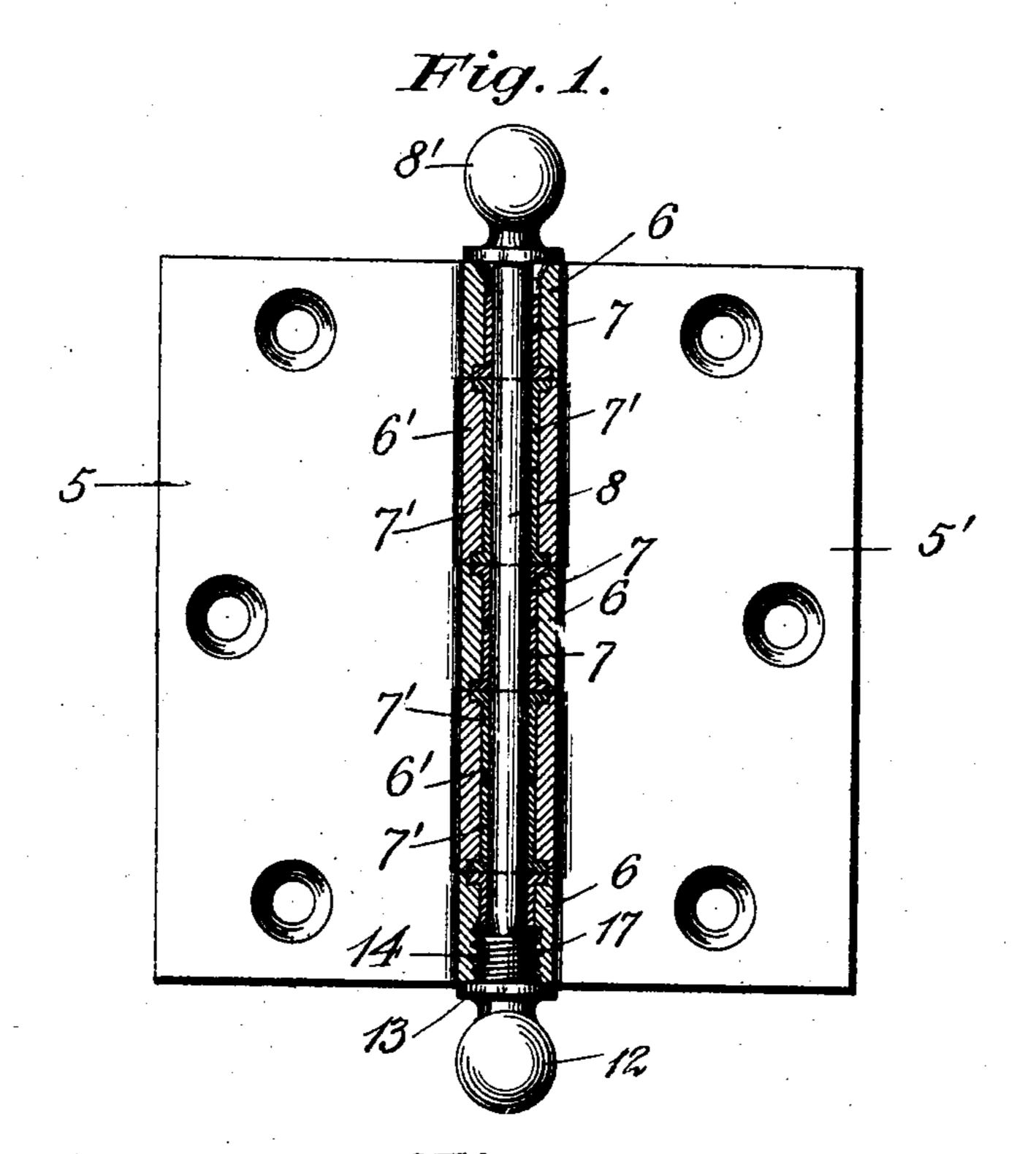
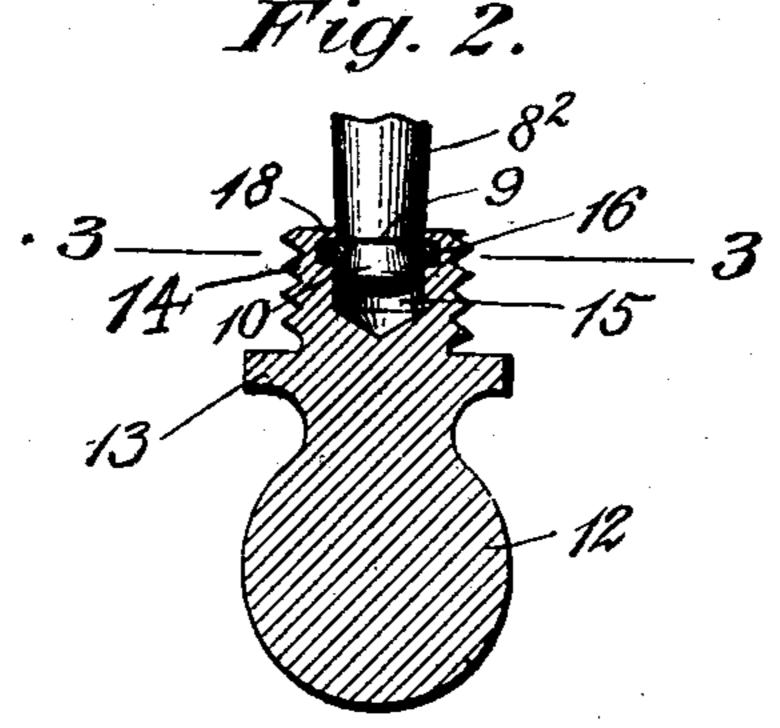
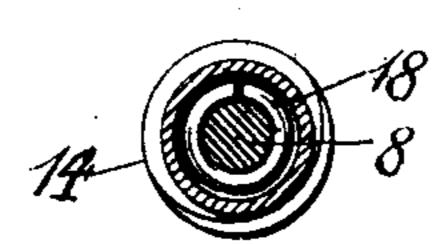
G. A. STARK. PINTLE RETAINER FOR HINGES. APPLICATION FILED JUNE 6, 1903.

