

(No Model.)

P. BOLD.
THILL COUPLING.

No. 550,155.

Patented Nov. 19, 1895.

Fig. 1.

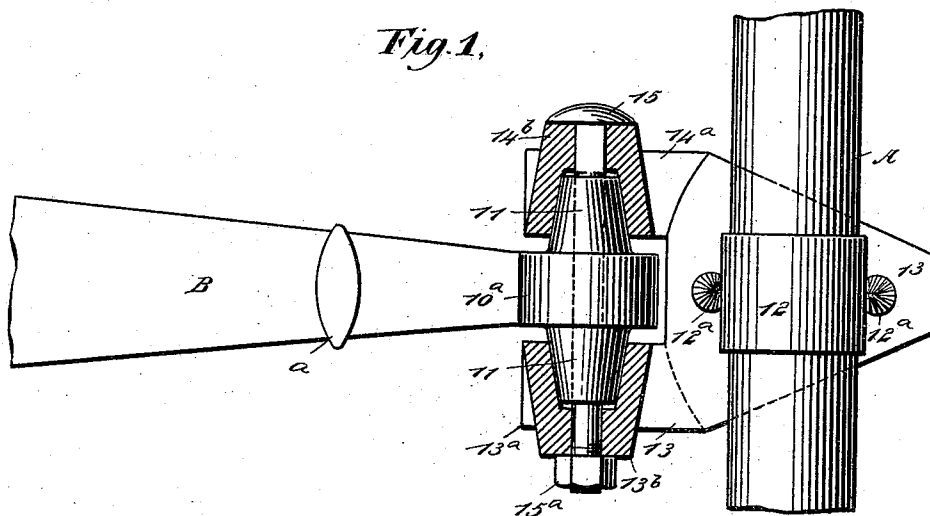


Fig. 2.

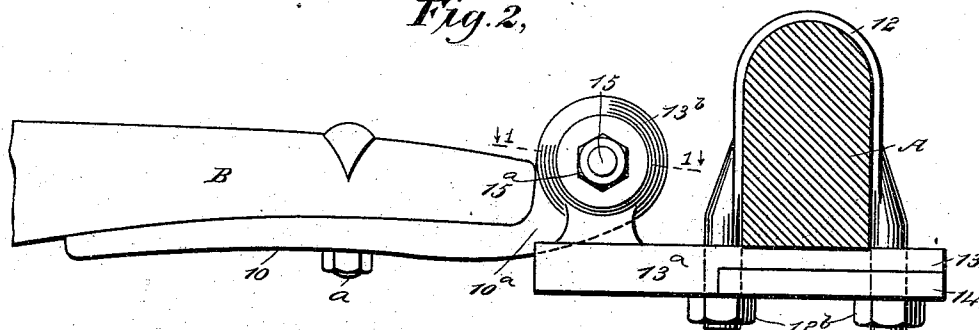
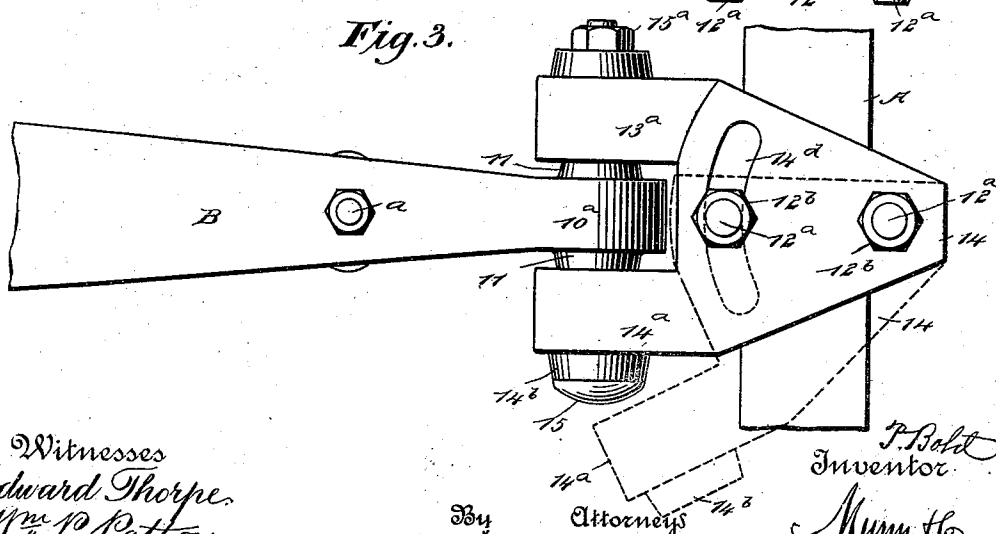


Fig. 3.



Witnesses
Edward Thorpe
Wm. L. Patton

By

Attorneys

P. Bold
Inventor
Mum & Co

UNITED STATES PATENT OFFICE.

PETER BOLD, OF WOODBOURNE, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 550,155, dated November 19, 1895.

