

(No Model.)

M. WARD.  
GLASS PRESS.

No. 266,565.

Patented Oct. 24, 1882.

Fig. 1.

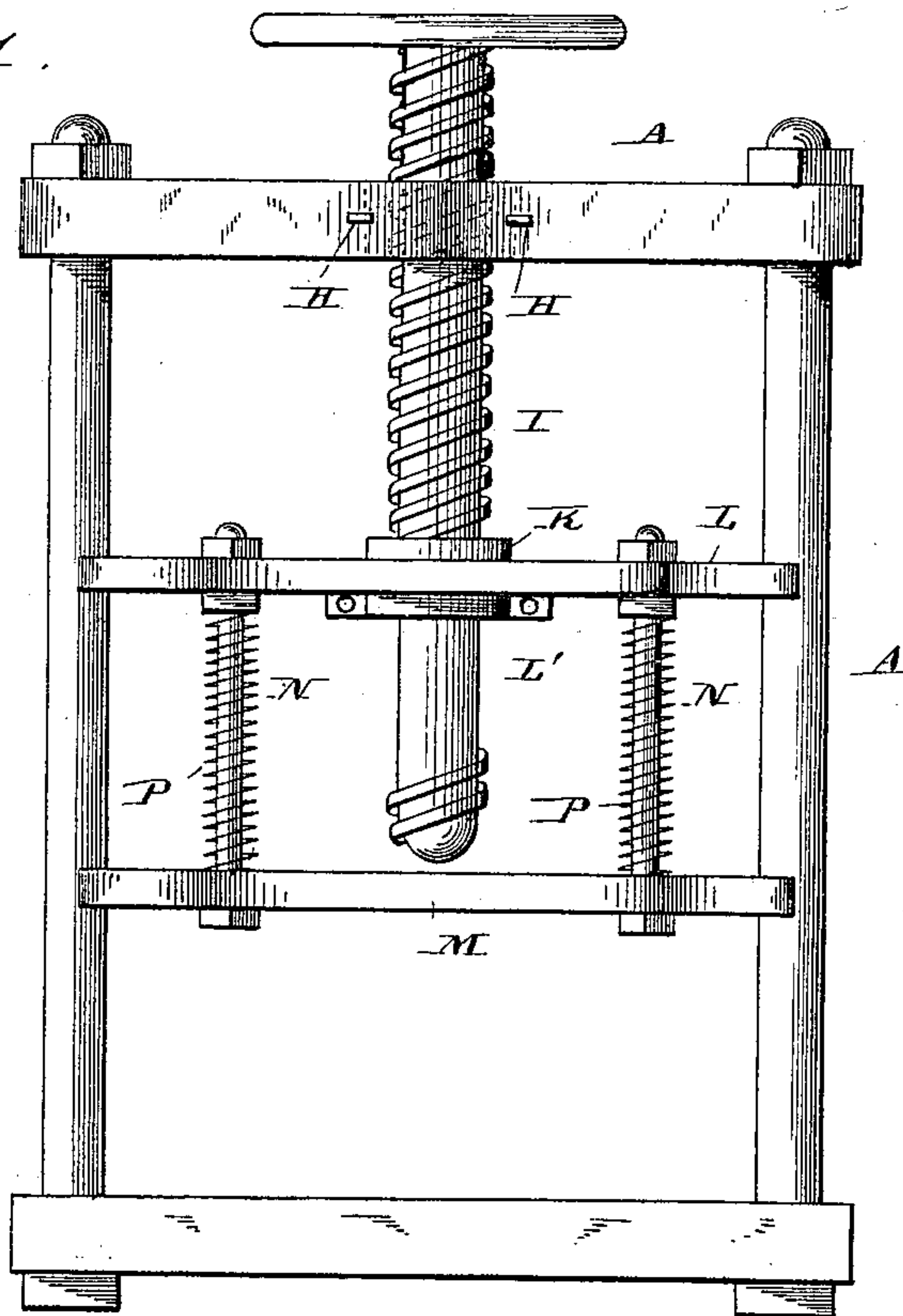


Fig. 2.

