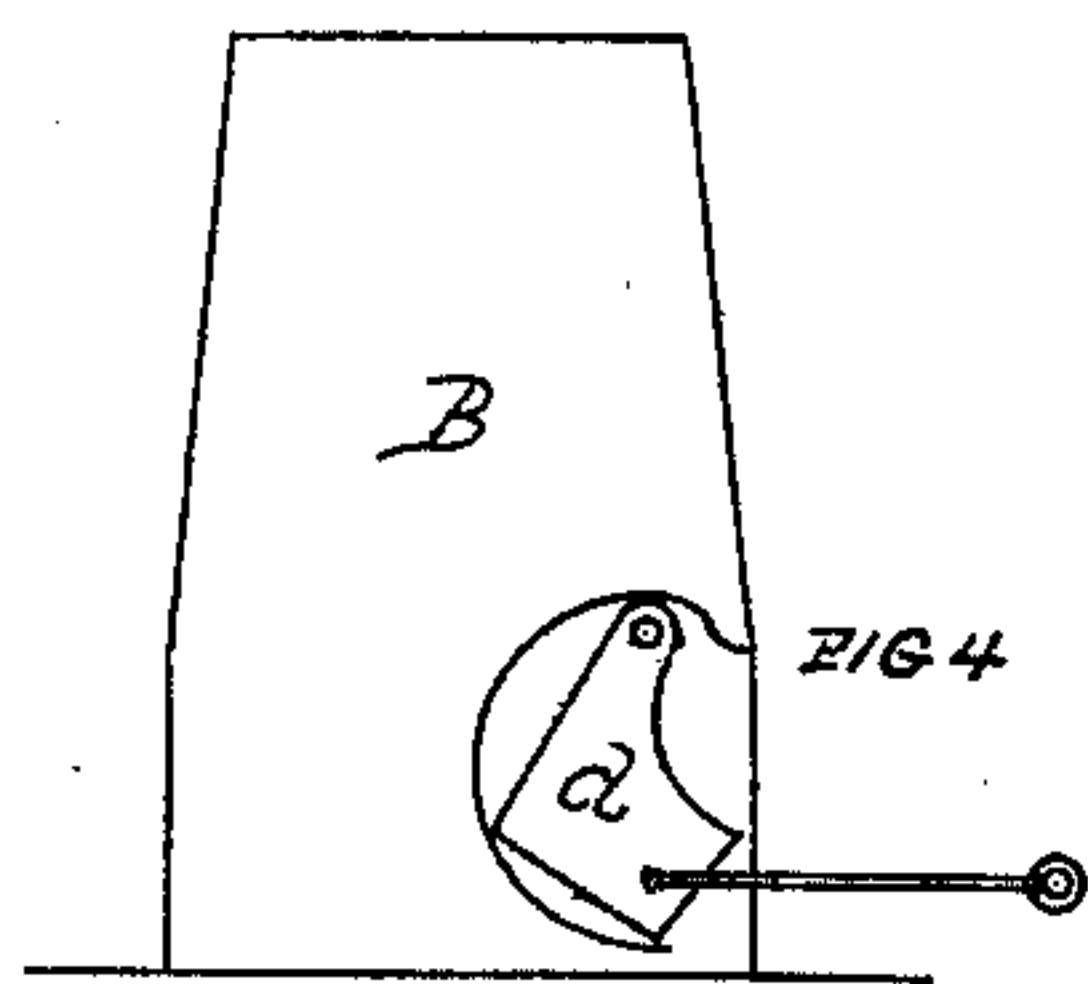


FIG. 4.

