No. 841,284. PATENTED JAN. 15, 1907.

D. W. TOWER.

DEVICE FOR FASTENING KNOBS TO BOLTS.

APPLICATION FILED MAR. 9, 1906.

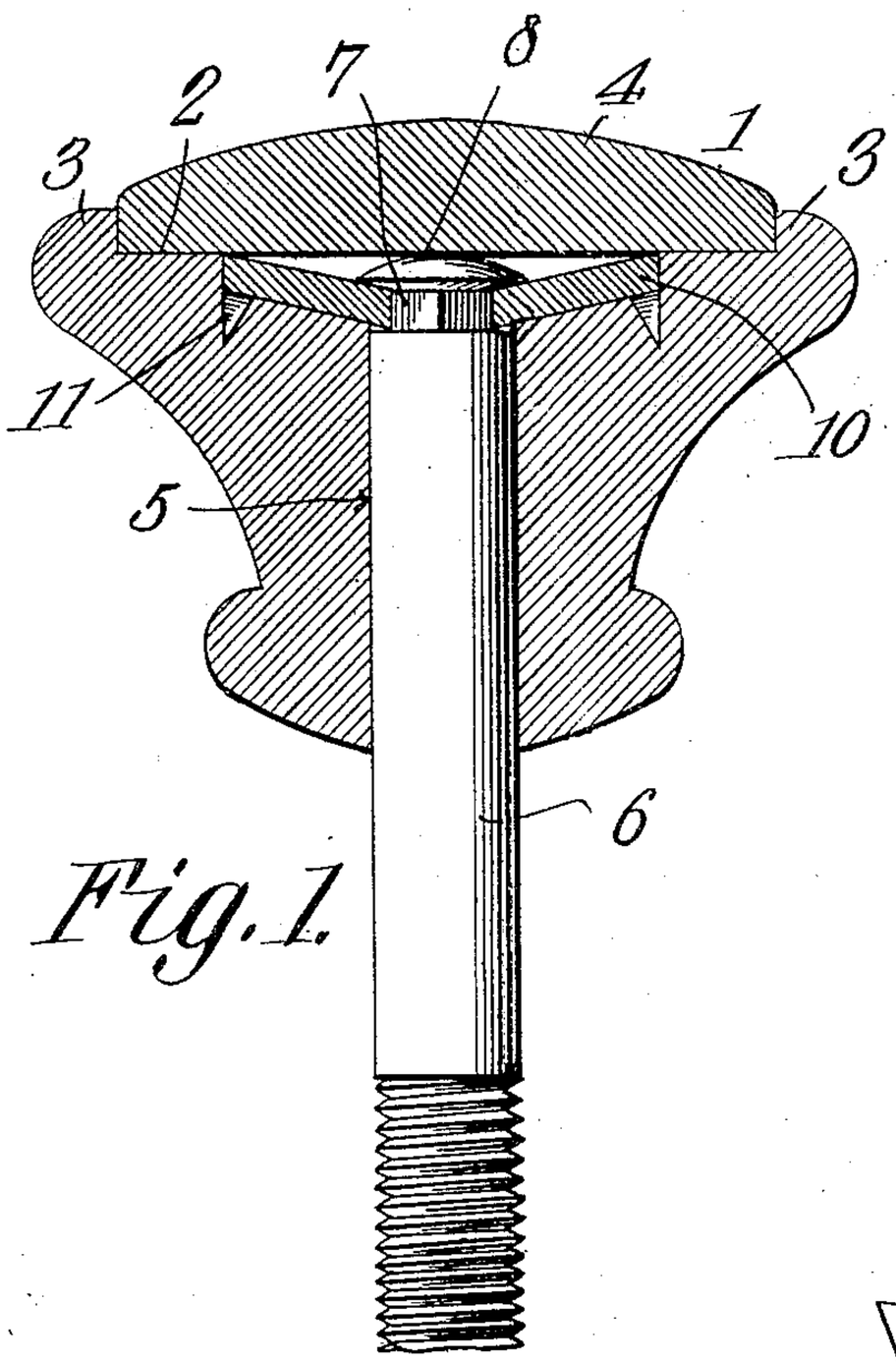

Fig. 1.

