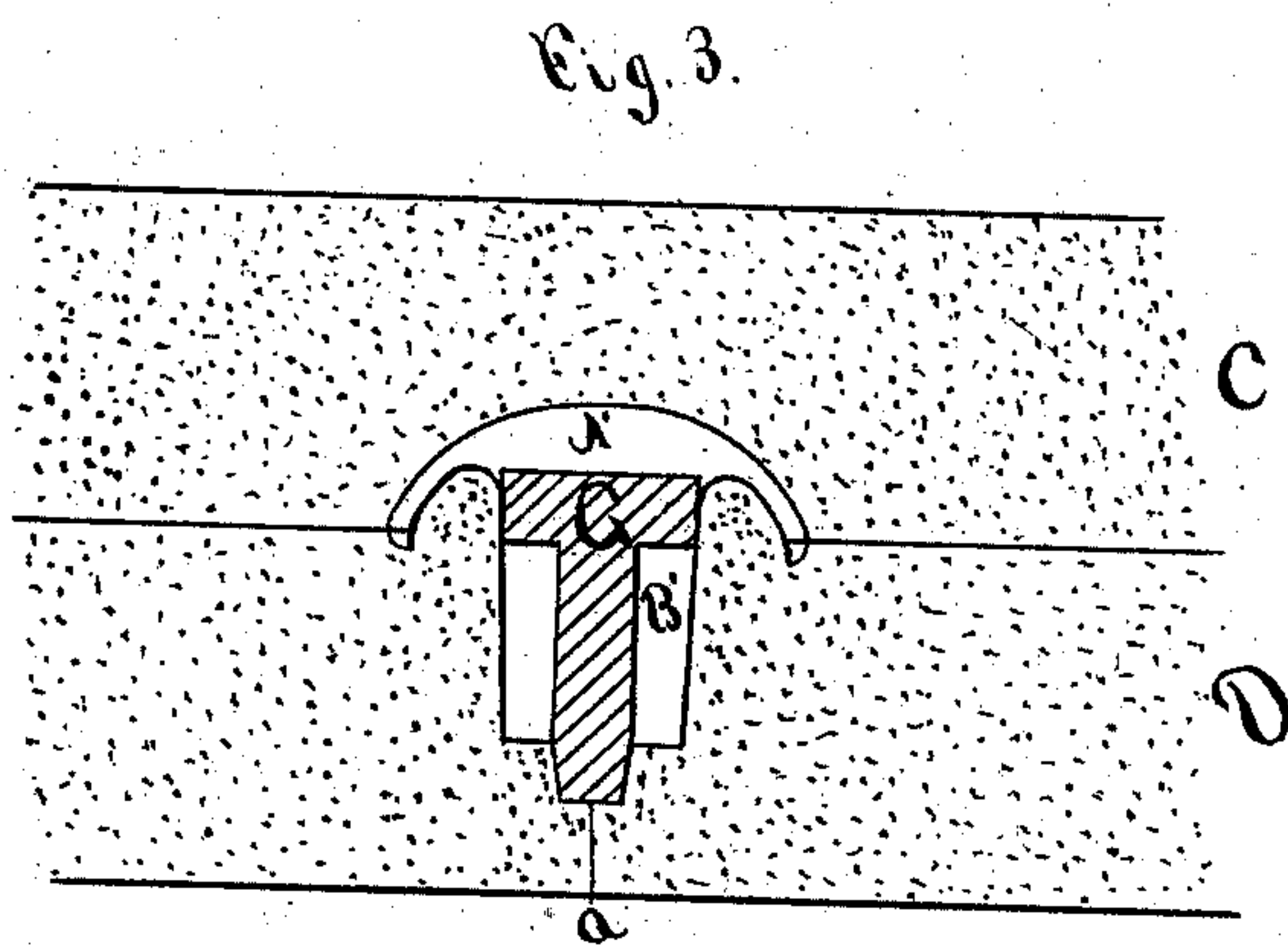
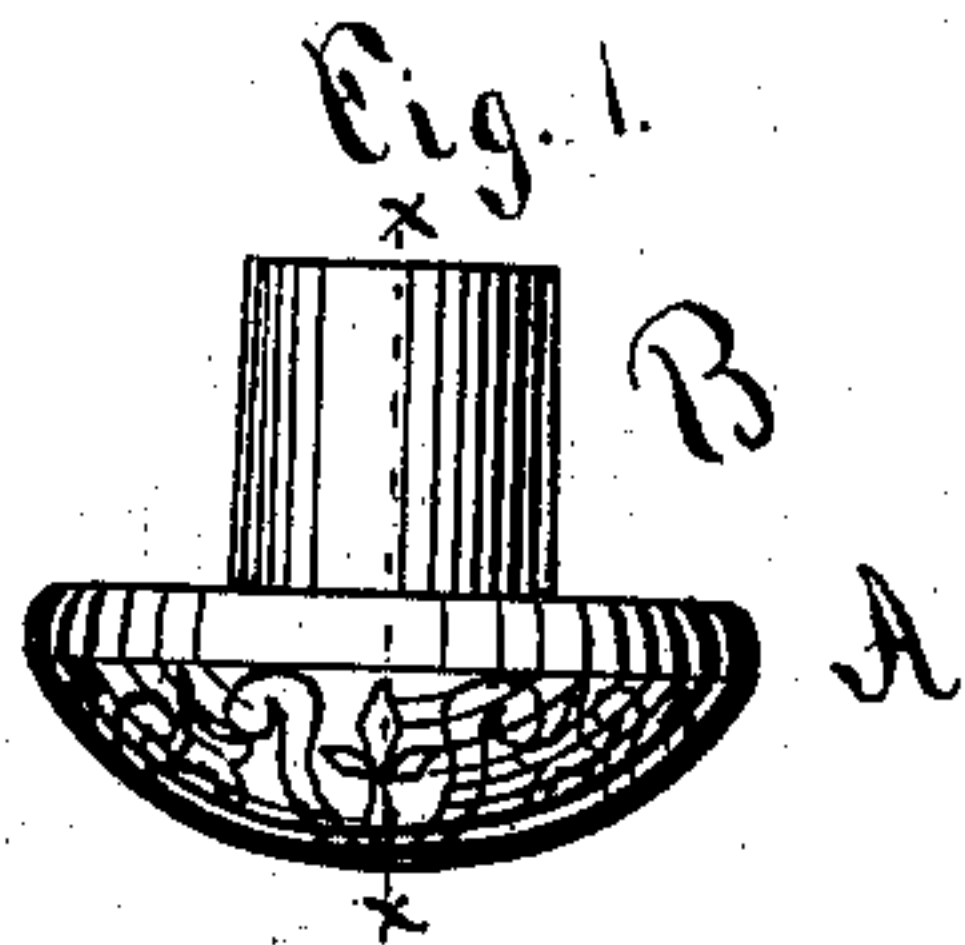


