[J.] [125] Making Glass Inobs. Patented Apr. 14, 1868.

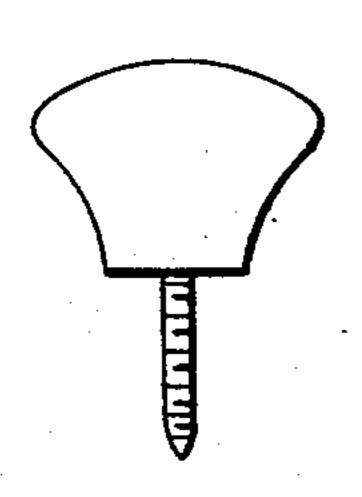
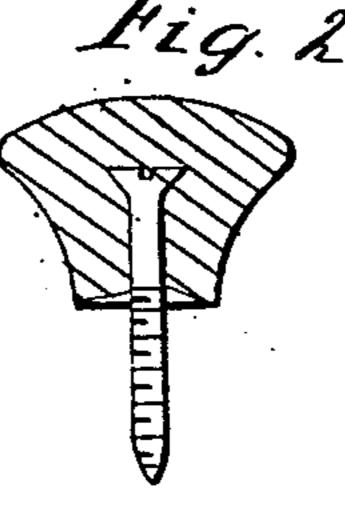


Fig. 2.



Witnesses:

JE76, 766.

6. D Ives. By his Attorney

## Anited States Patent Pffice.

## E. D. IVES, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 76,766, dated April 14, 1868.

## IMPROVEMENT IN THE MANUFACTURE OF GLASS KNOBS.

The Schedule referred to in these Aetters Patent and making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, E. D. Ives, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in the Manufacture of Glass Knobs; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, and in

Figure 2 a central section of a picture-knob.

This invention relates to an improvement in the manufacture of glass knobs, such as are used for doors,

hanging of pictures, or for other purposes.

Knobs made from glass have long been known, but have been made independent of the spindle or shank, and the spindle or shank secured into the knob after the knob was completed; and the security is liable to be loosened, so as to allow the knob to break from the spindle or shank. In all attempts heretofore to form the knob permanently upon the shank, by casting the glass thereon, the surface of the glass cracks, so that a very imperfect article is produced.

The object of my invention is to overcome this difficulty, and produce a knob formed permanently upon its shank, or whatever may be its means of attachment; and the invention consists in casting the knob permanently upon its shank; then, before the knob is thoroughly cool, I present the surface of the knob to an intense fire

heat, and, by such heat, finish the surface of the knob in the most perfect manner.

In order to the clear understanding of my invention, I will proceed to describe the same, as illustrated in

the accompanying drawings.

I first form a mould for the form and design of the knob to be produced, and so as to receive the screw, shank, or socket to which the knob is to be attached, whether it be for door-knobs, picture-knobs, or other purposes, then press the glass while in a heated state in the said mould, and upon the said socket, shank, or whatever it may be, so as to secure the knob firmly thereto, then remove from the mould when sufficiently cool to admit of it, but before it is perfectly cool; then submit the knob to an intense heat, either by means of the blow-pipe, or by fire direct, so as to give to the surface a fire finish. This last operation closes all the checks or deformities that may have arisen in consequence of the glass coming in contact with the mould, or with its socket or shank, and finishes the knob in the most perfect manner.

I have described the first operation as being pressed in moulds, but there are various devices for bringing

glass to that same state, my invention being more especially for the manner of finishing the knob.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters

Patent, is—

A glass knob, attached to its socket, shank, or whatever it may be, and completed by giving to the said knob a fire surface-finish, substantially in the manner herein set forth.

E. D. IVES.

Witnesses:

JOHN H. SHUMWAY, A. J. TIBBITS.