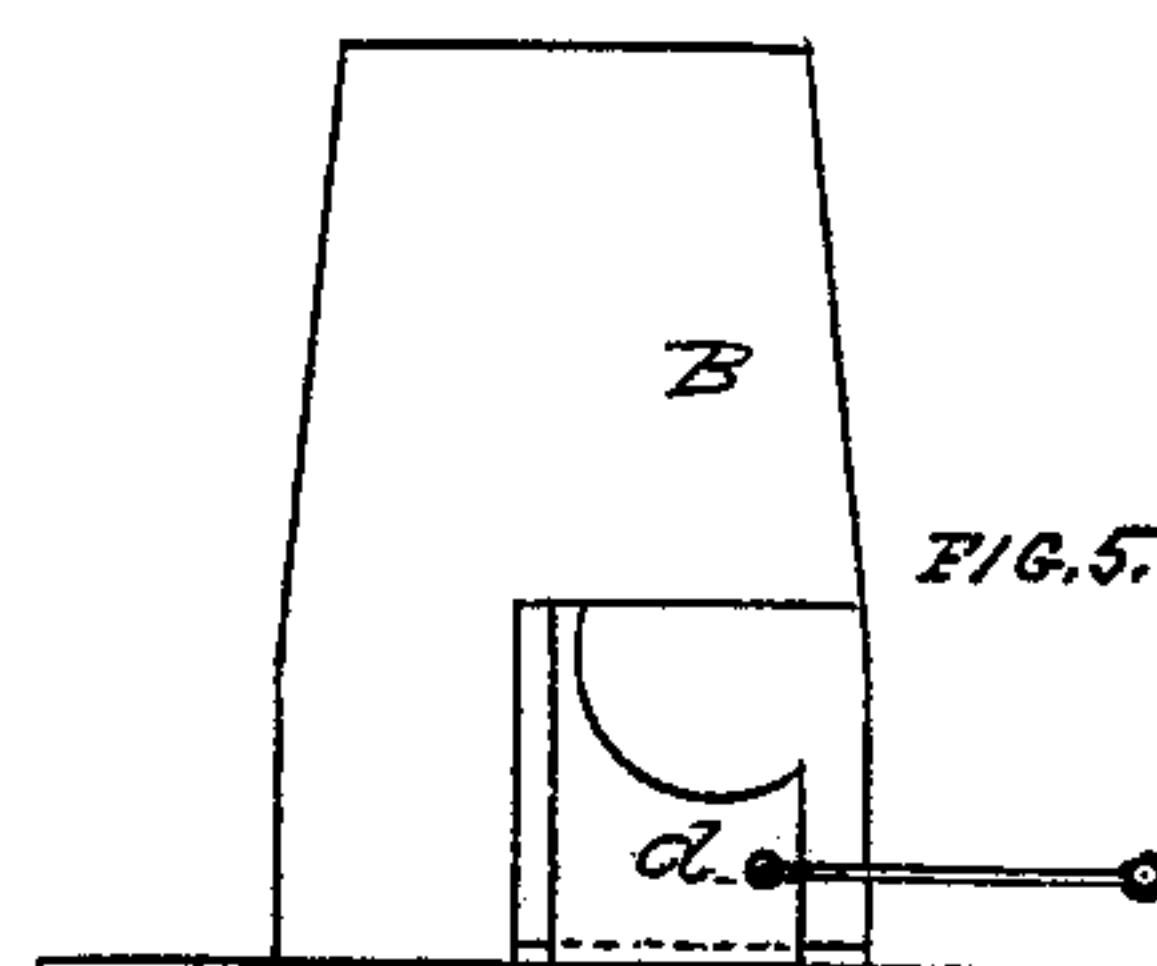


FIG. 5.

