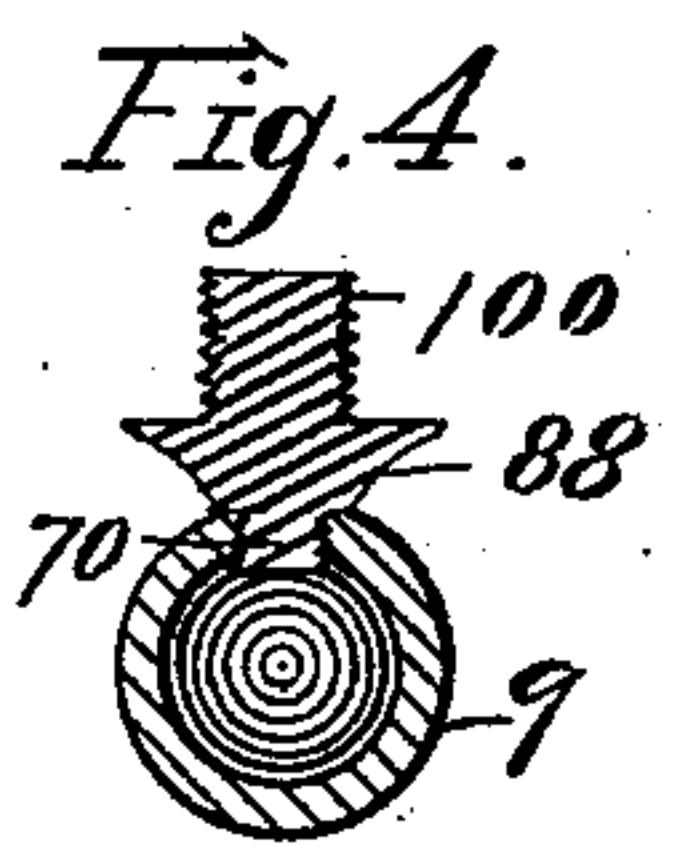
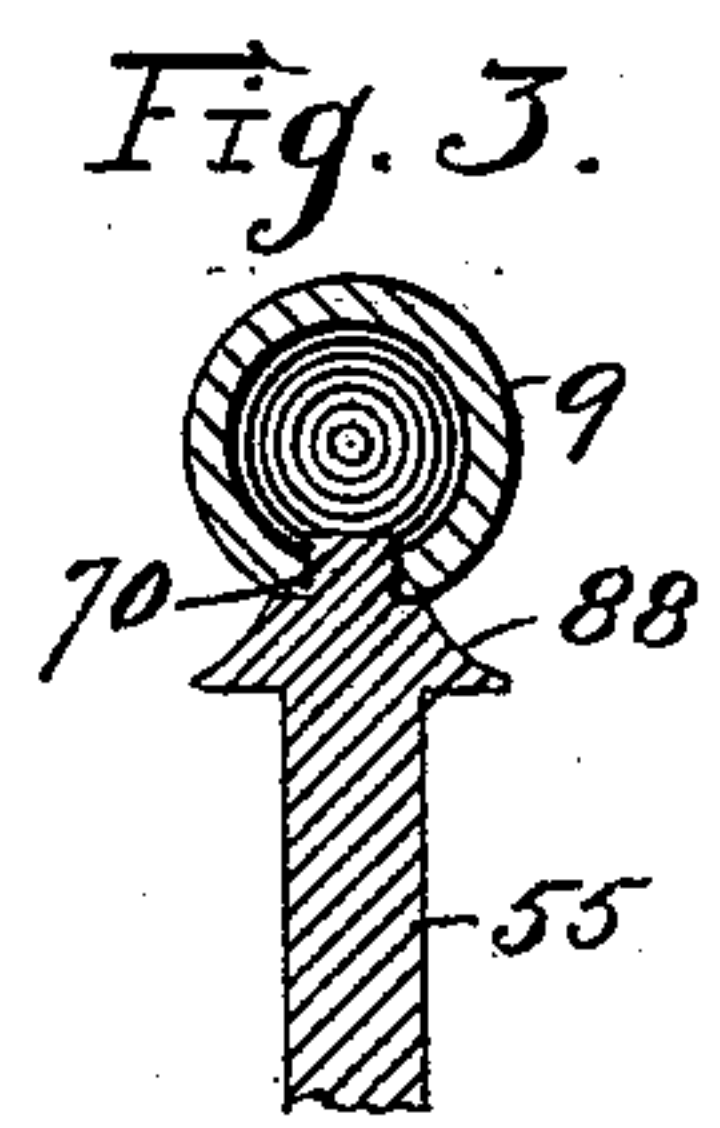