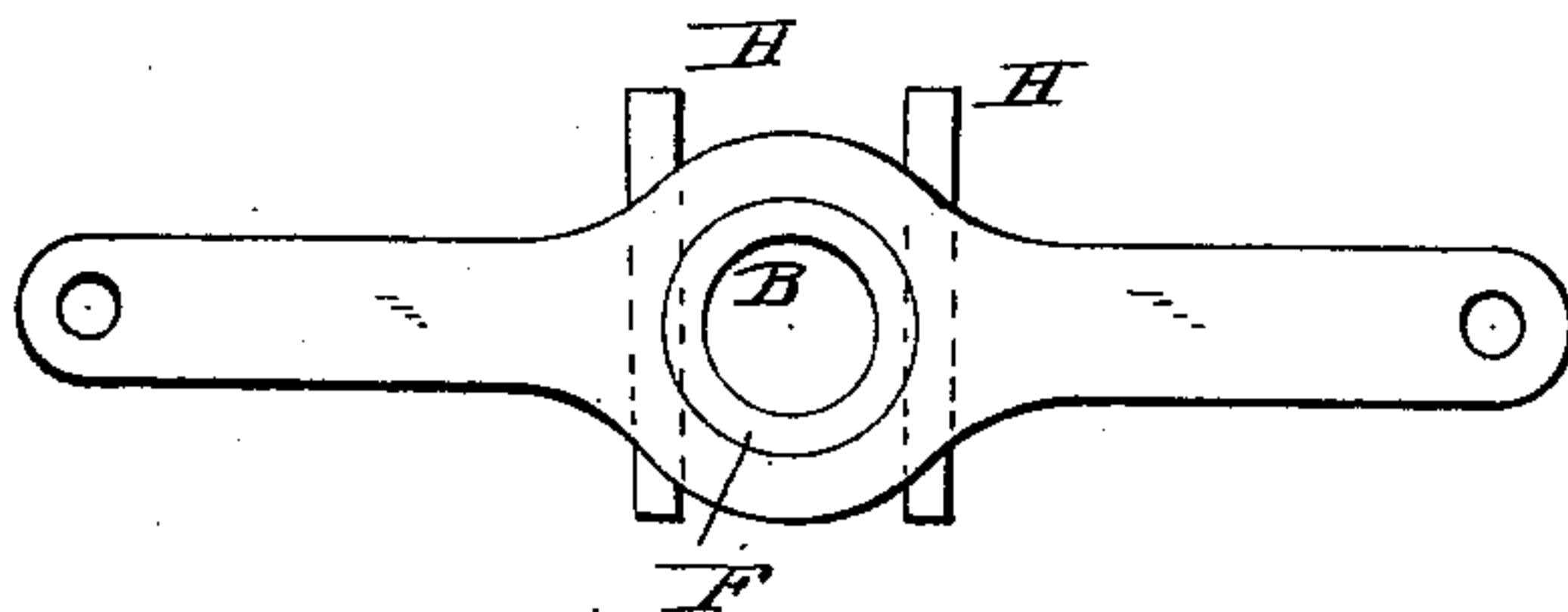


Fig. 5.

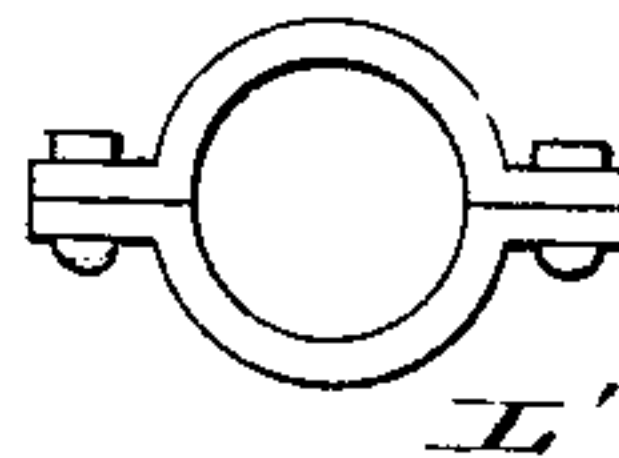


Fig. 3.