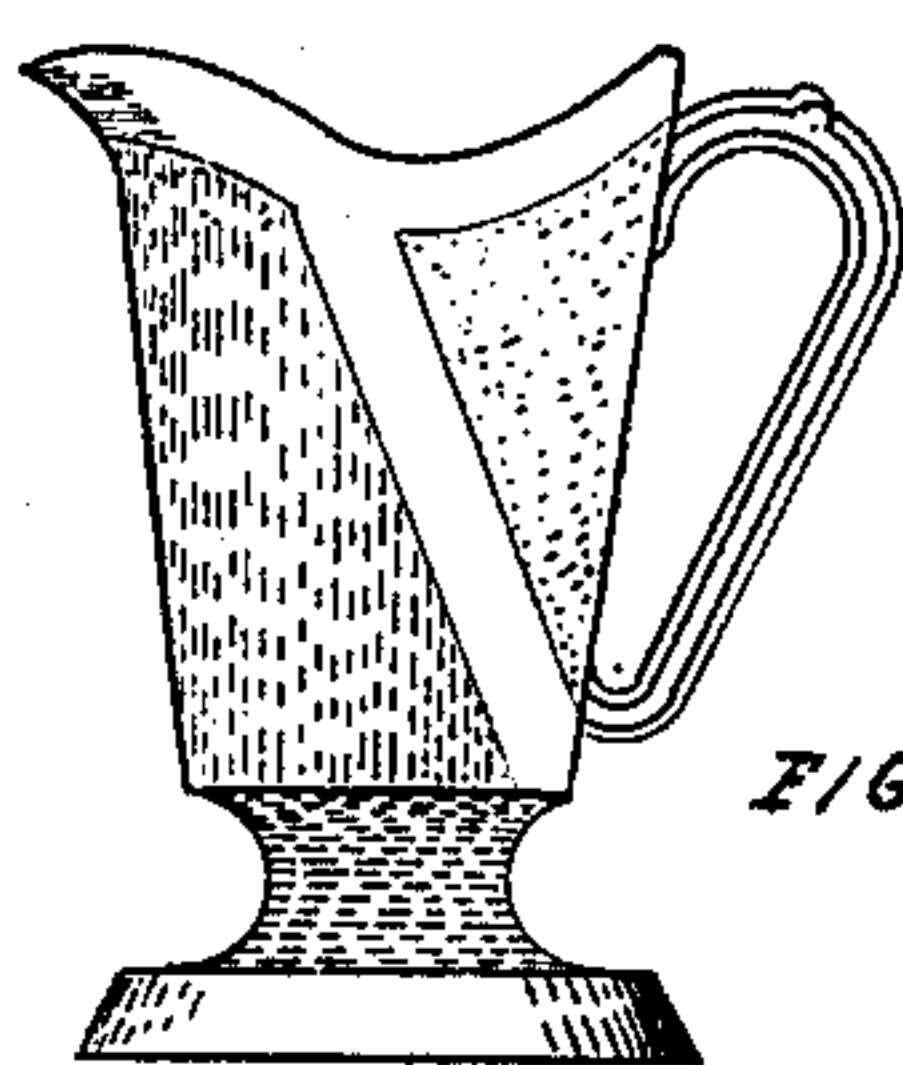


FIG. 7.