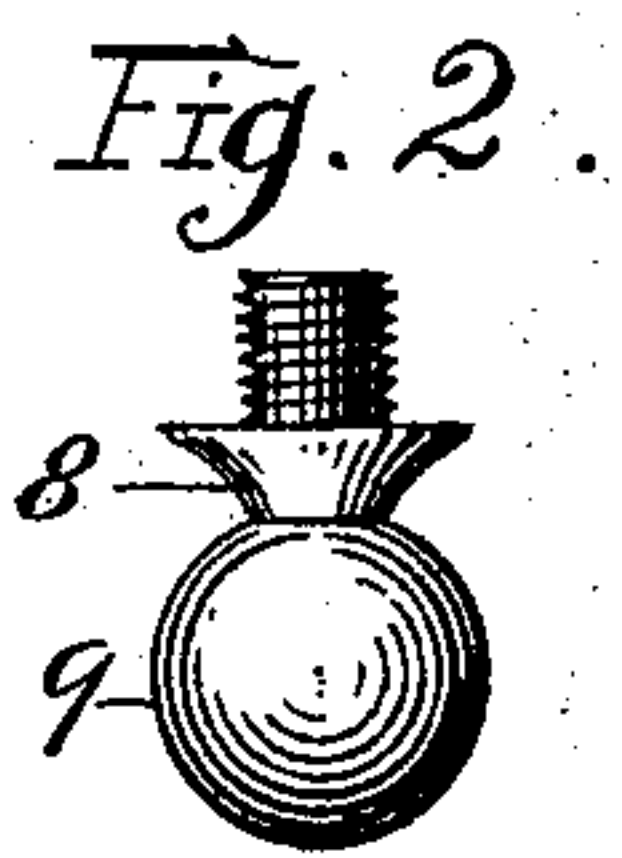
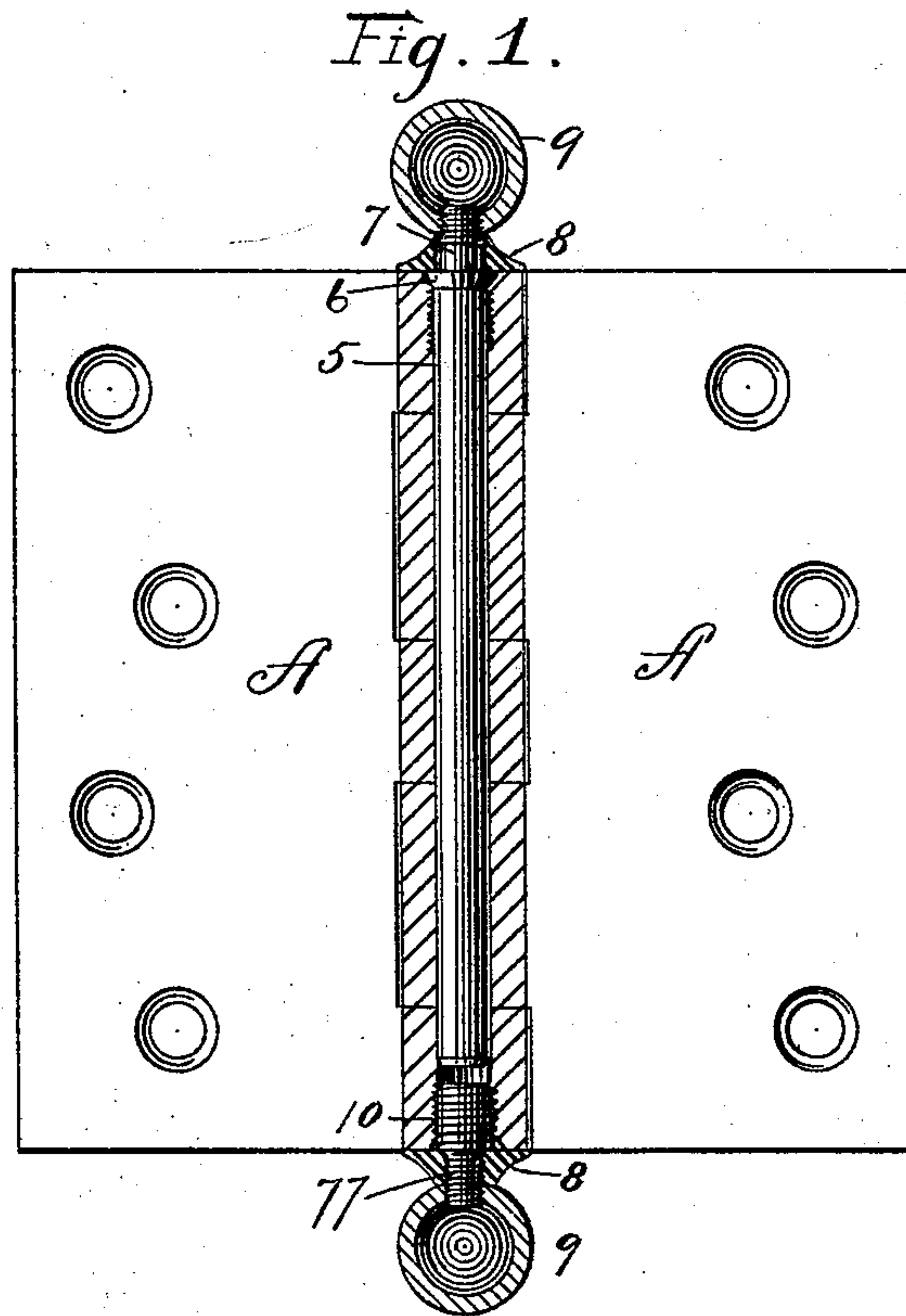


