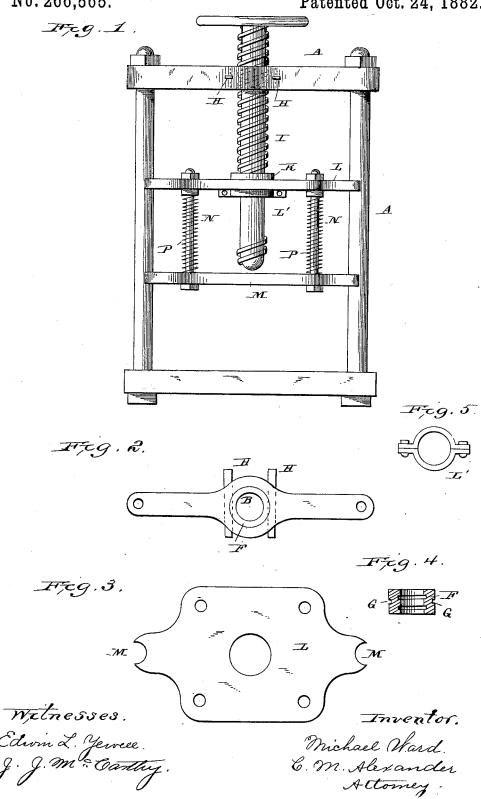
M. WARD.

GLASS PRESS.

No. 266,565.

Patented Oct. 24, 1882.



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 certain new and useful Improvements in Glass-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in glass-presses; and it has for its objects to provide an improved means for form-15 ing female screw-threads in articles of glassware, such as fruit-jars and the like; and it is further the design of this invention to furnish an apparatus which will be capable of forming screw-threads of the kind alluded to 20 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 screwforming tool the threads of which are of one pitch and the substitution of another having 25 threads of a different pitch, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which-

Figure 1 represents a side elevation of my 30 improved apparatus; Figs. 2 and 3 are detached 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 female screw-threaded nut, F, which is detachable, and is provided with grooves G on opposite sides for the pins H, which pass transversely through openings in the arch and secure the nut in place. Through the nut extends a screw-threaded shaft, I, which is provided 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. 55

The letter M' indicates a movable plate, provided 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 60 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 65 that a number of various pitches may be employed, 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 70 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. 75 Upon further rotating the screw-shaft it enters the mold and forms the thread in the plastic glass. When the thread is formed by reversing the motion of the screw-shaft the lower thread is withdrawn, leaving its impression in 80 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,

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 90 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 pressure plates and the connecting-bolts and pressure-springs, substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 12th day of 100 July, 1882.

MICHAEL WARD.

Witnesses:

W. B. STEWARTSON,

W. H. BRUNT.