

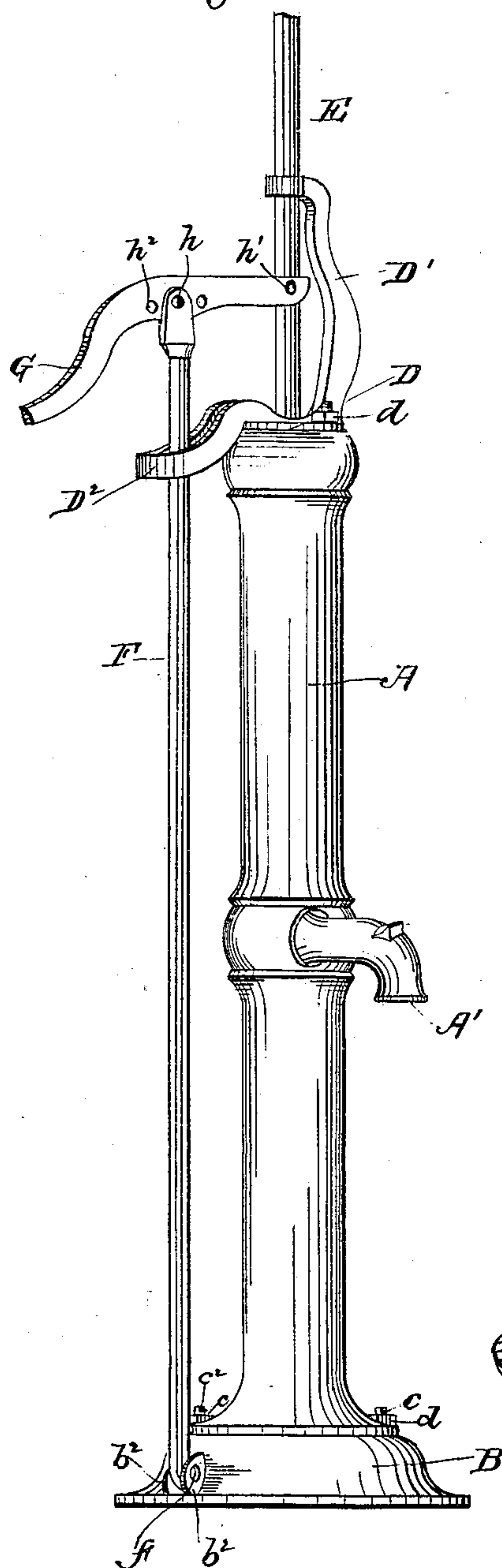
(No Model.)

F. F. PIERCE.
PUMP.

No. 253,760.

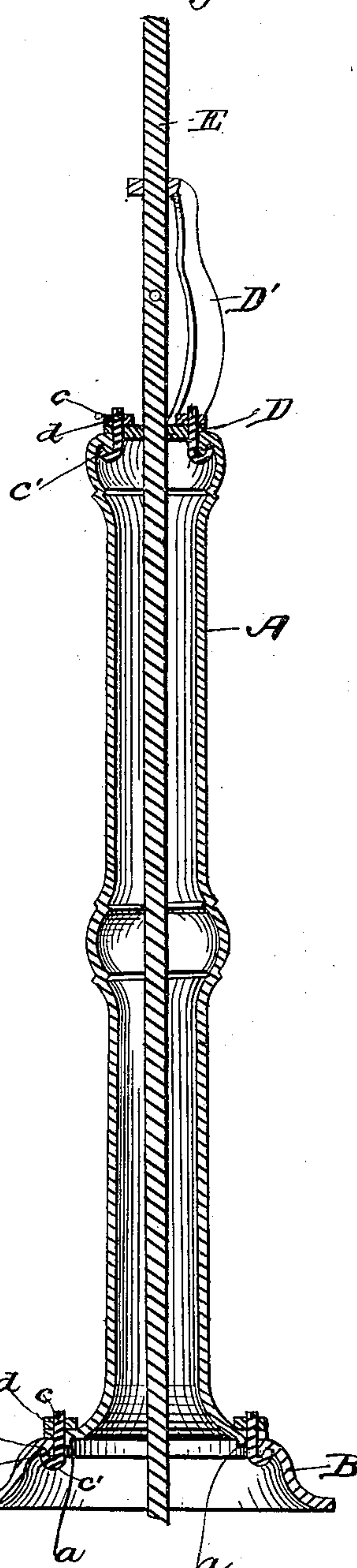
Patented Feb. 14, 1882.

Fig. 1.



Witnesses:
D. L. Shoemaker
Fred J. Church.

Fig. 2.



