No. 636,332. Patented Nov. 7, 1899.

C. GLOVER.

HINGE.

(No Model.) (Application filed Sept. 6, 1899.)

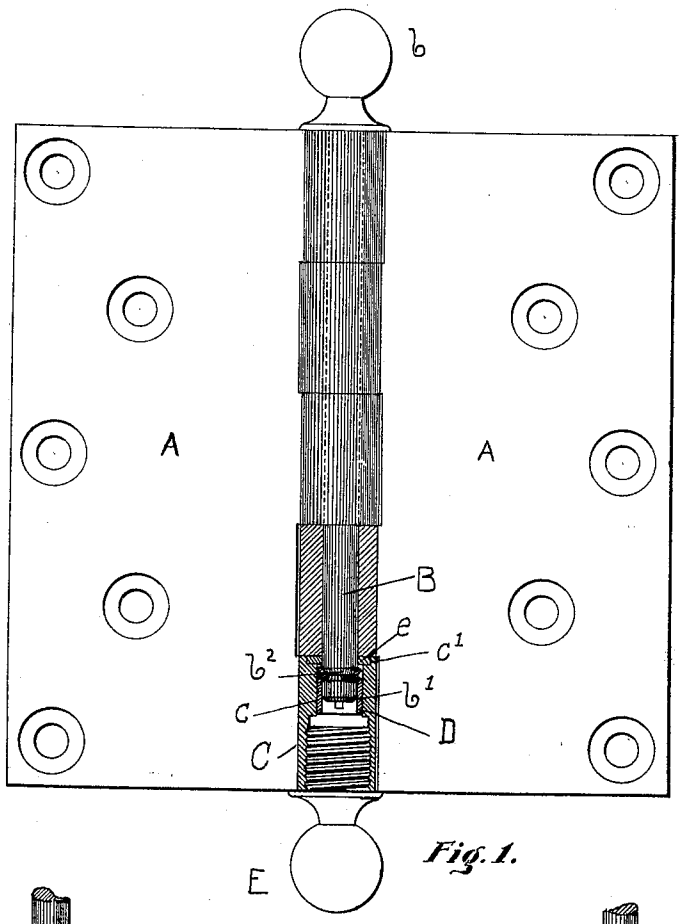


Fig. 1.

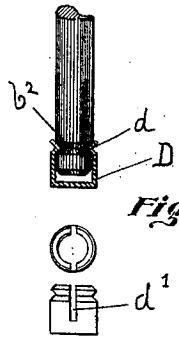


Fig. 2.

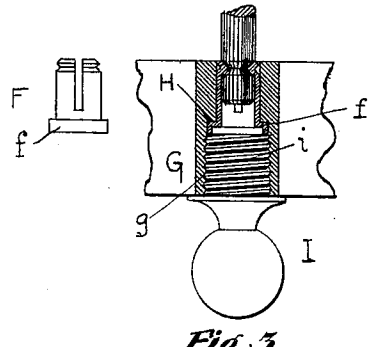


Fig. 3.

Witnesses.

Irwin Davis

Jenny J. Haugle.

Inventor:

Charles Glover.

BY A. E. Hart

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES GLOVER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE P. & F. CORBIN, OF SAME PLACE.

HINGE.

SPECIFICATION forming part of Letters Patent No. 636,332, dated November 7, 1899.

Application filed September 6, 1899. Serial No. 729,621. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GLOVER, a citizen of the United States, and a resident of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

My invention relates to that class of devices which are intended to secure the pintle of a hinge against accidental displacement and is of the class of devices described and claimed in my applications for Letters Patent of the United States, filed February 23, 1899, Serial No. 706,615, and June 23, 1899, Serial No. 721,542.

The object of the within-described invention is to provide means for accomplishing the above result; and it consists in a clip located in a socket in one member of the hinge to receive the end of the pintle, the wall of the clip being partially severed to give it the necessary elasticity to be sprung over the larger part of the pintle and contracted again into a suitable groove. The means by which this object is accomplished are shown in the accompanying drawings, in which—

Figure 1 shows one form of my invention embodied in a hinge. Fig. 2 is a detail of the clip shown in Fig. 1. Fig. 3 is a modified form of the clip.

Referring to the drawings, A A denote the leaves of an ordinary butt or hinge embodying my invention.

B is a pin headed at one end *b* and slightly beveled at the opposite end, as shown at *b'*, to enable it to be readily forced into the spring-clip, the lower end of the pin being grooved, as at b^2. A recess *c* is formed in knuckle C and is preferably enlarged at the top *c'* to accommodate a washer *e*. In the recess is located a clip D, having an inturned lip *d* formed at one end, reducing the diameter of the opening to approximately the diameter of the bottom of the groove b^2, the clip being split throughout a part of its length, as at *d'*, forming a spring top.

E is a tip attached to the bottom of the hinge to give it a finished appearance.

In assembling a hinge made according to my invention the clip D is placed in the recess *c* and held therein by the washer *e*. The two leaves of the hinge are then put together so that the holes in the knuckles will register, and the pin is inserted, its lower end being forced into the clip, which is expanded until the lip *d* enters the groove b^2. By this construction the pin is positively held against accidental displacement, but can be readily removed by hand. The washer *e* for holding the clip in the socket of the knuckle is not essential, although it is the most desirable form of construction.

In Fig. 3 of the drawings the clip F is a modified form of the clip shown in Figs. 1 and 2 and has a shoulder *f* formed at one end. The hole *g* through the knuckle G is enlarged at the lower end, having the shoulder H, against which the shoulder on the clip rests. The clip rests on and is held in position by the threaded shank of the knob I. When a clip of this kind is used, it is inserted in the bottom of the knuckle, the split part of the clip being positioned so as to receive the end of the pin when the hinge is assembled and is held in place by the knob I. The interengaging shoulders on the clip and the knuckle serve to prevent the removal of the clip when the pin is removed.

I claim as my invention—

1. In loose-pin butts, a means for securing the pin against accidental displacement, comprising a clip located in one of the knuckles, and a shoulder located in the path of outward movement of the clip, said clip being split through part of its length and having an opening reduced in diameter.

2. The combination in loose-pin butts with the leaves, knuckles, and a pin circumferentially grooved near one end, of a spring-clip located in a socket in one of said knuckles, said clip comprising a ring split through part of its length, and having an inturned lip adapted to enter the groove on the pin when the parts are assembled.

3. In loose-pin butts, the leaves, the pin circumferentially grooved near one end, a clip comprising a ring split through part of its length, located in one of the knuckles to receive and hold said pin against accidental displacement, and a washer located in the socket to retain the clip in position.

4. The combination in a butt, with the

leaves and a pin circumferentially grooved near one end, of a spring-clip located in a socket in one of the knuckles, said clip having a shoulder coacting with a shoulder in the knuckle to prevent the removal of the clip during the operation of removing the pin.

5. In loose-pin butts, a spring-clip for holding the pin against accidental displacement, said clip being split through part of its length, and having an inturned lip at one end and a shoulder at the opposite end, as shown and described.

CHARLES GLOVER.

Witnesses:
GEO. E. CHRIST,
W. G. BANCROFT.