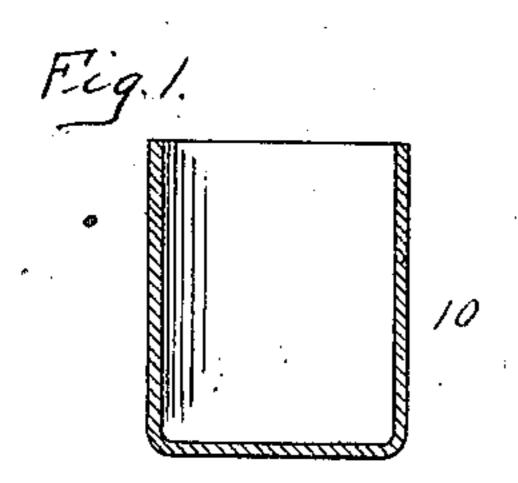
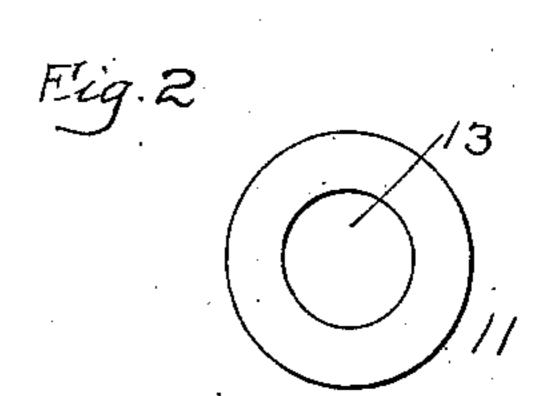
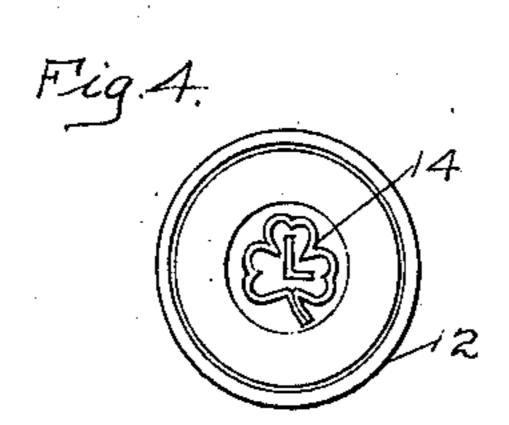
H. S. LOCKWOOD. THUMB KNOB FOR LOCKS AND LATCHES. APPLICATION FILED DEC. 3, 1909.

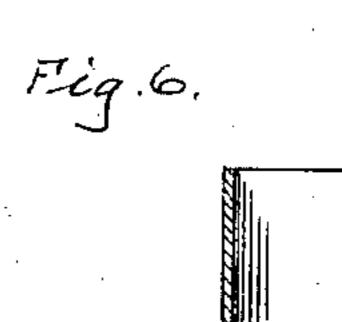
963,053.

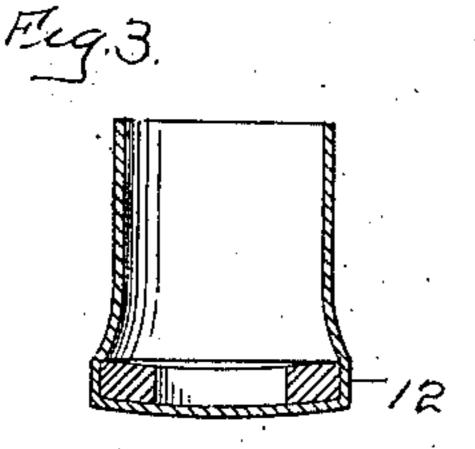
Patented July 5, 1910.

