

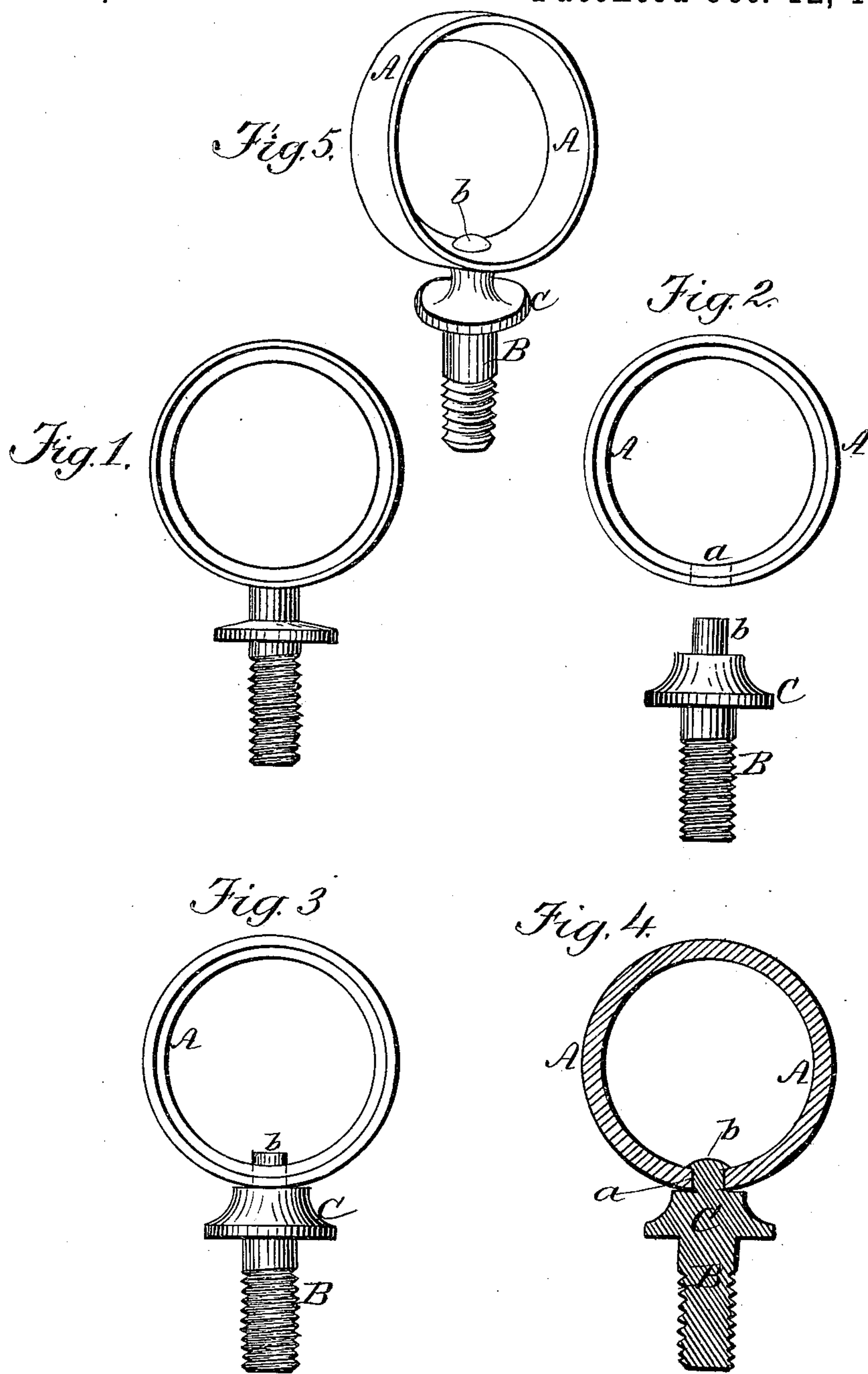
(No Model.)

T. S. ALEXANDER.

HARNESS TERRET.

No. 350,712.

Patented Oct. 12, 1886.



Witnesses:-
Ella S. Johnson,
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Inventor:
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UNITED STATES PATENT OFFICE.

THOMAS S. ALEXANDER, OF MERIDEN, CONNECTICUT.

HARNESS-TERRET.