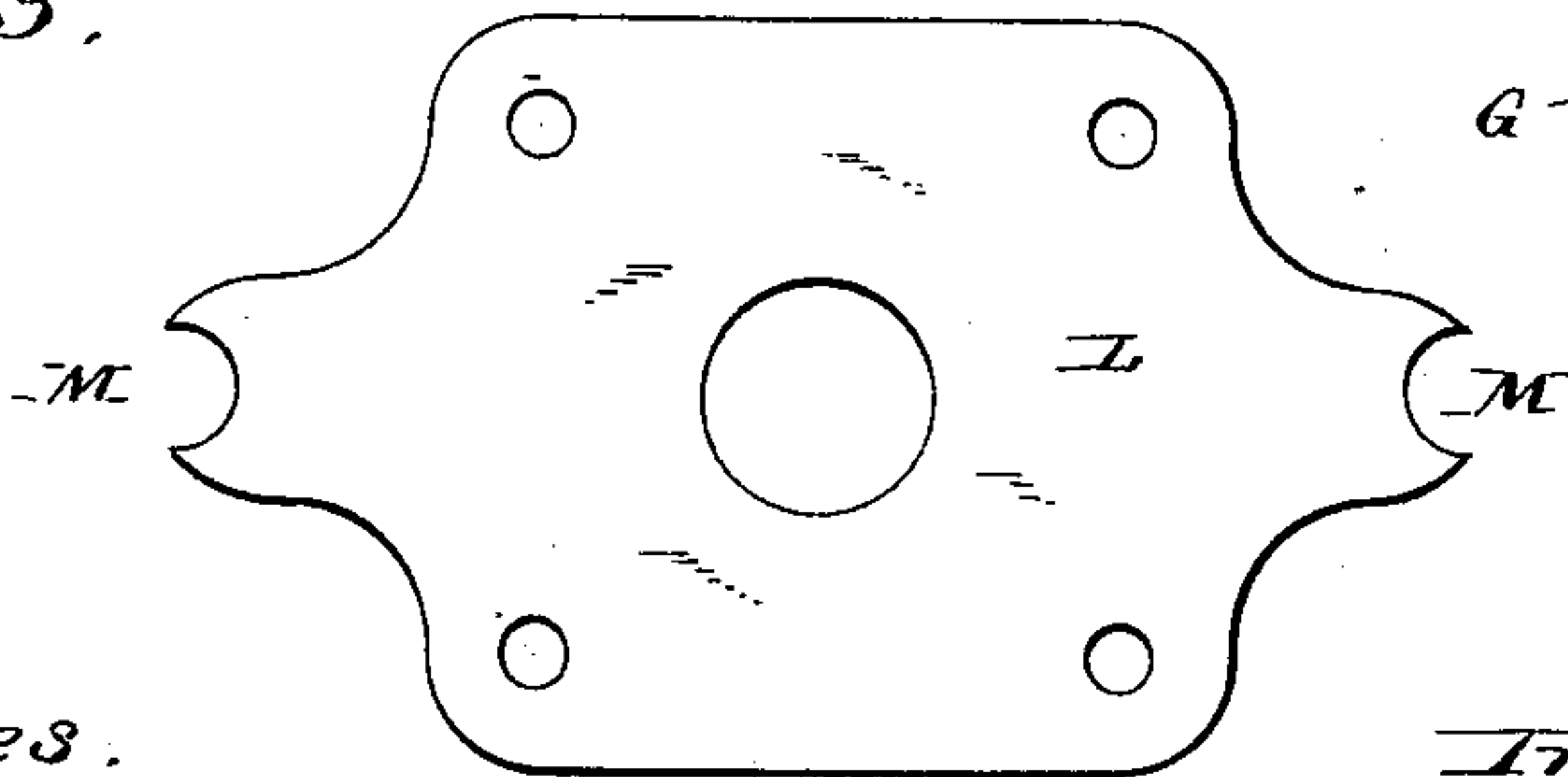
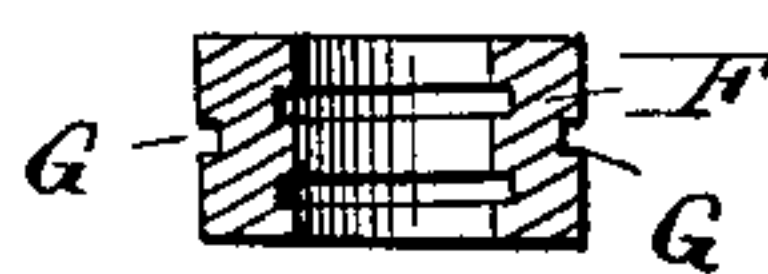


Fig. 4.