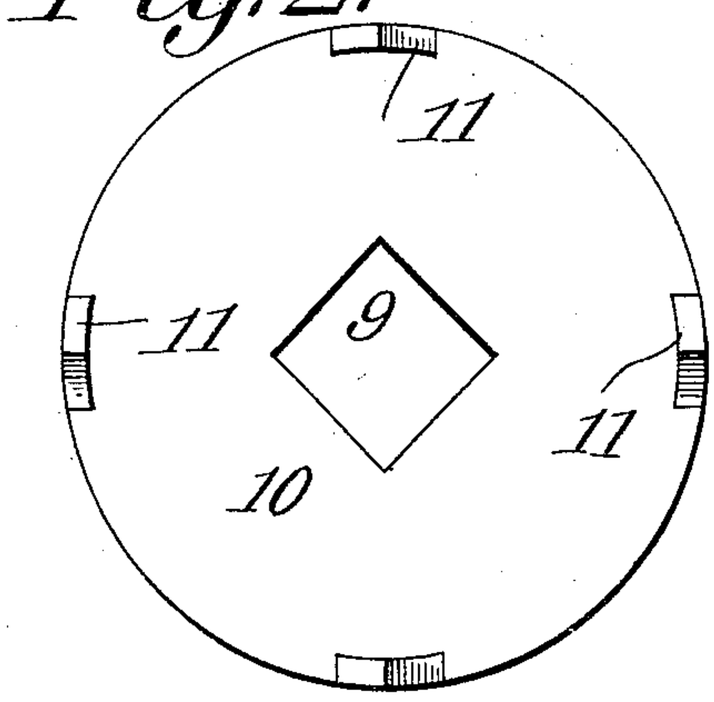

Fig. 2.

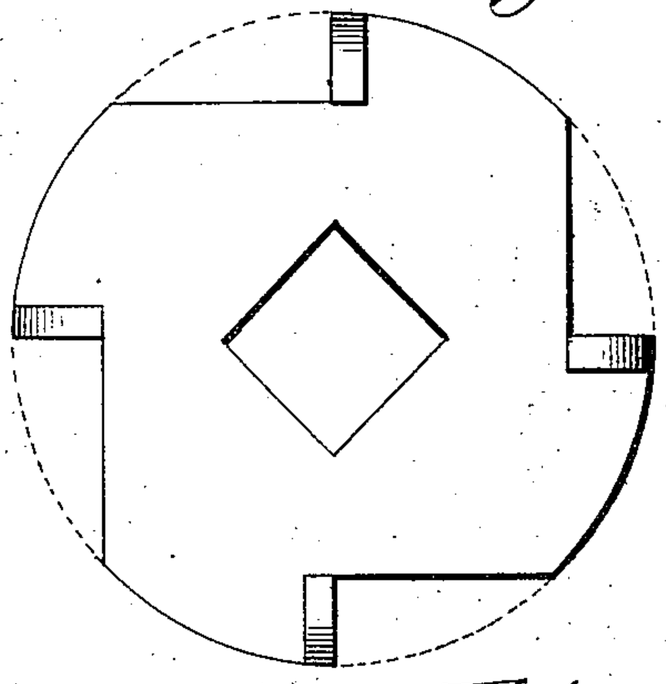

Fig. 3.

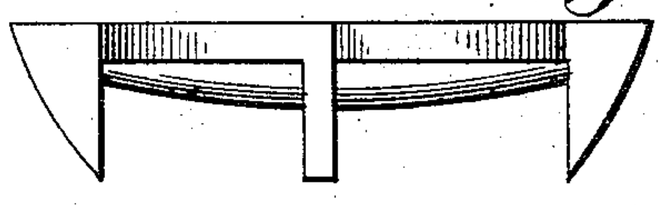

Fig. 4.

