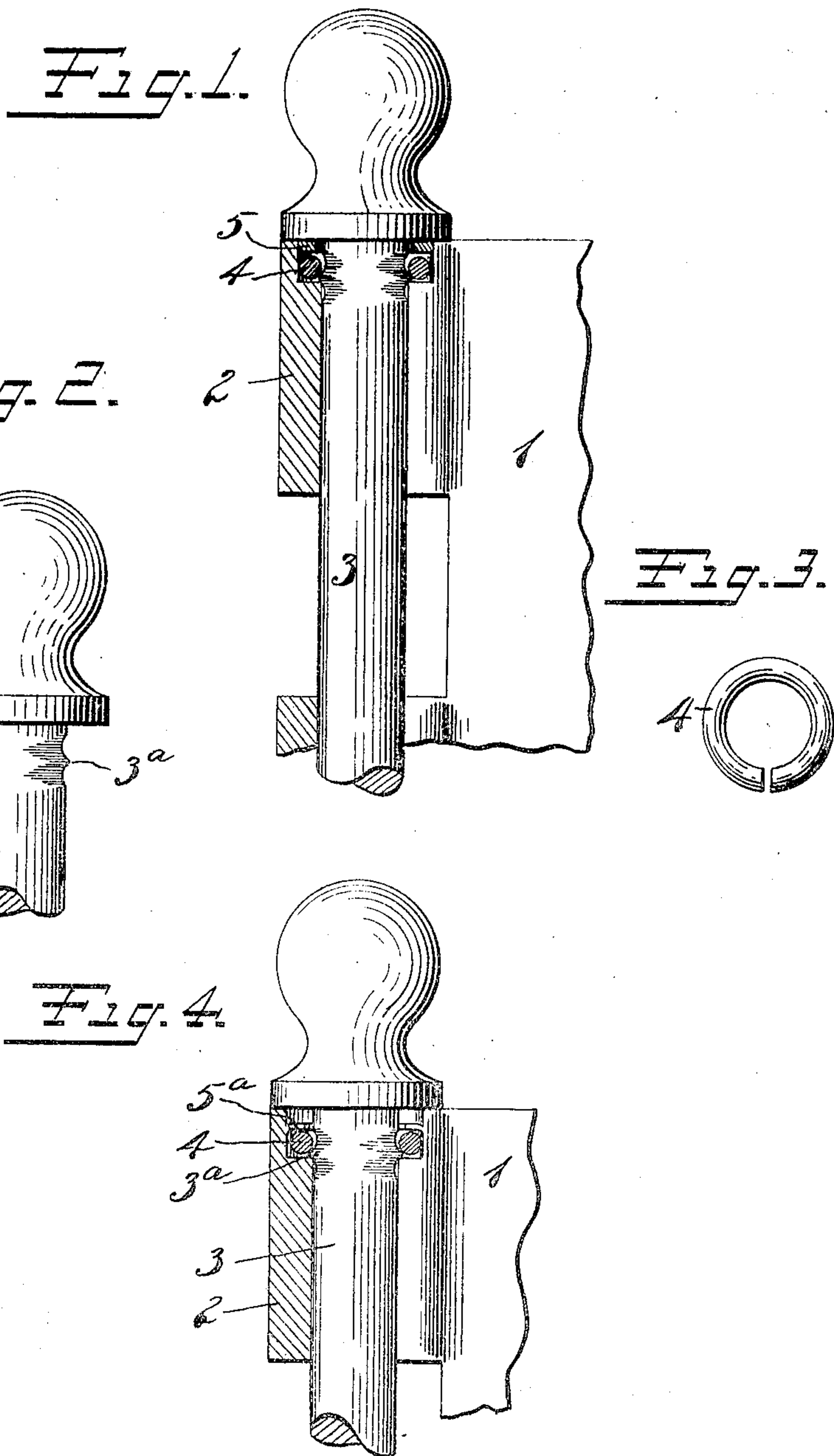


No. 807,680.