Inventor:
Frank F. Pierce
by Melville Church,
His atty.

Fig. 4.

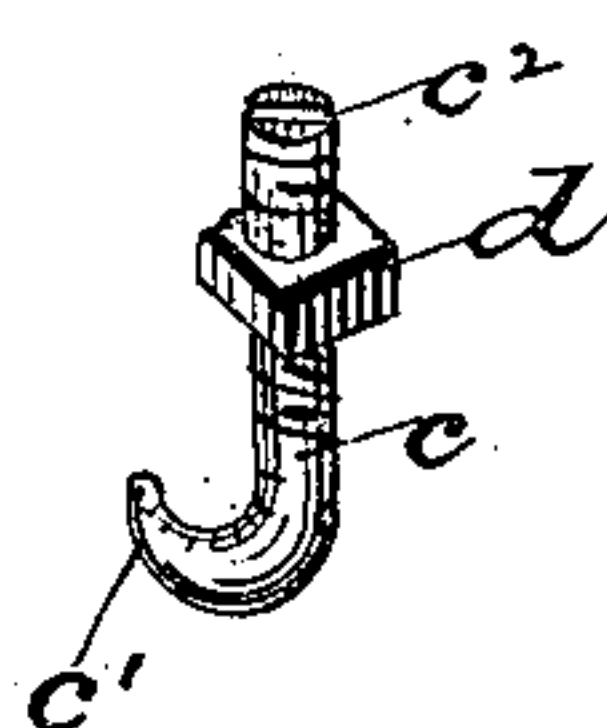
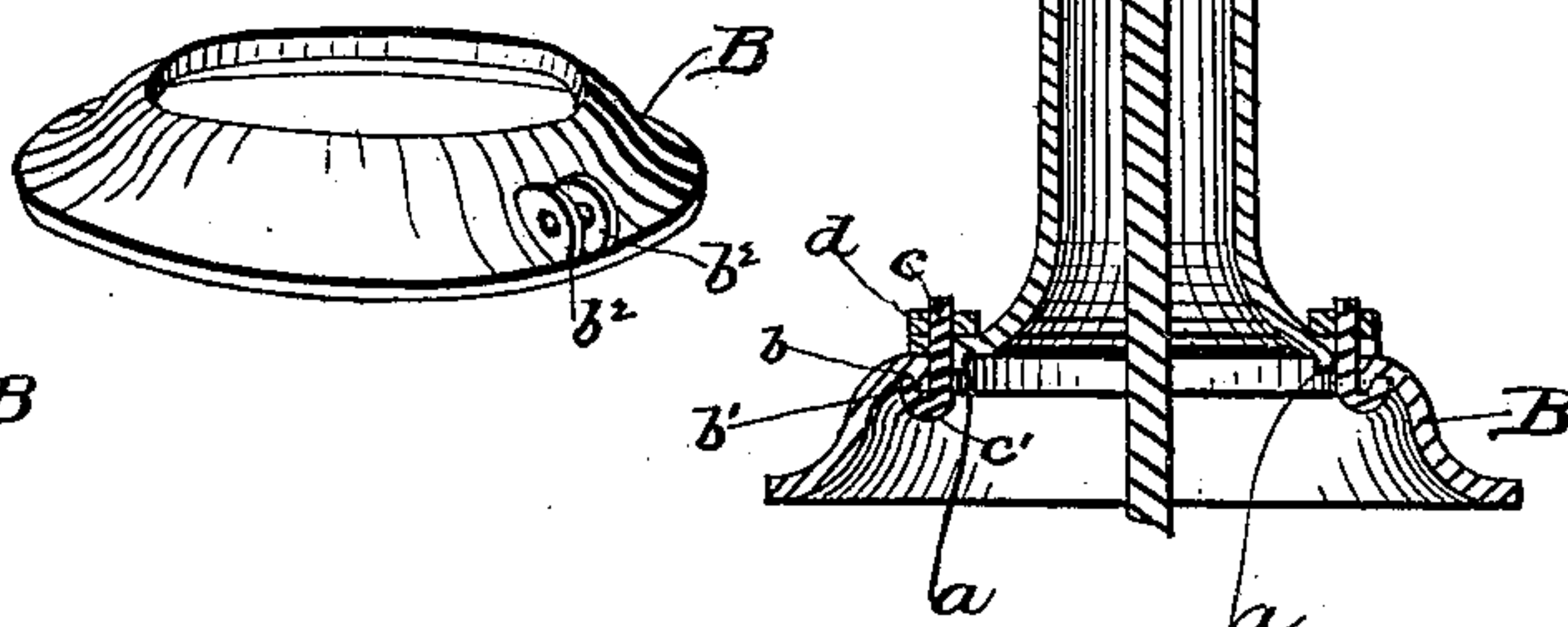


Fig. 3.