Witnesses.

Edwin L. Yerville.  
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Inventor.

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# UNITED STATES PATENT OFFICE.

MICHAEL WARD, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF  
TO HENRY F. VOIGT, OF SAME PLACE.

## GLASS-PRESS.

SPECIFICATION forming part of Letters Patent No. 266,565, dated October 24, 1882.

Application filed July 27, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL WARD, of  
Pittsburg, in the county of Allegheny, and in  
the State of Pennsylvania, have invented cer-  
tain new and useful Improvements in Glass-  
Presses; and I do hereby declare that the fol-  
lowing is a full, clear, and exact description  
thereof, reference being had to the accompa-  
nying drawings, and to the letters of refer-  
ence marked thereon, making a part of this  
specification.

This invention relates to certain improve-  
ments in glass-presses; and it has for its ob-  
jects to provide an improved means for form-  
ing female screw-threads in articles of glass-  
ware, such as fruit-jars and the like; and it  
is further the design of this invention to fur-  
nish an apparatus which will be capable of  
forming screw-threads of the kind alluded to  
of various pitches or number of threads to the  
inch; and to this end it consists in providing  
for the ready removal of the plunger or screw-  
forming tool the threads of which are of one  
pitch and the substitution of another having  
threads of a different pitch, as more fully here-  
inafter specified. These objects I attain by the  
means illustrated in the accompanying draw-  
ings, in which—

Figure 1 represents a side elevation of my  
improved apparatus; Figs. 2 and 3 are de-  
tached top views of portions of the same; Fig.  
4 is a detached view of a removable nut, and  
Fig. 5 a detached view of the lower split collar.

The letter A indicates that portion of the  
frame of the press technically known as the  
"arch." The upper cross-piece of the arch is  
provided midway between its two sides with  
an opening, B, in which is adapted to fit a fe-  
male screw-threaded nut, F, which is detach-  
able, and is provided with grooves G on oppo-  
site sides for the pins H, which pass trans-  
versely through openings in the arch and se-  
cure the nut in place. Through the nut ex-  
tends a screw-threaded shaft, I, which is pro-  
vided with a collar, K, which bears against  
the upper face of the movable plate L, which  
is provided with recesses M at opposite sides,  
and is loosely fitted between the sides of the  
frame and adapted to play vertically therein.  
The shaft below the plate is provided with a  
detachable collar, L', which abuts against the  
lower face of the said plate. Below the plate  
the shaft is plain, except near the lower ex-

tremity, where it is provided with a short  
thread of the same pitch as the thread above.

The letter M' indicates a movable plate, pro-  
vided with recesses at opposite sides, and  
adapted to move vertically in the frame. The  
plate M' is provided with a central aperture,  
through which the shaft above mentioned is  
adapted to pass, and is connected loosely to  
the bolts N, which are secured rigidly to the  
plate L. These bolts are surrounded by springs  
P, by which the plates are held normally apart.  
The screw shaft is detachable with its nut, so  
that a number of various pitches may be em-  
ployed, according to the style of thread to be  
formed in the glassware.

The operation of my invention is as follows:  
The mold is placed in the frame under the  
opening in the movable lower plate, with a  
proper quantity of matter or plastic glass in  
it. The screw-shaft is then rotated so as to  
depress the plates until the aperture of the  
lower plate sets over the mouth of the mold.  
Upon further rotating the screw-shaft it enters  
the mold and forms the thread in the plastic  
glass. When the thread is formed by revers-  
ing the motion of the screw-shaft the lower  
thread is withdrawn, leaving its impression in  
the article, the parts being brought to their  
normal position, ready for the next operation.

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

1. In a glass-press, the combination of the  
vertical posts, the upper cross-beam, and the  
detachable nut having external notches and  
means for securing it in the beam with the  
vertically-descending screw-threaded shaft, as  
shown and described.

2. In a glass-press, the combination, with  
the frame having the screw-threaded shaft  
working through the cross-beam thereof and  
provided with collars, of the guide and press-  
ure plates and the connecting-bolts and press-  
ure-springs, substantially as shown and de-  
scribed.

In testimony whereof I affix my signature,  
in presence of two witnesses, this 12th day of  
July, 1882.

MICHAEL WARD.

Witnesses:

W. B. STEWARTSON,  
W. H. BRUNT.