E. E. STOW.  
Casting Door-Knob.

No. 205,219.

Patented June 25, 1878.



Witnesses.  
W. B. Thomson.  
Sydney J. Perry.

Inventor.  
E. E. Stow.  
By James Shepard Atty.

# UNITED STATES PATENT OFFICE.

ENOS E. STOW, OF PLANTSVILLE, ASSIGNOR TO PECK, STOW & WILCOX  
COMPANY, OF SOUTHTON, CONNECTICUT.

## IMPROVEMENT IN CASTING DOOR-KNOBS.

Specification forming part of Letters Patent No. **205,219**, dated June 25, 1878; application filed  
April 25, 1878.

*To all whom it may concern:*

Be it known that I, ENOS E. STOW, of Plantsville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Knobs, of which the following is a specification:

My invention resides in that improvement in the art of making knobs which consists of a sand mold having only one core-print, which is arranged in the hub end thereof, in combination with a core resting at one end in said print, and having at the other end a cross-arm, whose ends rest against the sides of the hub portion of the mold and inside of the knob portion, as hereinafter described.

In the accompanying drawing, Figure 1 is a plan view of a knob which is the product of my invention. Fig. 2 is a vertical section of the same on line *x x* of Fig. 1, and Fig. 3 is a vertical section of the mold with core set therein as used in the manufacture of said knob in accordance with my invention.

I make the knob proper, A, substantially semi-spherical in form, hollow on its back side, and with the hub B extending outward from the knob, as shown.

Extending through the hub in axial line, but not through the face of the knob, is a square hole for the reception of the ordinary knob-spindle. Just inside the hollow knob A, and practically out of sight, is a transverse opening through the hub and opening into the axial square hole, as shown in Fig. 2, whereby I am enabled to produce a knob which is better and cheaper than prior ones, in the following manner:

The pattern is made of the same shape as the knob, except that a short core-print is formed on the small end of the hub.

In Fig. 3, C designates the cope, and D the drag; A', the imprint of the knob; B', that of

the hub, and *a* that of the core-print. When the pattern is withdrawn from the mold a T-shaped core, G, is placed therein, as shown in Fig. 3. This core is square in cross-section, and its lower end fits in the depression *a* of the mold, so as to hold that end and center it. The upper end or cross-arm of the core G is of a length equal to the diameter of the hub just inside the hollow knob, so that when placed in the mold the ends of said cross-arm rest against the cylindrical sides of the depression or imprint of the hub, and center that end of the core. The mold is then filled in the ordinary manner of casting.

By thus extending the core sidewise to the exterior of the hub, the core is not only centered at both ends, but said cross-arm acts as a conductor or vent, to convey the gases in casting to the exterior of the depression in the mold, thereby effectually preventing blowing, while the openings formed by said cross-arm of the core are in the hollow side of the knob A, so as to be practically concealed from sight, thereby saving the expense of plugging up, as has heretofore been the case in casting knobs in which the core was centered and had a vent at the knob end.

I claim as my invention—

The combination of a sand mold having only one core-print, which is arranged in the hub end thereof, with a core resting at one end in said print, and having at the other end a cross-arm, whose ends rest against the sides of the hub portion of the mold and inside of the knob portion, substantially as described, and for the purpose specified.

ENOS E. STOW.

Witnesses:

E. B. HOLCOMB,  
J. BOND.