

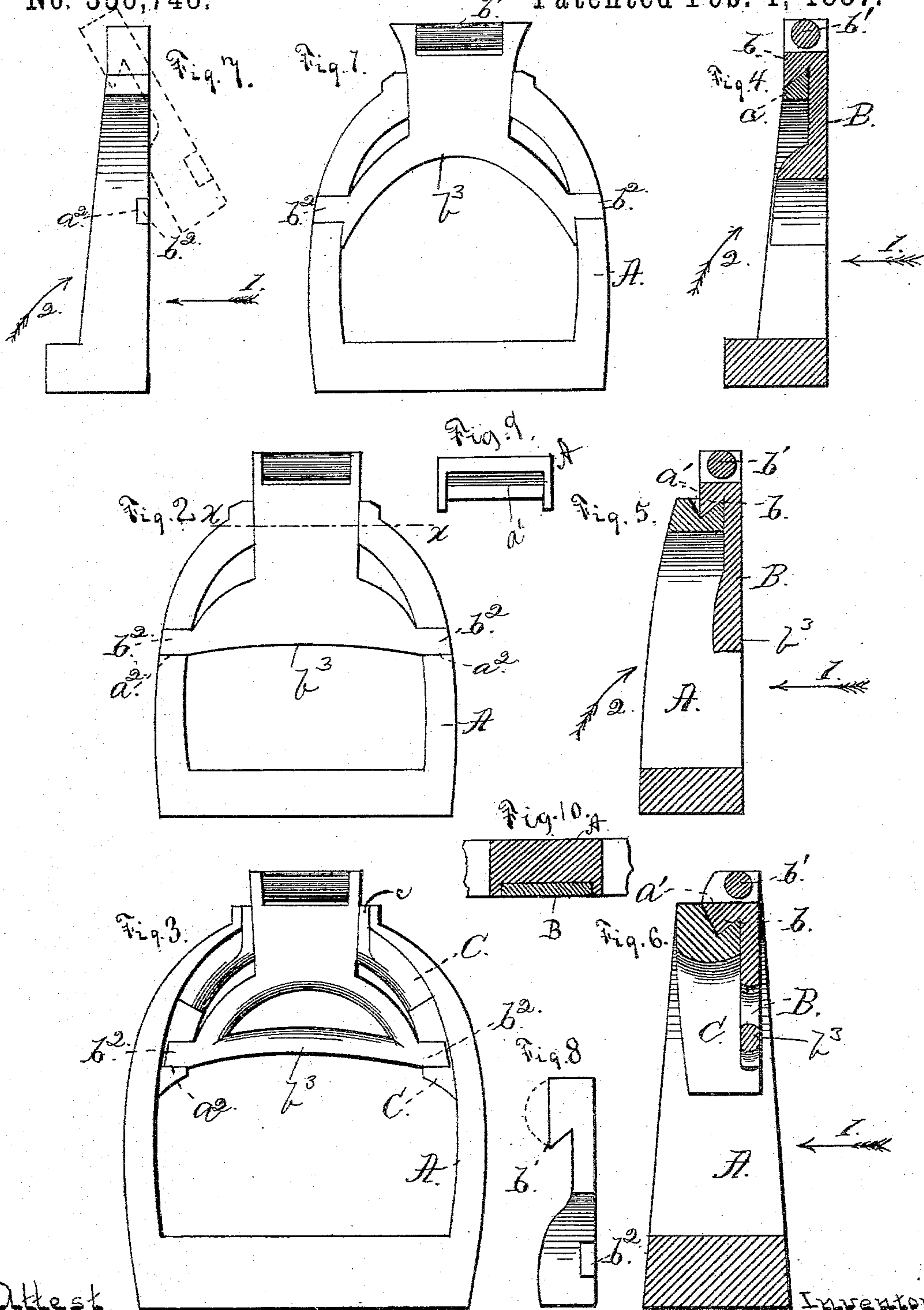
(No Model.)