Application filed May 15, 1895. Serial No. 549,441. (No model.)

To all whom it may concern:

Be it known that I, PETER BOLD, of Woodbourne, in the county of Sullivan and State of New York, have invented a new and Improved Thill-Coupling, of which the following is a full, clear, and exact description.

This invention relates to an improvement in that class of thill-couplings in which the thill is provided with two oppositely-projecting trunnions respectively received in sockets carried by clip-plates, which are generally two in number and which have movement that will increase or diminish the distance between the sockets, so as to regulate the degree of pressure which is applied to the trunnions.

The object of my invention is principally to so improve this construction that it will be possible to effect this adjustment of the sockets without causing the clip-plate, which is directly adjacent to the axle, to have sliding movement thereon and thereby scratch or mar the axle. This end I attain by a peculiar construction of the clip and plates, whereby the upper clip-plate is held rigidly against the under side of the axle, and whereby the lower clip-plate moves on the upper clip-plate to effect that adjustment, which has heretofore been effected by the movement of both plates to the detriment of the finish of the axle, as will more fully appear hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 represents a plan view of my invention, parts being sectioned on the line 1 1 of Fig. 2. Fig. 2 represents a side elevation of the coupling, and Fig. 3 is a bottom plan thereof.

In carrying out my invention the axle A is supplied with a clip 12 of the usual construction, having its terminals 12^a screw-threaded and provided with nuts 12^b. Held by the terminals 12^a of the clip 12 are the clip-plates 13 and 14. The clip-plate 13 is substantially triangular in form, and has at its left forward corner an extension 13^a, from which a pedestal rises carrying a socket 13^b, the said socket having a tapering interior bore contiguous to a regularly cylindrical interior bore, the lat-

ter being at the outer side and axially coincident to the tapering bore. The clip-plate 13 is also formed with two rounded openings respectively and snugly receiving the terminals 12^a of the clip 12, so that the said plate 13 is rigidly mounted on the clip, and by means of the nuts 12^b held at the under side of the axle A, so as to be incapable of any movement thereon.

The extension 13^a of the plate 13 is given a thickness equal to twice that of the main portion of the plate, and this thickness forms a shoulder at the rear lower portion of the projection 13^a, which is arranged to snugly engage the front portion of the plate 14, and this shoulder, as well as the front portion of the plate 14, is curved, so as to permit the plate 14 to move in and out of engagement with the shoulder, as shown by dotted lines in Fig. 3. This movement of the plate 14 is effected by providing the rear portion of said plate with a rounded opening receiving the rear terminal of the clip 12 and by providing the forward portion of the plate 14 with an arc-shaped slot 14^a, which receives the forward terminal of the clip, and which thereby permits the plate 14 to swing on an axis existing at the rear terminal of the clip. It will be observed that this swinging of the plate 14 is independent of the plate 13, the plate 14 being the lower plate and having a projection 14^a, which is a duplicate of the projection 13^a, and has a rising pedestal carrying a socket 14^b, the interior construction of which is similar to that of the socket 13^b. The projection 14^a has an upwardly-extended thickened portion, formed also with a shoulder, which is curved to conform to the curvature of the front edge of the plate 13, so as to permit the said shoulder of the thickened portion 14^a to move freely on the curved front edge of the plate 13.

The thill B is provided with a strap 10, which is bolted to the under side of the thill by means of the usual device *a*, and which has its rear portion projected upwardly to a slight degree and rounded. This upwardly-projected and rounded portion of the strap 10 is provided with transversely-aligned and oppositely-projected trunnions 11, which are respectively fitted within the tapering sock-

ets 13^a and 14^a and which are provided with an axially coincident bore passing completely through them. This bore of the trunnions 11 receives a bolt 15, which passes also through 5 the regularly cylindrical portions of the sockets 13^a and 14^a and which is provided with a head and with a nut 15^a, whereby it may be held in place and whereby also the plates 13 and 14 are held at the proper relative position, so that the trunnions will be snugly 10 mounted. It will be seen that by means of this construction as soon as the trunnions become worn by friction and are thus made loose the plates may be moved together by 15 means of the bolt 15 and its nut 15^a. It will also be seen that this movement is alone accomplished by the lower clip 14 and that the clip-plate 13 is held immovable on the axle. Having thus described my invention, I

claim as new and desire to secure by Letters 20 Patent—

A thill coupling, comprising the combination of a clip, an upper clip plate having two openings respectively and snugly receiving the terminals of the clip and having also a 25 socket, a lower clip plate pivotally mounted on one terminal of the clip and having an arc-shaped slot movable on the remaining terminal, the lower clip plate also having a socket co-operating with the upper clip plate, 30 and a thill strap having oppositely projected and transverse trunnions respectively mounted in the sockets of the upper and lower clip plates, substantially as described.

PETER BOLD.

Witnesses:

WILLIAM W. SMITH,
PETER H. NOW.