PATENTED DEC. 19, 1905.

B. W. LEWIS.  
PINTLE RETAINER FOR HINGES.  
APPLICATION FILED OCT. 6, 1904.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## PINTLE-RETAINER FOR HINGES.

No. 807,680.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed October 6, 1904. Serial No. 227,444.

*To all whom it may concern:*

Be it known that I, BURTON W. LEWIS, a citizen of the United States, residing at Plainville, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Pintle-Retainers for Hinges, of which the following is a full, clear, and exact description.

My invention relates to improvements in hinges, and particularly to what is termed a "pintle-retaining" device.

The object of the invention is to provide a simple, inexpensive, and effective means for securely retaining a pintle in place to prevent it from working up or out of its proper position.

In the accompanying drawings, Figure 1 is illustrative of a portion of a hinge or butt showing part of the hinge-knuckle and retainer in section and a portion of the spindle in elevation. Fig. 2 represents the upper end of a pintle detached. Fig. 3 is a plan view of a detail of construction. Fig. 4 is a view similar to that of Fig. 1 and illustrating a modification.

1 represents a portion of a hinge-leaf.

2 is the knuckle.

3 is the pintle. Near the upper end of the pintle I provide a projection, preferably in the form of an annular bead 3<sup>a</sup>, which stands beyond the surface of the pintle, as best seen in Fig. 2. This projection or bead may be formed in any desired way. In the end of the outer hinge-knuckle I provide a cavity or recess of suitable size to receive a split ring 4 or equivalent means. The inside diameter of the split ring 4 is approximately the diameter of the pintle 3, so that when the pintle is slipped into place it will offer a slight resistance to the passage of the projection 3<sup>a</sup>. This split ring 4 may be held in place in the recess in the knuckle 2 in any desired manner—for example, by a separate overstanding washer 5, such as shown in Fig. 1, or by an integral overstanding shouldered portion 5<sup>a</sup>, such as shown in Fig. 4. It will be noted that the projection 3<sup>a</sup> on the pintle is formed thereon at such a point as to engage underneath the split ring 4 when the pintle is in its home position. Since the retainer 4 is held against longitudinal movement in the knuckle 2, it is obvious that it will resist the working out of the pintle.

It is necessary in the operation of the device that the washer 5 or the integral shoulder 5<sup>a</sup> should have a passage slightly larger than the normal diameter of the pintle and sufficiently large to permit the free passage therethrough of the projection 3<sup>a</sup> on said pintle.

What I claim is—

1. In a hinge, a knuckle recessed at one end, a yielding pintle-retaining device located therein, means for preventing the accidental detachment of said retaining device, a pintle having a lateral projection thereon extending beyond the surface of the pintle and arranged to coact with said retaining device.

2. In a hinge, a knuckle having an annular recess in the end thereof, an annular yielding pintle-retaining device arranged therein, means to prevent the accidental detachment of said retaining device, a pintle having a lateral projection thereon arranged to coact with said yielding retaining device, the entrance to the knuckle being enlarged to form a clearance-passage for said lateral projection on the pintle, substantially as described.

3. In a hinge, a knuckle having an annular recess in the outer end thereof, a split ring located therein, means for holding said split ring in place but leaving it free to expand and contract, a pintle having a lateral projection thereon extending beyond the bearing-surface of said pintle and arranged to coact with said split ring and a clearance-passage at the entrance to said knuckle to admit of the free passage of said projection.

4. In a hinge, a knuckle having an annular recess in the outer end thereof, a split ring located therein, means for holding said split ring in place but leaving it free to expand and contract, a pintle having an annular lateral projection thereon extending beyond the surface of said pintle and arranged to coact with said split ring and a clearance-passage at the entrance to said knuckle to admit of the free passage of said annular projection.

Signed at New Britain, Connecticut, this 21st day of September, 1904.

BURTON W. LEWIS.

Witnesses:

WILBUR E. DOANE,  
H. P. CARTER.