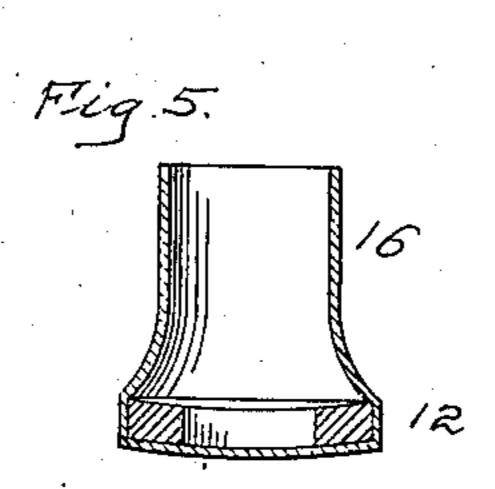


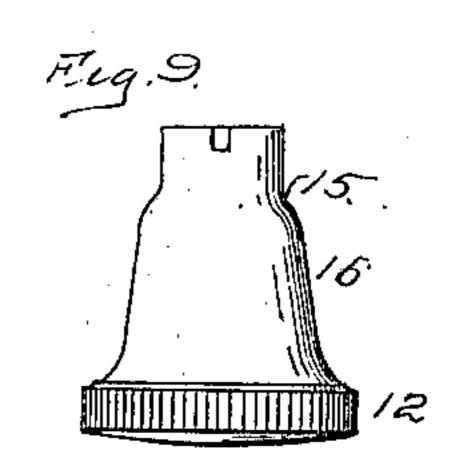


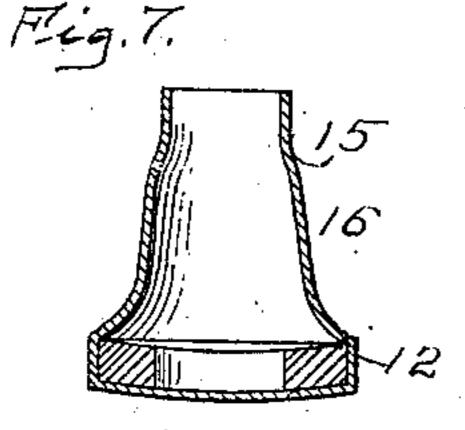


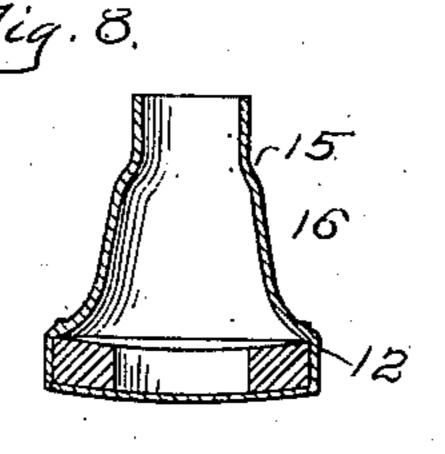












Henry S. Lockwood

BY

ATTORNEY

WITNESSES.

Ernst P. Wold. S.W. atherton.

UNITED STATES PATENT OFFICE.

HENRY S. LOCKWOOD, OF SOUTH NORWALK, CONNECTICUT.

THUMB-KNOB FOR LOCKS AND LATCHES.

963,053.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed December 3, 1909. Serial No. 531,179.

To all whom it may concern:

Be it known that I, Henry S. Lockwood, a citizen of the United States, residing at South Norwalk, county of Fairfield, State of Connecticut, have invented an Improvement in Thumb-Knobs for Locks and Latches, of which the following is a specification.

This invention has for its object to provide a simple and inexpensive thumb knob
adapted for general use and especially
adapted for use upon locks and latches,
which shall be made without seam or joint,
shall be strong and rigid and which shall
be simple and inexpensive to produce.

With these and other objects in view I have devised the simple and novel knob which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is a section of the blank as formed by the first operation; Fig. 2 an elevation of the disk detached; Fig. 3 a section of the partly formed knob after the second operation; Fig. 4 and end view corresponding therewith; Figs. 5, 6, 7 and 8 are sectional views illustrating respectively the third, fourth, fifth and sixth operations; and Fig. 9 is an elevation of the completed knob which may or may not be knurled, as shown.

My novel knob comprises a one-piece metallic shell and a disk over which the 35 shell is formed. 10 denotes the shell and 11 the disk. The shell is formed by cupping a blank of metal, after which the disk is inserted in the cup and the knob is completed by successive operations which close the 40 sides of the shell about the disk and impart to the shank of the knob any desired configuration. The disk is made of the necessary thickness to give any required width to the bearing portion of the knob, which is 45 indicated by 12. The disk may be of any preferred form, but I have shown it concavo-convex in order to give a convex contour to the face of the knob and may be provided with a central opening 13. This 50 opening enables me to impart to the face of the knob embossed ornamentation, as indicated by 14 in Fig. 4, after the disk is in

place. After the first operation, as shown by Fig. 1, the disk is dropped into the cup and the second operation is performed, as 55 shown by Fig. 3. This operation shapes the base of the shell to correspond with the contour of the disk, forms the bearing portion 12 of the knob and may or may not emboss ornamentation on the face of the knob.

The succeeding operations complete the configuration of the shank of the knob, which is indicated by 16.

A third operation is illustrated by Fig. 5, a fourth by Fig. 6, a fifth by Fig. 7 and a 65

sixth by Figs. 8 and 9.

It should be understood that the invention is not restricted to any special number of operations in producing the finished knob. For example, the rounded shoulder in the 70 finished knob, indicated by 15, which is partly produced in the fifth operation and is completed in the sixth operation, may be omitted if preferred, likewise the nurling of the finished knob.

The essential features of the invention are that a blank, which may be round, is first drawn to cup-shape as in Fig. 1, then the disk is inserted and then the sides of the cup are closed inward to secure the disk in 80 place and to form the bearing portion and shank of the knob.

Having thus described my invention I claim:

1. A knob comprising a one piece shell 85 having one end closed the other end being open and reduced to form a shank, and a disk resting against the wall of said closed end to form a rigid bearing portion, the reduced portion of said shank extending 90 partially over the exposed face of said disk to hold the latter in position.

2. A knob comprising a one piece shell having one end closed the other end being open and reduced to form a shank, and a 95 disk resting against the wall of said closed end to form a rigid bearing portion, the reduced portion of said shank extending partially over the exposed face of said disk to hold the latter in position, said disk being 100 provided with an opening to permit the formation of a depression in the wall of said closed end.

3. A knob comprising a one piece shell

having one end closed the other end being open and reduced to form a shank, and a concavo convex disk resting against the wall of said closed end to form a rigid bearing portion, the reduced portion of said shank extending partially over the exposed face of said disk to hold the latter in position, said disk being provided with an opening

to permit the formation of a depression in the wall of said closed end.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY S. LOCKWOOD.

Witnesses:

FRANK T. BRUNDAGE, EDWARD B. SMITH.