NO MODEL.





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Witnesses: Chas I fahmely Frances E. Bhagett.

Inventor: George A. Stark

By mis Attorney

Mint Hand

UNITED STATES PATENT OFFICE.

GEORGE A. STARK, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY WORKS, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

PINTLE-RETAINER FOR HINGES.

SPECIFICATION forming part of Letters Patent No. 765,152, dated July 12, 1904.

Application filed June 6, 1903. Serial No. 160,350. (No model.)

To all whom it may concern:

Be it known that I, George A. Stark, a citizen of the United States, residing at New Britain, in the county of Hartford and State 5 of Connecticut, have invented certain new and useful Improvements in Pintle-Retainers for Hinges, of which the following is a specification.

My invention relates to pintle-retainers for 10 hinges, and has for its object the provision of an improved device of this character which will be simple in construction and reliable in operation.

A further object of the invention is the provision of a chambered hinge-tip provided with a pintle-retaining device seated in an annular groove thereof.

A further object of the invention is the provision of means for securing the pintle by 20 what may be termed an "end lock," as will be hereinafter described.

In the accompanying drawings, Figure 1 is a view in plan and section of a butt-hinge with my invention applied thereto. Fig. 2 is a lon-25 gitudinal vertical section of one of the ornamental tips of a hinge, showing my invention; and Fig. 3 is a transverse section on line 3 3 of Fig 2.

Like numerals designate similar parts

30 throughout the several views.

Referring to the drawings, the numerals 5 5' designate the leaves of a butt-hinge having knuckles 7 7' for the reception of a pintle 8, the latter having a knob or ornamental tip 8', 35 as shown in Fig. 1. At the end opposite said knob the pintle is reduced to form a conical or tapering portion 8², terminating in a shoulder 9, and below said shoulder is outwardly flared or inclined, as at 10, for a purpose here-40 inafter stated. (See Fig. 2.)

Designated by 12 is an ornamental knob or tip provided with a flange 13 and with an externally-threaded cylindrical shank 14, said shank having an inner chamber 15 and a cir-45 cular groove 16, shown adjacent to the end of said chamber, although it may be differently disposed, one of the end knuckles 6 of the hinge being internally threaded, as at 17, for

the reception of said shank. Disposed in the groove 16 is a split ring or band 18, which 50 when contracted may be readily inserted in said groove and will be prevented from escape by the shoulders of the tip on each side of the groove.

When the leaves of the hinge are assembled 55 with the knuckles in alinement, the chamber in the knob 12 will also be in alinement with the pintle-opening, and when the pintle is inserted its end opposite the knob 8' will enter said chamber and pass through and expand 60 the split ring 18, the latter immediately contracting around the reduced portion of said pintle and serving to retain it in position. Should it be desired to remove the pintle, the knob 8' is grasped and pulled, and the flaring 65 or wedge-like tip 10 will then expand the retaining-ring 18 within the groove 16, which is of sufficient diameter to enable this result to be accomplished, until the pintle is released, when said ring will immediately contract and 70 resume its normal position.

In constructions with which I am familiar the pintle has been retracted by fastenings located in the knuckles of the hinge and clips on the pintle. These old constructions are 75 more expensive to make and do not act as readily as could be desired. By locating the pintle-retainer in the detachable knob of the hinge a simple construction results and one that will operate effectually at the point where 80 most necessary.

Changes may be made in the form and proportions of the parts without departure from the invention, which is not restricted to the precise details shown and described.

Having thus described my invention, what I claim is—

1. A knob for hinges having a chamber in the part thereof which enters the knuckle, combined with a pintle-retainer mounted in 90 said chamber.

2. A knob for hinges having an externallythreaded and chambered shank for closing the end of the knuckle, said shank having a seat for a pintle-retainer.

3. The combination, with a knob having a

chambered shank and a groove of greater diameter than, and surrounding, the chamber in said shank, of a pintle-retainer seated in the groove; a hinge having knuckles; and a pintle having its end shaped to engage and be retained by said pintle-retainer.

4. The combination, with a hinge, one of whose knuckles is threaded, of an internally-grooved and chambered knob, having an ex-

grooved and chambered knob, having an external thread for engaging the thread of said knuckle; a split ring seated in the groove of

the knob; and a headed pintle having an outwardly-flared and reduced tip and a shoulder adjacent to said tip, substantially as and for the purpose specified.

In testimony whereof I affix my signature in

presence of two witnesses.

GEO. A. STARK.

Witnesses:

E. A. Moore,

B. Hubert.