UNITED STATES PATENT OFFICE.

FRANK F. PIERCE, OF BRODHEAD, WISCONSIN.

PUMP.

SPECIFICATION forming part of Letters Patent No. 253,760, dated February 14, 1882.

Application filed December 9, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANK F. PIERCE, of Brodhead, in the county of Green and State of Wisconsin, have invented certain new and
5 useful Improvements in Pumps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

10 Figure 1 is a view of the pump in elevation; Fig. 2, a longitudinal sectional view of the same; Fig. 3, a perspective view of the base; Fig. 4, a similar view of a bolt and nut employed in securing the parts together.

15 Similar letters of reference in the several figures denote the same parts.

This invention relates particularly to that class of pumps that are adapted to be operated by hand as well as by a windmill or other power;
20 and it consists in certain novelties of construction, which I will first describe, and then point out particularly in the claims.

In the accompanying drawings, A represents the stock of the pump, constructed preferably
25 of metal, and having a spout, A', about midway of its length.

B is a metal base, upon which the stock rests, a shoulder, *a*, being formed upon the stock, so that the latter shall fit into as well as upon
30 the base, as shown in Fig. 2. The base has an annular flange, *b*, projecting down from the upper portion, upon which the stock rests, said flange forming an annular recess, *b'*, behind it, as shown. A series of bolts, *c*, having hooked
35 lower ends, *c'*, pass up through holes in the lower flange of the pump-stock, and their hooked ends engage with the depending flange *b* and project into the annular recess *b'*, as shown in Fig. 2, while their upper screw-threaded ends
40 are provided with nuts *d*. A slot or nick, *c''*, is made in the upper end of each of the bolts, in order that the bolt may be held in proper position by a screw-driver or other tool inserted in said slot while the nut is being screwed
45 tightly down. The upper end of the pump-stock is provided with a depending flange similar to that on the base, and the top or cap D is shouldered and fits the top of the stock, and is held by another series of the hooked
50 bolts, as clearly shown in Fig. 2. By this manner of connecting the cap and base to the stock

the stock is enabled to be turned to the right or left on its vertical axis, after loosing the nuts on the several bolts, so as to bring the spout in any desired position with respect to
55 the operating-handle and fulcrum, or vice versa.

The cap D is provided with an arm, D', which extends upward and inward, and is perforated for the passage of, and forms a guide for, the plunger or piston rod E. It is also provided
60 with a lateral slotted arm, D², which forms the guide and lateral support of the oscillating fulcrum F of the handle G. The said fulcrum has a perforation in its lower end, and is mounted upon a bolt, *f*, between two lugs, *b² b²*, on the
65 base B, so as to turn freely, while its upper end extends up through the slot in the arm D², and is bifurcated to receive the operating-handle G, and perforated for the passage of the pivot-bolt *h* of the handle, as shown. The short
70 arm of the handle is connected to the pump-plunger at *h'*.

In order that the leverage applied by the handle may be varied, it is provided with a series of pivot-holes, *h²*, and by shifting the
75 pivot-bolt from one to the other of these holes the leverage may be increased or diminished, as desired.

In operation the fulcrum F vibrates back and forth, being guided by the slotted arm D²,
80 while the plunger works up and down in a true vertical line, being guided by the arm D', as well as by the cap.

It will be seen that by connecting the fulcrum to the base instead of to the stock the
85 latter is relieved of all strain and weight.

All the joints of the pump being tight, the upper part of the stock forms an air-chamber which is useful in securing a uniform flow.

The upper extended end of the plunger is
90 adapted to be connected to the pitman of a windmill or other power, and when so connected the handle may be disconnected, if desired.

I claim as my invention—

1. The combination, with the pump-stock having the depending annular flange at its upper end, of the base having the depending annular flange, the cap carrying the guide for the fulcrum, the hooked bolts and nuts for uniting
100 the stock to the base and to the cap, and the handle and fulcrum, the latter hinged to the

base, the whole arranged and adapted for adjustment substantially as described.

2. The cap having the upwardly and inwardly extending arm, forming a guide for the
5 plunger, and the laterally-slotted arm for guiding and supporting laterally the fulcrum, substantially as described.

3. The combination, with the parts to be

united by them, of the hooked bolts and their nuts, each bolt having a slot in its upper end, 10 for the purpose specified.

FRANK F. PIERCE.

Witnesses:

J. W. STEWART,

J. W. DAY.