

(No Model.)

E. J. MURPHY.

PRESS FOR MOLDING GLASS INSULATORS.

No. 291,072.

Patented Jan. 1, 1884.

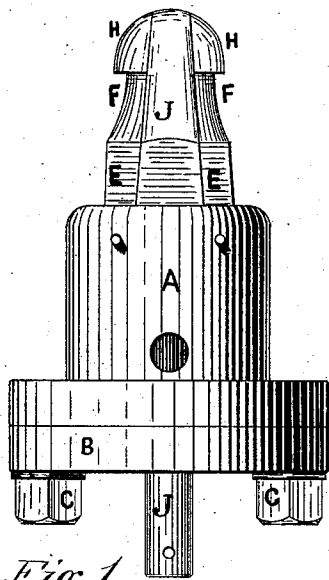


Fig. 1.

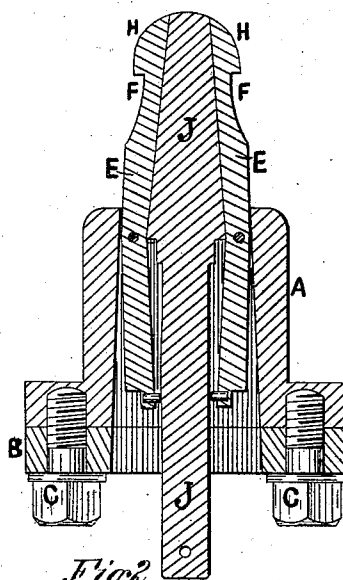


Fig. 2.

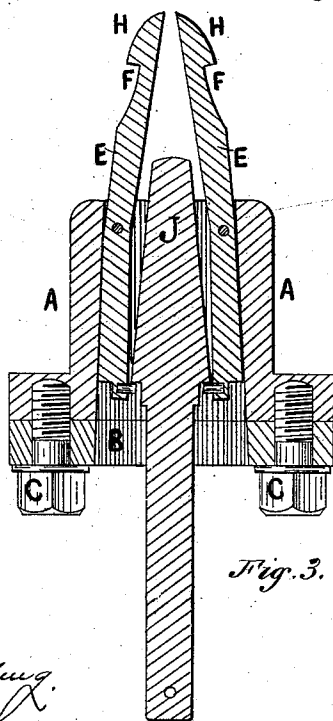


Fig. 3.

Witnesses:

D. S. Gooding
Edw. Edmunds

Inventor:

Edward J. Murphy.

Sylvester Walker
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD J. MURPHY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO LAW-
RENCE B. GRAY AND JOSEPH HAM, BOTH OF SAME PLACE.

PRESS FOR MOLDING GLASS INSULATORS.

SPECIFICATION forming part of Letters Patent No. 291,072, dated January 1, 1884.

Application filed September 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. MURPHY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Presses for Molding Glass Insulators, of which the following is a specification.

The object of my invention is to provide an automatic expanding and contracting plunger for pressing and forming the interior of glass insulators; and it consists in the construction, combination, and arrangement of the several parts of the plunger, as hereinafter more fully described, and set forth in the claim.

Figure 1 represents a side elevation of a plunger constructed according to my invention. Fig. 2 represents a vertical section of the same. Fig. 3 represents a similar view of the same in a contracted position.

A represents the shell or case of the plunger, having a suitable flange, upon the face of which is secured a suitable disk or collar, B, by means of screw-bolts C, or in any suitable manner and of any form desired, and within the said shell A is pivoted the adjustable side pieces, E, of the plunger, their outward-projecting end portions having formed about their outer faces depressions or grooves, forming a neck, F. The extreme ends or end portions project outward at opposite sides or are enlarged, so as to form head portions H, the object of the said enlarged head portions H being to form an irregular or enlarged end or bottom interior cavity in an insulator, and in order to permit such enlarged cavity to be formed by the plunger and permit the said enlarged head end portions, H, to be instantly removed therefrom I have provided a sliding center piece, J, formed tapering at one end portion, which is adapted to be forced between the inward incline faces of the said side pieces, E, which incline from the said pivotal point each way to their extreme outer and inner ends,

as shown. The oppositeshank end portion of the said sliding center piece, J, projects from said shell A, and is adapted to be attached to or connected with the operating-lever of the press employed, so that as the said center piece, J, is slid up and down or back and forth the said side pieces, E, are forced apart and together by such movements automatically, Fig. 2 showing the said parts expanded, and Fig. 3 showing the same sufficiently contracted to permit the said enlarged or head portions H to pass through the passage formed by the contracted or neck portions F, and thus allow the said plunger to be withdrawn from the interior cavity of the insulator thus formed and pressed of glass. It will be evident that the exterior form of the adjustable portion of such plunger may be made of any shape or outline or configuration desired without departing from my invention.

In order to prevent the center wedge-shaped piece, J, from being withdrawn entirely from the body or shell portion A, I have provided the inner ends of the said pivoted side pieces, E, with short projecting pins, which contact with shoulders formed upon the center piece when it is withdrawn sufficiently to actuate the said movable side pieces, as shown in Fig. 3.

Having thus described my invention, what I claim is—

The combination, with the shell or case A, of the pivoted side pieces, E, having incline faces, and the tapering center piece, J, adapted to be slid back and forth therein, whereby the end portion of the plunger may be expanded and contracted, as and for the purposes set forth.

EDWARD J. MURPHY.

Witnesses:

SYLVENUS WALKER,
CHAS. S. GOODING.