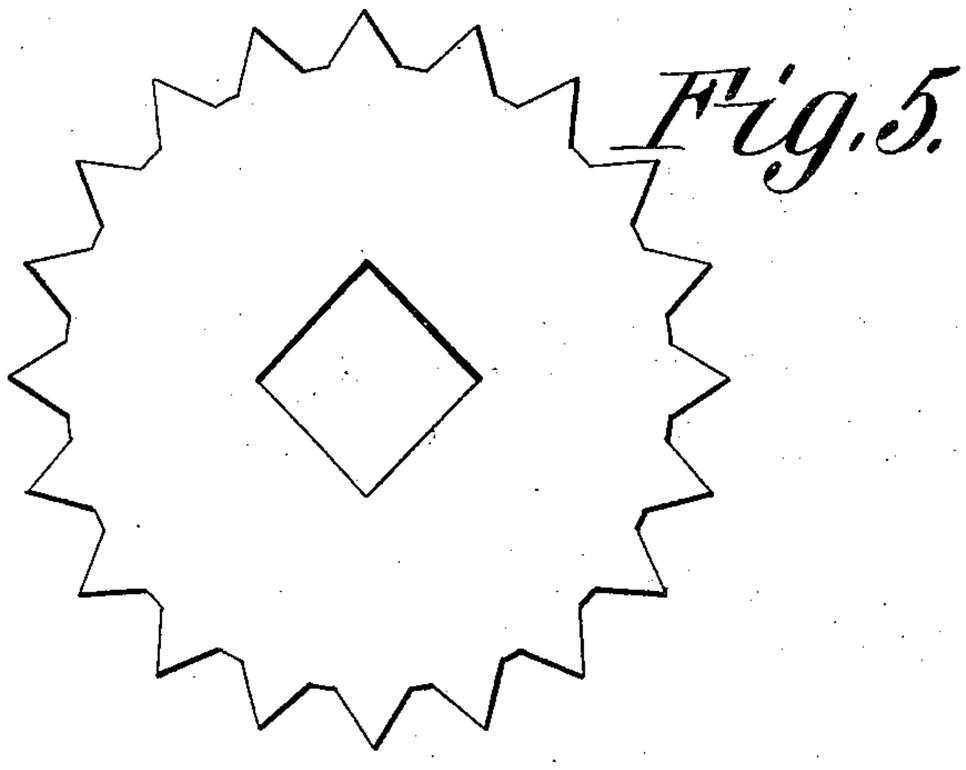

Fig. 5.

Fig. 6.

WITNESSES:

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DEVICE FOR FASTENING KNOBS TO BOLTS.

No. 841,284. Specification of Letters Patent. Patented Jan. 15, 1907.

Application filed March 9, 1906. Serial No. 305,157.

To all whom it may concern:

Be it known that I, DANIEL W. TOWER, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Devices for Fastening Knobs to Bolts, of which the following is a specification.

This invention relates to devices for fastening knobs to bolts, and more particularly to bolts or screws, such as those used upon mirrors, which employ wooden knobs.

The object of the invention is to provide simple, durable, and inexpensive means for rigidly connecting knobs to bolts or screws, and which means is concealed so that it will not detract from the appearance of the knobs.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings are shown the preferred forms of the invention.

In said drawings, Figure 1 is a longitudinal section through a knob and through the means for fastening the knob to a bolt, said bolt being shown in elevation. Fig. 2 is a bottom plan view of the disk used upon the bolt. Figs. 3 and 4 are plan and edge views, respectively, of a modified form of disk; and Figs. 5 and 6 are similar views of another modification.

Referring to the figures by numerals of reference, 1 is a wooden knob of any suitable contour, having a preferably circular recess 2 in the center of one end thereof, said end being surrounded by a flange 3. A cap 4 is adapted to be glued or otherwise fastened upon the knob and over the recess, the edge of the cap being overlapped by the flange 3. A longitudinal passage 5 extends through the knob to the center of the recess 2 and is adapted to receive a threaded bolt 6, having an angular portion 7, the end of which is upset, as shown at 8. This angular portion of the bolt fits snugly within a corresponding opening 9 in the center of a disk 10, having spurs 11 extending downward from its periphery, said spurs being formed integral with the disk.

In connecting the parts herein described the bolt 6 is inserted into the passage 5 and the angular portion thereof is placed within the opening 9 in disk 10, after which the end of said angular portion is upset, as shown at 8, so as to prevent the washer from being detached from the bolt. The spurs 11 are then driven into the knob so as to cause the disk to become seated tightly upon the inner wall of recess 2, and then the cap 4 is glued or otherwise permanently secured over the recess 2 and the parts contained therein. Independent rotation of the knob and bolt is thus prevented, and as the knob is engaged by the disk at points considerably removed from the bolt-opening in the knob it is apparent that when said knob is grasped and turned there will be little, if any, danger of its becoming split.

Instead of utilizing the disk (shown in Fig. 2) the modifications illustrated in Figs. 3 to 6 may be employed. In the form shown in Figs. 3 and 4 the spurs are produced by cutting into the periphery of the disk and then bending downward the flaps which are produced in this manner. As shown in Figs. 5 and 6, the disks can be provided with a series of radiating teeth or spurs which may be forced into the wall of recess 2. All of these various forms of disks can be utilized to produce the result desired, although the form illustrated in Figs. 1 and 2 is deemed the most desirable in view of its simplicity of construction and the readiness with which it may be placed in position.

It will be noted that all of the disks are concavo-convex in cross-section, so as to conform to the contour of the bottom of the recess 2. The deepest portion of this recess is at its center, so as to accommodate the end of the bolt above the center of the disk without necessitating the dishing or recessing of the inner surface of the cap 4.

I claim—

1. The combination with a knob having a recess; of a bolt extending through the knob and having an angular portion within the recess, a disk immovably mounted upon the angular portion and within the recess, said disk having spurs adapted to engage the knob.

2. The combination with a knob having a

recess; of a bolt extending through the knob and having an angular portion within the recess, a disk immovably mounted upon the angular portion and within the recess, said disk having spurs adapted to engage the knob, and means for concealing the disk.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL W. TOWER.

Witnesses:
GEORGE F. SINCLAIR,
CATHERINE M. MCCARTHY.