

(No Model.)

A. W. TOURGEE.

HORSE COLLAR AND HAME.

No. 329,507.

Patented Nov. 3, 1885.

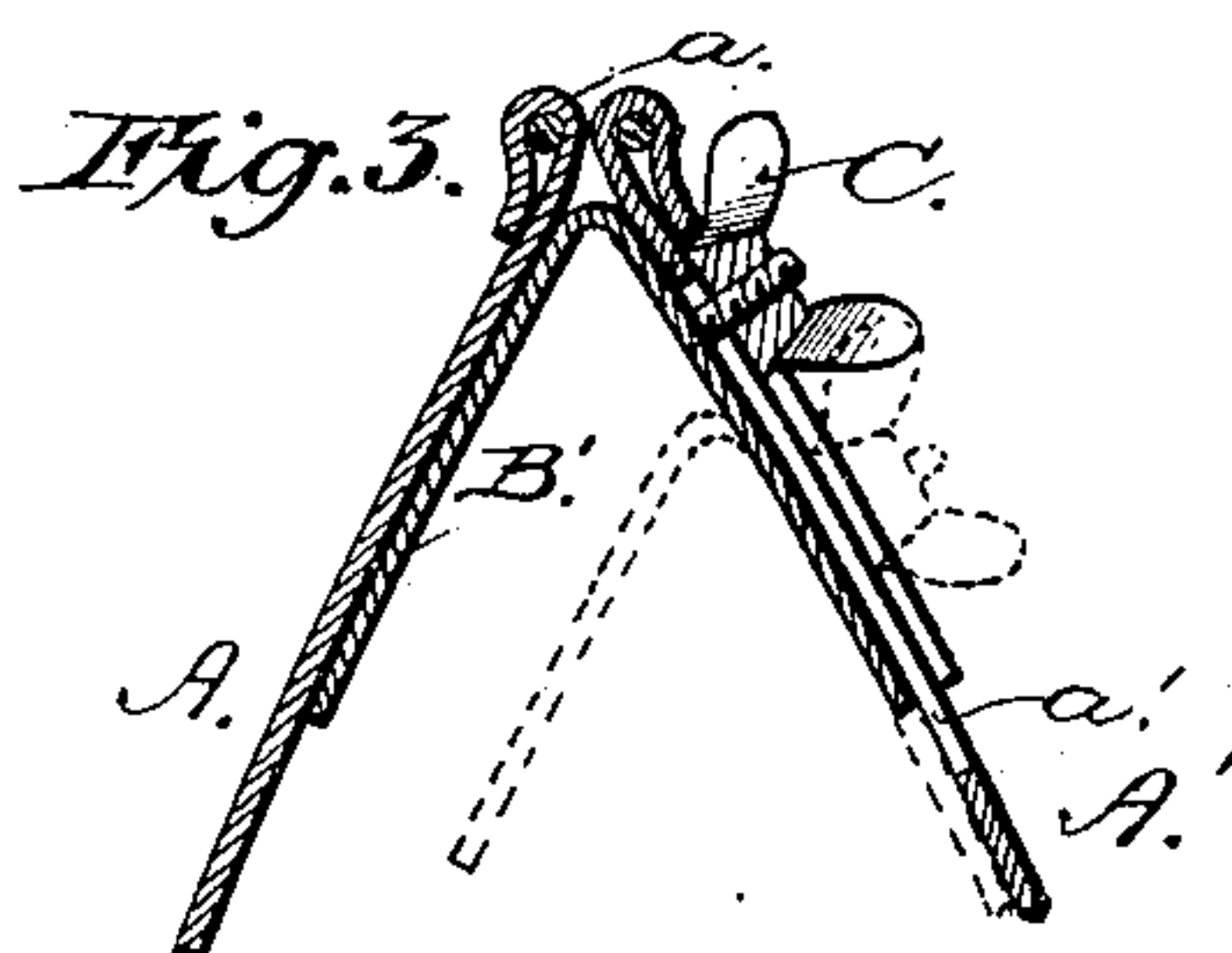
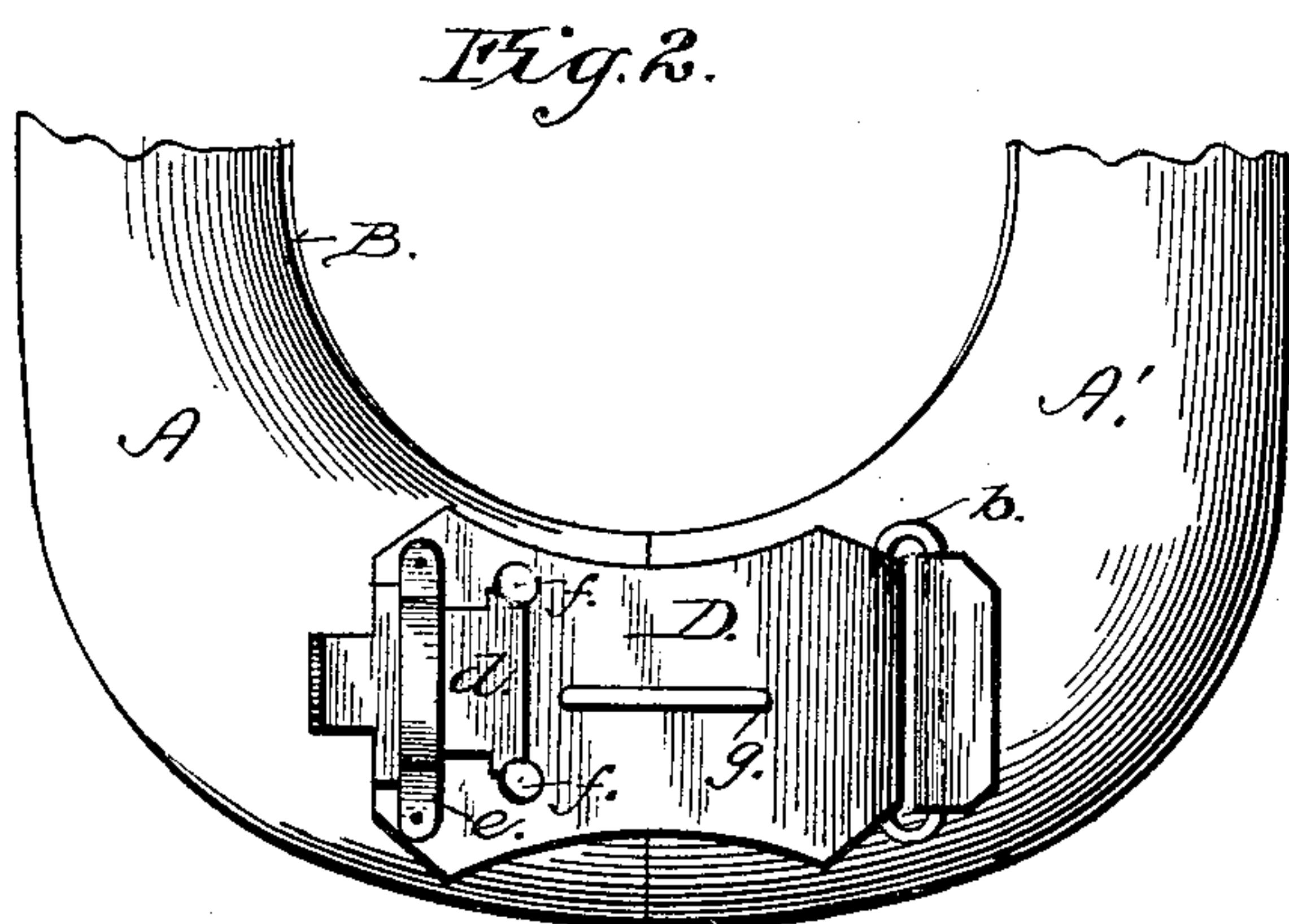
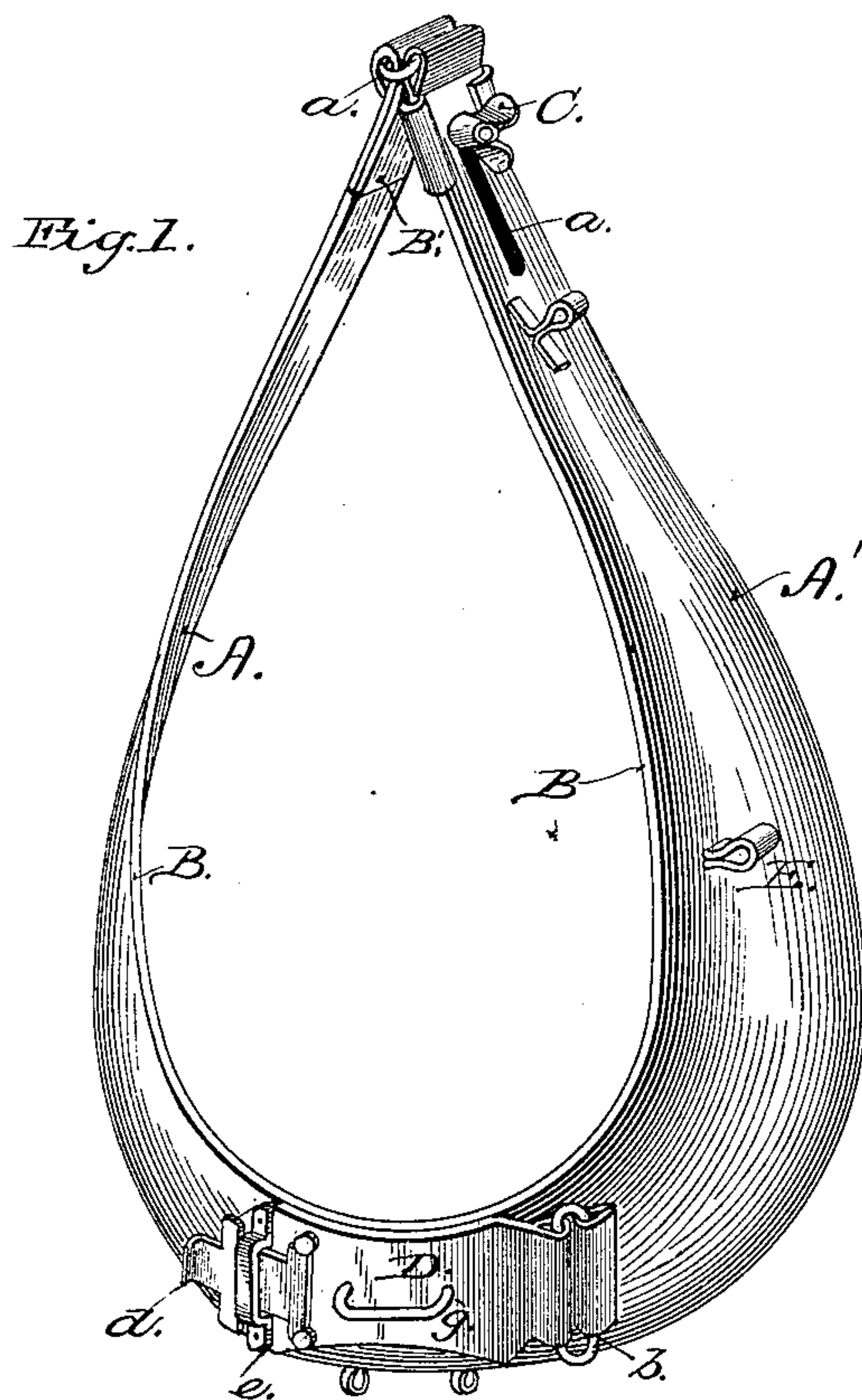