(No Model.)

C. GLOVER.
BUTT HINGE PIN AND TIP.

No. 538,907.

Patented May 7, 1895.



Witnesses
A. W. Stipes
F. H. Griswold.

Inventor
Charles Glover
By James Shepard
Atty.

UNITED STATES PATENT OFFICE.

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

BUTT-HINGE PIN AND TIP.

SPECIFICATION forming part of Letters Patent No. 538,907, dated May 7, 1895.

Application filed April 27, 1894. Serial No. 509,172. (No model.)

To all whom it may concern:

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

My invention relates to improvements in butt pins and tips for attachment to ordinary butt knuckles, and the objects of my improvement are simplicity and economy in construction and particularly to construct the ball portion of the tip of sheet metal.

In the accompanying drawings, Figure 1 is a sectional view of a butt or hinge, together with my pin and tips applied thereto, the pin and tip screws being in elevation. Fig. 2 is a side elevation of the lower tip. Fig. 3 is a sectional view of a pin and tip in a somewhat modified form, and Fig. 4 is a corresponding view of the lower tip to accompany said pin.

A A designate the leaves of a butt or hinge for which any ordinary form of butt or hinge may be substituted. 5 designates the pintle or pin having at its upper end a small shoulder 6 which is formed thereon in an upsetting or heading machine, and above said shoulder a tenon 7, the upper end of which is screw threaded. Upon this tenon 7, I place the tip base 8 with its under side pressed against the shoulder 6 of the pin. The ball portion 9 of the tip is made hollow by striking it up from sheet metal and is threaded at its mouth or opening to fit the threaded end of the tenon 7, so that by screwing said ball portion of the tip firmly upon the upper end of the pin, the tip is complete as shown. The lower tip is constructed of the same two parts 8 and 9, but instead of being fastened upon the pin 5 they are fastened upon the tip screw 10, one end of which has a reduced tenon or neck 77 which is threaded on its end, the tip base being first placed thereon and resting against the shoulder formed at the junction of the screw 10 and tenon 77. The ball part 9 of the tip is then screwed on to hold them in place as shown, the tip being screwed into the end knuckle of one of the leaves. This form is particularly desirable when the tip is to be made of brass or bronze metal.

Where the tip base is on the pintle as at the upper part of Fig. 1, and in Fig. 3, that portion of the pintle which projects from the broad side of said tip base is the shank of the tip which enters the knuckle and by means of which the tip is secured to the knuckle. Where the tip base is on the screw as at the lower part of Fig. 1, and as in Figs. 2 and 4 that portion of said screw which projects from the broad side of said tip base is the shank of the tip which enters the knuckle and by means of which the tip is held in place.

Figs. 3 and 4 show a modification which is more particularly designed for an iron or steel tip and in which the tip base 88 is formed directly upon the end of the pin 55 by means of an upsetting or heading machine and on the end of said tip base is a screw threaded tenon 70 which receives the ball portion 9 of the tip which is firmly screwed thereon as before described. In Fig. 4 the tip screw 100 is in like manner formed with the tip base 88 headed or upset thereon and provided with a like threaded tenon 70 upon which the ball portion 9 of the tip is firmly screwed.

I am aware that a prior patent shows and describes a hinge leaf having a pintle socket or knuckle at each end with integral screw threaded shanks projecting therefrom, a pintle extending through said knuckles and their shanks, and detachable caps, internally threaded, which caps are screwed upon the knuckle-shanks over the ends of the pintle, and the same is hereby disclaimed.

By my improvements I divide the tip at its narrow neck into two parts, namely the base portion and a hollow ball portion, whereby I am enabled to cheaply construct these tips by striking up the ball portion from sheet metal and finishing the tip in any manner desired, and to construct them separately from the butt leaves and knuckles so as to be applicable to ordinary butt knuckles.

I claim as my invention—

1. The herein described tip for attachment to ordinary butt knuckles consisting of the attachable and detachable tip base, a shank projecting from the broad side of said tip base for attaching it to the butt knuckle, a screw threaded tenon projecting from the smaller

end of said tip base and the hollow sheet metal ball portion of the tip screwed upon said tenon, substantially as described and for the purpose specified.

- 5 2. The herein described butt tip consisting of the combination of the screw or pin one portion of which forms the shank by means of which the tip is secured to the butt knuckle, a shoulder on said screw or pin at the outer
10 end of said shank, a screw threaded tenon projecting from said shoulder, the hollow sheet

metal ball portion of the tip fitted to said tenon and the perforated tip base with said tenon extending through its perforation and the broad side of said tip base seated on said shoulder while said ball portion is firmly screwed against its opposite side, substantially as described and for the purpose specified. 15

CHARLES GLOVER.

Witnesses:

A. H. GAMERDINGER,

W. P. HOOKER.