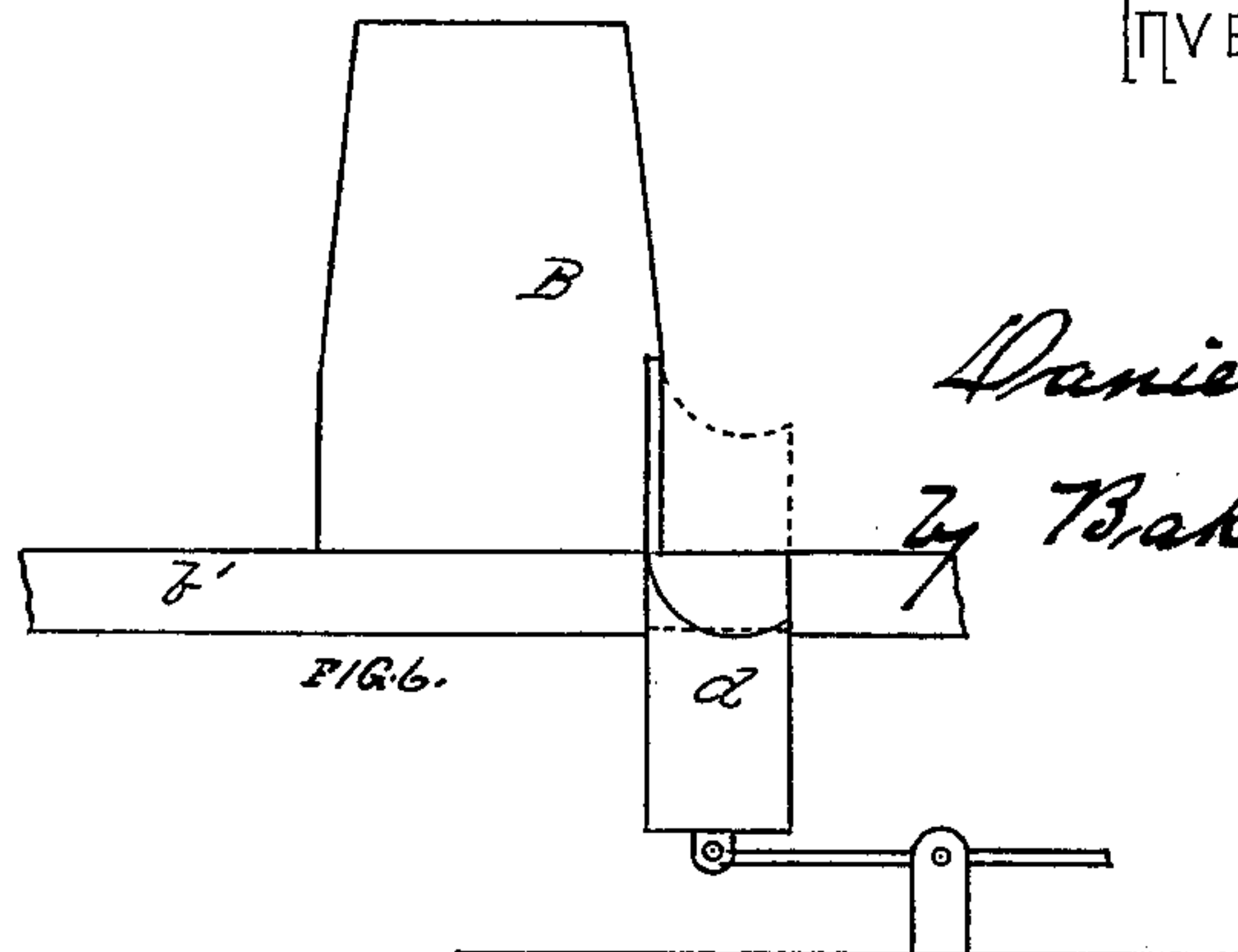


FIG. 6.

INVENTOR

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WITNESSES.  
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# UNITED STATES PATENT OFFICE.

DANIEL C. RIPLEY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN SHAPERS AND FINISHERS FOR PITCHERS AND LIKE ARTICLES OF GLASSWARE.

Specification forming part of Letters Patent No. **214,054**, dated April 8, 1879; application filed March 18, 1879.

*To all whom it may concern:*

Be it known that I, DANIEL C. RIPLEY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Shapers and Finishers for Pitchers and Like Articles of Glassware; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of devices embodying my invention. Fig. 2 is a sectional view. Fig. 3 is a detached view of the shaper or mandrel. Figs. 4, 5, and 6 are diagrams, showing modifications in the lipper or lipping device. Fig. 7 is a view of one of the class of articles which may be formed and finished on the devices shown.

Like letters refer to like parts wherever they occur.

My invention relates to the construction of devices for forming, lipping, and finishing pitchers and like articles to which special form is to be given in finishing; and consists, mainly, in combining with a mandrel a projecting curved piece adapted to indent the article, so as to form a lip thereon, the mandrel being pivoted so that it can be turned at will during the finishing and shaping of the article; secondly, in combining with the former or mandrel and lipper or lipping device a guide or guides, so arranged with relation to the mandrel and lipper that the article when placed on the mandrel shall assume such position as will always form the lip of the article at the desired point; and, finally, in details of construction hereinafter more specifically set forth.