D. B. COMLY.

STIRRUP.

No. 356,748.

Patented Feb. 1, 1887.



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# UNITED STATES PATENT OFFICE.

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## STIRRUP.

SPECIFICATION forming part of Letters Patent No. 356,748, dated February 1, 1887.

Application filed June 21, 1883. Serial No. 98,738. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID B. COMLY, a citizen of the United States, residing at Adena, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Stirrups; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of stirrups, and has for its object to furnish, first, a stirrup having a detachable yoke, simple in its structure and application and certain in its operation; and, secondly, a frame or arch having my detachable yoke attached thereto and adapted to be applied to the ordinary blank or foot-loop employed in the manufacture of wooden stirrups.

It consists, first, in the combination of a stirrup or foot-loop having its side bars united together at their upper ends, whereby a solid cross-head is provided, and a detachable yoke having its upper ends provided with a strap-loop and with a shoulder projected from its side over the cross-head of the foot-loop and having its lower end extended downward on the outer said cross-head, and provided with a trip or toe bar extended across the face of the foot-loop and interlocked with the side bars of the foot-loop.

It consists, secondly, of a frame or arch, the upper end of which forms for the stirrup the cross bar or head described in the first statement of invention, and the lower end of which is provided with laterally-extended wings conformed to the curvature of the side bars of the foot-loop and adapted to have the ends of the side bars lapped thereupon and secured thereto, and the detachable yoke described in the first statement of invention applied to the said frame or arch, with its laterally-extended toe-bar interlocked either with the wings of the frame or arch, or with the side bars of the foot-loop, as may be desired by the manufacturer of the stirrup.

In the drawings, Figures 1, 2, and 3 are front views of stirrups constructed according to my invention, but differing slightly in con-

struction. Figs. 4, 5, and 6 are respectively sectional views of the stirrups shown in Figs. 1, 2, and 3. Fig. 7 is a side view of the stirrup shown in Fig. 1, and Fig. 8 is a detail view of the yoke employed in the stirrup illustrated in Figs. 3 and 6. Fig. 9 is a plan view of the foot-loop head; and Fig. 10 is a cross-sectional view on line *x x*, Fig. 2.

In carrying out my invention my aim is to have the yoke constructed with an extension near its upper end, to engage the top of the foot-loop, and having its lower end extended laterally in position to enter notches formed in the edges of the foot-loop.

In the construction shown in Fig. 1 the upper portion or crown of the foot-loop *A* is beveled back from its forward edge, as shown at *a*, Fig. 4, and the portion *b* of the yoke *B* is correspondingly beveled on its under side and fits over the beveled portion *a* of the loop *A*, and on which part the yoke practically pivots in connecting the yoke and loop in the operation of the device.

In the loop shown in Fig. 2 I form a V-shaped slot, *a'*, in its top, and insert the part *b* of the yoke therein, and a similar connection is had in Fig. 3, except that in the latter figure the slot *a'* is formed in the arch, as will be described.

The construction of the yoke is practically the same in all the figures, having a cross-bar, *b'*, at its upper end, to receive the stirrup-strap, the extension *b*, which is preferably made in the beveled shape shown, and the lateral extensions *b<sup>2</sup>*, which enter the notches *a<sup>2</sup>*, and having its lower side or cross-bar, *b<sup>3</sup>*, extended across the face of the foot-loop, in position to be engaged by the foot of the rider should he be thrown from his seat, whereby the detachment of foot-loop and yoke is accomplished, as will be described. These notches *a<sup>2</sup>* are formed in the sides of the foot-loop in the constructions shown in Figs. 1 and 2; but when the frame or arch is used they are formed therein.

It will be readily seen that the arch can be used without departing from the principle of my invention, and I prefer in some cases to use such arch, inasmuch as it permits the convenient application of the invention to the stirrups now in use.

