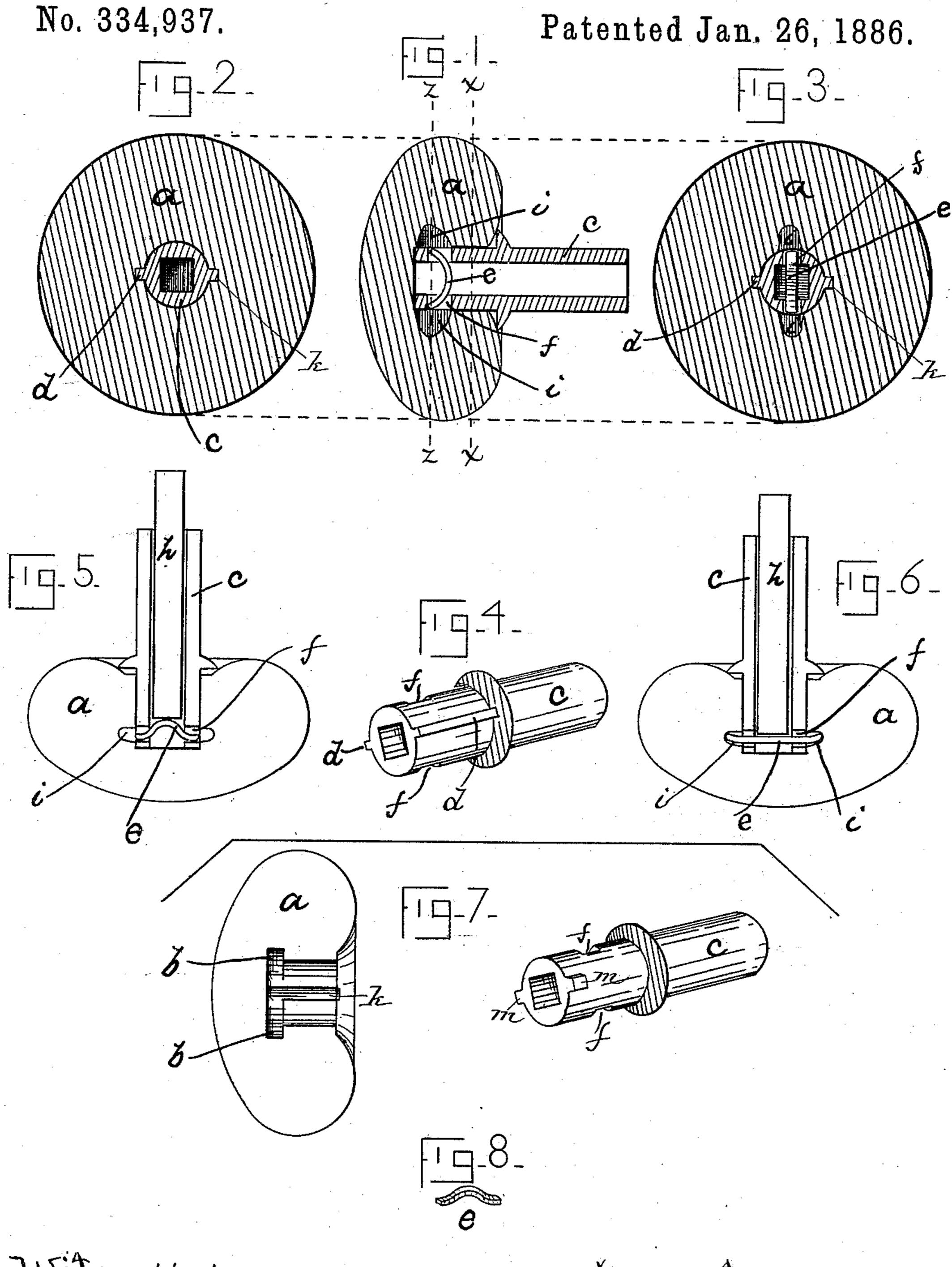
## W. H. COMSTOCK.