In forming pitchers and like irregular shapes, the common practice is to press, blow, or otherwise form the preliminary shape, then to reheat the article and finish it by hand with a paddle or buffer, the handle of the article (when there is a handle) sometimes being pressed with the bowl and sometimes stuck on at the time of finishing; but the lip is invariably shaped by hand-work. This operation necessarily involves the employment of skilled labor, and renders the manufacture of such articles less rapid and more expensive than are desirable.

The object of my invention, therefore, is to provide means whereby unskilled labor may be employed for finishing rapidly and accurately articles of the class specified.

I will now proceed to describe my invention, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates a suitable bed or block for supporting the former B. B represents a former or mandrel, whose general shape corresponds with the interior of the article to be finished, said former being, by preference, stepped or mounted on a spindle, *b*, so that it can be turned while shaping or finishing any article thereon. The base of the mandrel B is, by preference, provided with a flange, *b'*, to which are secured guide-pins *c*, intended to determine the position of the handle or like portion of the article operated upon. For this purpose I prefer to use two pins or rods, as thereby the article upon the mandrel or former is retained in a fixed position; but a single guide-pin will answer, and it (the guide-pin) may have other means of fixing its position with relation to the mandrel B, provided it is found desirable to omit the flange *b'*. At a point directly opposite the guide-pins *c*, I place the lipper or lipping device *d*; but said device may have any other position relatively to the handle, if preferred—as, for instance, one-fourth around the circle when a side lip is required; or several lippers, *d*, may be used at will. The lipper *d* should be curved and rounded upon its upper surface, as at *e*, in order to properly spread and shape the glass, and it may be rigidly secured to the mandrel B, as shown in Figs. 1 and 2; or it may be arranged on a pivot or hinge, Fig. 4, or a horizontal slide, Fig. 5; or it may work in a slot in the bed, Fig. 6, so as to be projected and withdrawn in forming the lip upon the pitcher or like article.

In order to preserve the proper shape of the foot of the article being finished and its relation to the bowl, I provide a disk-cup, *f*, with stem *g*, by which it is journaled in an adjustable bracket, F, and a spring, *h*, by which its weight is carried, and it can revolve with the article being shaped as the mandrel B is turned.

The devices, being substantially those specified, will be employed as follows: The article, having been pressed, blown, or otherwise



formed, either with a suitable handle or lug, or the same being subsequently applied, is reheated in the usual manner, and is then taken by the boy or unskilled workman and dropped on mandrel B, with the handle against the guide-pins or between the guide-pins, as the case may be. This will bring the article in proper position for the lipper to form the lip, and the workman will then press the plastic glass into shape with a wooden paddle, buffer, or like hand-tool, as the case may be, rotating the mandrel or shaper B to such extent as he may find necessary to enable him to get at all parts of the article requiring to be touched. If the article be footed, which is usually the case, the disk *f* will rest upon the foot with such pressure as to straighten and correct the position of the same.

The advantage of my invention is, that pitchers and like articles can be rapidly and accurately formed and finished by unskilled labor, and at a great saving over the present cost of production.

Having thus described the nature and advantages of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a shaper or former of the class specified, of a lipper or lipping device, substantially as and for the purpose specified.

2. The combination, with a shaper, former, or mandrel, of a lipper or lipping device and one or more guide-pins, substantially as and for the purpose specified.

3. The rotary shaper or mandrel provided with the lipper or lipping device and the guide-pins, substantially as and for the purpose specified.

In testimony whereof I, the said DANIEL C. RIPLEY, have hereunto set my hand.

DANIEL C. RIPLEY.

Witnesses:

JAMES H. PORTE,

F. W. RITTER, Jr.