Hotchkiss, Davenport & Quincy,

Knob.

No. 2,361. Patented Nov. 16, 1841.

Fig. 3.

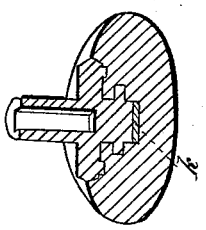


Fig. 5.

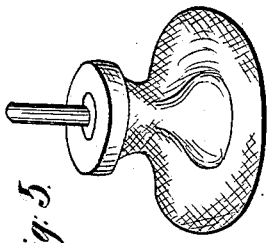


Fig. 2.

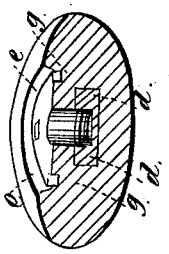


Fig. 1.

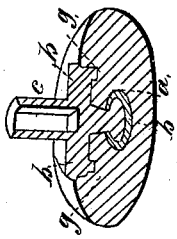
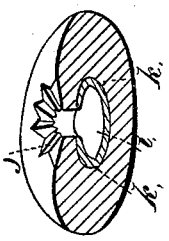


Fig. 4.



UNITED STATES PATENT OFFICE.

JNO. G. HOTCHKISS, OF NEW HAVEN, CONNECTICUT, AND JNO. A. DAVENPORT AND JNO. W. QUINCY, OF NEW YORK, N. Y.

MANNER OF ATTACHING NECKS, SHANKS, SCREWS, &c., TO GLASS KNOBS FOR LOCKS, CURTAIN-PINS, &c.

Specification of Letters Patent No. 2,361, dated November 16, 1841.

To all whom it may concern:

Be it known that we, JOHN G. HOTCHKISS, of the city of New Haven and State of Connecticut, and JOHN A. DAVENPORT and JOHN W. QUINCY, of the city of New York and State of New York, have invented a new and improved mode of securing metallic necks or shanks or screws to knobs of glass intended for door-knobs, curtain-pins, and such also as are used for cabinet-furniture or other purposes; and we do hereby declare that the following is a full and exact description thereof.

In forming the knob of glass, whether by blowing or by pressure, we leave a cavity in the back part of the knob where the neck, shank, or screw, is to be fastened such cavity being so made as that by means of fusible metal, or alloy, poured into it, the neck, shank, screw, or other article prepared for the purpose, shall be securely held in place.

In the accompanying drawings we have represented several modifications of our mode of procedure, serving fully to exemplify our invention; but we do not intend to limit ourselves to the particular form and manner of effecting this object, as shown in these drawings, but to vary this as we may think proper, while the general principle, that of securing the parts together by a fusible metallic alloy, is not departed from.

In the accompanying drawing Figure 1 shows a section through a knob for a lock, having the neck fastened into it. The red lines *a*, *a* represent a hollow ball of metal inserted in the body of the knob, at the time of pressing it; *b*, *b* represents the fusible metal, which is to be poured into a case or shell of brass, plated metal, &c., which is to constitute the exterior of the neck; and this being held in place on the back of the glass knob, the fusible metal is to be poured into it, so as to fill it, and to enter through an opening left in the knob for that purpose, into the cavity of the hollow ball *a*, *a*, a square socket is represented as left at *c*, to receive the spindle of the lock.

Fig. 2, shows a section of a knob without a neck attached to it; *d*, *d*, is a nut of metal having a screw cut into it, and inserted in the body of the knob; in the same manner with the hollow ball in the last examples, *e*, *e*, is a depression in the back of the knob around or within which the shell of the metallic neck is to be placed; and *f* is an opening leading to the screw nut; on pouring in the alloy it will enter the cavity of the screw, and will be held firmly in place. *g*, *g*, shows depressions, or indentations made in the pressed knob, into which the alloy entering, checks all tendency to its turning around. Indentations, or notches, should be generally formed in the glass for this purpose.

Fig. 3, shows another form of the cavity for receiving the alloy. The part colored red, and marked *h*, represents a piece of cloth, or other compressible material, which we sometimes insert before pouring in the fusible alloy, so as to allow for the unequal shrinkage of the glass and metal in cooling.

Fig. 4, shows a knob which has been blown so as to leave a cavity, *i*, within it to receive the fusible alloy. The starred part *j*, will check the metal shank, and prevent its turning; and the red portion *k*, represents a piece of cloth, &c., inserted in the cavity.

Fig. 5 represents a knob having its neck of glass, but blown or pressed with a cavity for inserting a screw shank *l*, and for surrounding it with the fusible alloy.

When the neck, shank, screw, &c., is to be fastened to the glass knob, the latter is to be heated to a suitable temperature, say that of boiling water, when the alloy may be safely poured in; the whole is then allowed to cool slowly.

Having thus fully described the nature of our invention, and shown the manner in which the same is to be carried into operation, what we claim as new, and desire to secure by Letters Patent, is—

Securing of shanks, screws, &c., within knobs of glass, by means of a fusible metal or alloy, substantially in the manner herein made known and described.

JOHN G. HOTCHKISS.
J. A. DAVENPORT.
JOHN W. QUINCY.

Witnesses:
W. H. CHURCHILL,
A. B. AMERMAN.