DOOR KNOB.



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## United States Patent Office.

WILLIAM H. COMSTOCK, OF NORWICH, CONNECTICUT.

## DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 334,937, dated January 26, 1886.

Application filed November 6, 1885. Serial No. 182,066. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. COM-STOCK, a citizen of the United States, residing at Norwich, New London county, Con-5 necticut, have invented certain new and useful Improvements in Door-Knobs, which improvements are fully set forth and described in the following specification, reference being had to the accompanying drawings.

My improvements relate to that class of knobs which are provided with a rigid metallic extension or neck, a common type of said class being the porcelain knobs universally used with door latches and locks; and 15 my immediate object is to provide a cheap yet strong device which may be quickly applied to connect the two sections of the complete device—i. e., the knob proper and its

metallic neck. 20 Referring to the annexed drawings, Fig. knob, a neck, and my newly-invented fastenstraightened, as hereinafter more fully de-25 scribed. Fig. 2 is a cross-section of a complete knob on line x x of Fig. 1, and Fig. 3 a similar view on line z z of said Fig. 1. Fig. 4 is a perspective view of the metallic neck detached. Figs. 5 and 6 are sectional 30 views of an assembled knob and neck, the first named having the locking device in place, and the latter showing said device as straightened to lock together said neck and knob. In the construction thus far described 35 the neck is prevented from rotating in the

knob by longitudinal ribs, which enter corresponding slots, k, in the said knob. In Fig. 7 I have shown a knob and neck which are locked together by lugs m on the inner end 40 of the neck, which lugs are first entered in the knob-slots k, and then turned into undercut recesses b. The neck is then prevented from rotating by a locking wire of the form shown in Figs. 1 to 6, which is straight-45 ened and enters slots in the knob. Fig. 8 is

a detached perspective view of the lockingwire.

The knob proper is represented by the letter a, and may be made of any material now 50 known in the art, the only change required being the addition of the internal slots to receive the locking devices.

While the form shown in Fig. 7 is practicable, I prefer that shown in Figs. 1 to 6, as it

does not require the accurately-formed under- 55 cut slots b.

The letter c represents the metallic neck, having formed as an integral part thereof one or more longitudinal ribs, d, and having also near its inner end passages f, leading out- 60 ward on opposite sides from the central spindle-hole in the said neck.

e represents a piece of malleable-metal (preferably annealed) wire, square in crosssection, and formed as a bow, whose length, 65 when thus shortened, is about equal to the diameter of the neck c. When about to assemble a neck and knob, this bowed wire is entered in the opening f, and the neck is then entered in the knob, as shown in Figs. 1 70 and 5. The knob is then placed on a cupped block of lead or other suitable anvil. A set or punch, h, is dropped into the spindle-hole until it rests on the bowed wire. (See Fig. ure 1 is a longitudinal sectional view of a | 5.) A sharp blow on said set is then given, 75 which straightens wire e and forces its ends ing device in place ready to be swaged or outward into coincident chambers i, formed in the surrounding knob. (See Fig. 6.) When thus properly extended, the neck and knob are firmly locked together, and cannot be easily 80 disconnected or loosened.

> The bowed locking-wires may be cheaply produced from a continuous coil of wire, previously drawn to proper size and shape and annealed.

> Having thus described my invention, I claim—

1. In combination with a neck having lateral passages, substantially as described, and a knob whose central opening is provided 90 with lateral chambers coincident with said lateral neck-passages, a bow of annealed metal adapted to enter said lateral neck-passages, and capable of extension to enter said lateral knob-chambers, substantially as herein de- 95 scribed.

2. In combination with a knob having both slots k and chambers i, as described, a neck having ribs adapted to engage slots k, and lateral passages coincident with said chambers 100 i, and a bow of metal adapted to enter said lateral neck-passages, and capable of extension, to enter said coincident knob-chambers, as and for the object specified.

WILLIAM H. COMSTOCK.

Witnesses: TYLER J. HOWARD, FRANK H. ALLEN.