SPECIFICATION forming part of Letters Patent No. 350,712, dated October 12, 1886.

Application filed March 12, 1886. Serial No. 195,029. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. ALEXANDER, a citizen of the United States, residing at Meriden, in the county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Harness-Terrets, of which the following is a specification, reference being had therein to the accompanying drawings.

The harness-terret in general use is cast and finished in one piece, and from this it will be readily understood that owing to its particular formation the turning off and finishing of the parts after casting requires much hand-work. This trouble and expense of finishing is particularly due to the fact that the stem of the terret-ring is cast solidly to the periphery of the ring, and forms surface shoulders and angles at the outer face of the ring, and precludes the possibility of finishing all its parts without hand finishing, turning, and burnishing.

The object of my improvement in the manufacture of harness-terrets is to so facilitate both the casting and finishing that the terrets can be made at a greatly reduced cost, and the work of finishing them can be wholly or almost done by machinery without detracting from the quality or desirability of the terret. This object I attain by casting the terret-ring and its stem separately and then joining, as herein-after described. The terret-ring is first cast after the manner of a simple ring. It is then put into a lathe, turned smoothly inside and outside by a tool having the desired conformation of cutting edge, and it then has a hole drilled or punched through it from its periphery, this hole being for the purpose of securing a separate terret-stem to the terret-ring. The terret-stem, as before stated, is cast separately with a rivet-stem and a shoulder between the latter and the screw-shank, and is finished in a lathe, as stated, by tools conforming to its shape. This stem has the ordinary shoulder common to the stems of single cast terrets; but in addition to the ordinary stem beneath the shoulder for securing it to the harness it is provided with a shorter and smaller stem or pin above its shoulder for securing the terret-ring to the stem either by a screw or by riveting, or by both screw and riveting.

In the accompanying drawings, Figure 1

represents the style of terret made of a single casting, as in common use. Fig. 2 is an illustration of my improvement in making the terret ring and stem separate. Fig. 3 illustrates the stem with the smaller stem of the stem proper passing through the hole in the ring before the act of riveting; Fig. 4, a section showing said pin as riveted, and Fig. 5 a perspective looking at the interior of the ring upon the point of rivet.

In the drawings, A is the ring, and B the stem. The ring has a hole, *a*, as before stated, while the stem has a smaller stem or pin, *b*, which may or may not be screw-threaded, as also the hole *a* may or may not be screw-threaded. After the said pin *b* is inserted it is properly riveted, as seen in Figs. 4 and 5.

The usual shoulder is lettered C.

The statement of the invention renders further description in detail unnecessary.

It is important to notice that the terret-ring is without shoulder or surface projection and has the opening *a*, while the binding-shoulder C is formed upon the attaching-stem with a rivet-pin, whereby the ring is riveted to the screw-stem, thus giving the advantage of turning both the ring and the stem and finishing them in a lathe instead of by hand-work, as heretofore, thus greatly reducing the cost in the manufacture of these articles.

The harness-terret generally in use has the stem, ring, and shoulder cast in one piece, and for that reason both pieces must be finished by hand-work. In some cases the ring has been formed with a projecting knob or shoulder having a screw-socket to receive the attaching screw-stem; but this construction is also expensive. To avoid the expense attending these hand-finished terrets it has been proposed to make them of cast-iron and finish them with separate bands and tips as ornamental mountings, as in the patent of Sargent, dated October 10, 1876, in which these separate mountings are made of polishable metal, and finished with gold, silver, or nickel plating, whereas by my improvement the plain ring and the stem are made of polishable metal and finished by lathe-work at a comparatively very small cost, and the two parts are secured together by drilling the hole *a* in the ring to receive the rivet-pin *b* of the attaching-stem.

The riveting-pin has a length sufficient to

extend through the ring-opening *a* and form a rivet-head on the inner side of the ring, as shown, and when said pin is screw-threaded the riveting gives it a solid connection with
5 the ring without adding to the cost of the article, because the riveting-pin is threaded at the same operation of forming the pin and the shoulder.

I claim—

10 The harness-terret herein described, consisting of two parts, the plain ring having the

opening *a*, and the attaching part having the integral screw-shank *B*, the pin *b*, and the intermediate shoulder *C*, the two parts being united by upsetting the pin *b* after it is passed
15 through the opening, as specified.

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

THOMAS S. ALEXANDER.

Witnesses:

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