The carrier or arch *C* is composed of the



cross-head *c*, and lateral wings extended therefrom and conformed to the curvature of the side bars of the foot-loop. This cross-head serves as a bearing for the yoke, which bearing is formed in the construction shown in Figs. 1 and 2 by cross-head or crown of the foot-loop. The carrier and yoke, it will be seen, may be manufactured alone and sold to the trade, and the foot-loop now well known may be attached by any ordinary mechanic.

In applying the arch to stirrups now in use the said arch would be preferably constructed with the stem *c*, adapted to fit in an opening formed in the crown of the foot-loop, and the notches *a*<sup>2</sup> would be formed in the side of the arch, and the depression *a'* formed in its upper end, as shown in Fig. 6. The arch could be secured by screws or otherwise in the loop, as shown, and would not add materially to the weight of the stirrup. In connecting the yoke and foot-loop the extension *a* of the loop is applied to its bearing on the top of the loop, forming a pivotal connection, and the parts are moved on this pivotal point so as to bring the extensions *b*<sup>2</sup>, when the two parts come together, into the notches *a*<sup>2</sup>, as shown. I prefer to bevel the side of the part *a* of the yoke and construct the same as shown in Fig. 4, as thereby a firmer bracing of the parts is secured; but it will be understood that the upper end of said yoke might be constructed as shown in Fig. 6, or as indicated in dotted lines, Fig. 8, or, where so desired, the bearing-point *a* might be formed simply in hook shape to catch over the top or crown of the loop.

In use, it will be understood, the foot is inserted in the direction shown by arrow 1 in the several figures, and the loop is firmly connected by the yoke with the strap as long as the normal mounting, riding, or dismounting positions are maintained; but should the rider be thrown from his horse his foot will at once take the direction indicated by arrow 2 and strike the lower end of the yoke, forcing the same out, as indicated in dotted lines, Fig. 7, and the foot-loop will be detached and all danger of being dragged obviated.

It is obvious that instead of forming the lugs *b*<sup>2</sup> on the yoke and the notches *a*<sup>2</sup> in the foot-loop, the said lugs or projections could be secured or formed on the inner sides of the foot-loops, and that recesses or notches could be formed in the yoke in position to engage on the said projections, and that the operation would be the same and no departure would be made from the principle of the invention.

In addition to the convenience of the arch

or frame C for applying the invention to stirrups now in use, as before described, it is also advantageous in the manufacture of wooden stirrups under my invention, in which case the frame C is made of some suitable metal and is secured within the wooden foot-loop, as shown in Figs. 3 and 6, the said wooden loop being lapped upon and secured to the curved wings of the arch or frame, as will be clearly understood from the said figures.

It will be understood that the forming of the notches in the arch or frame is no departure from my invention, inasmuch as the said frame when secured to the foot-loop in the manner described becomes practically a part of the latter, and that the notches formed therein are virtually formed in the loop.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stirrup, the combination, hereinbefore set forth, of the foot-loop having its side bars united together at their upper ends, whereby a solid cross-head is provided, and a detachable yoke having its upper end provided with a strap-loop and with a shoulder projected from its side over and adapted to engage and lock upon the cross-head of the foot-loop, and having its stem or lower end carried downward on the outer side of said cross-head and provided with a trip or toe bar extended across the face of the foot-loop, the said loop and the lower end of said yoke being provided with means, substantially as described, whereby they may be interlocked, substantially as and for the purposes set forth.

2. The herein-described stirrup, consisting of the arch or frame having lateral wings conformed to the curvature of the side of the foot-frame, the foot-frame having the upper ends of its side bars lapped upon and secured to the curved wings of the said arch or frame, and a detachable yoke seated upon the upper end of said arch or frame and having its lower end extended down on the outer side of said frame to a point within the foot-loop, and provided with a toe-bar extended across the face of the foot-loop, the said loop and the lower end of said yoke being provided with means, substantially as described, whereby they may be interlocked, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID B. COMLY.

Witnesses:

GEO. A. CHAMBERS,  
JNO. M. FRANCIS.