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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HORSE-COLLAR AND HAME.

SPECIFICATION forming part of Letters Patent No. 329,507, dated November 3, 1885.

Application filed February 18, 1885. Serial No. 156,295. (No model.)

To all whom it may concern:

Be it known that I, ALBION W. TOURGEE, a citizen of the United States, residing at Mayville, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Combined Horse-Collar and Hames; 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 novel and simplified improvements in the construction of combined horse-collars and hames, the object being to reduce the size and weight of the same; to promote the more extended application and a wider and more perfect distribution of the traction force; to increase the area of impact between the shoulder of the draft-horse and the collar; to permit of the easy adjustment upward and downward of the traction attachments; to secure lightness, smoothness, and a more perfect ventilation, and in general to perform the office of collar and hames with greater ease and comfort to the draft-animal, with a decided increase of his efficiency; and my improvements consist, essentially, in forming the said collar and hames of one or more sheets of metal struck up in the desired shape, the front or inner portion of which is adapted to closely encircle the neck of the horse just in front of the shoulders, and the remaining portion of which is carefully fitted to the shoulder itself.

It further consists of certain self-adjusting or other necessary attachments designed to be secured to the said metallic plates or sheets of metal for connecting the collar and hames with the tugs, trace-chains, pad, or other portions of the harness.

In the annexed drawings, Figure 1 represents a perspective view of a combined collar and hames made in accordance with my invention; Figs. 2 and 3, detail views thereof; and Fig. 4 a detail sectional view taken on the line *x x* of Fig. 1.

Similar letters of reference indicate like parts in the several figures.

Referring to the drawings, A A' represent the two parts or halves of my combined collar and hames, which are each formed from one or more sheets of metal bent or lapped over at the edges, as shown in Fig. 4, and pivotally connected together at the wither or top parts of the same by a link, *a*, or other suitable means. The inner concave edges of these plates A A' are struck up to form the small roll B, as shown, while the main portion of said plates are so shaped as to secure the requirements of a perfect collar and hames, as set forth in the recital of the objects of the invention. When the two parts or halves of the collar are each formed of a single metallic plate, the edges of the same are also bent or lapped over to present smooth and rounded edges, as also to stiffen and strengthen the entire construction.

Near the upper or wither end of one of the parts or halves of said hame-collar is provided a metallic cap, B', which is fastened to the inner side of one of the halves of the collar and resting against the other, so as to extend over the neck of the horse and permit the weight of the collar to rest thereon, as shown in Fig. 3, to protect the mane and neck of the horse from wear by the sharp edges or pivotal joining of the collar above. This cap B' is shaped like an inverted V and is fitted to the one half of the collar to which it is attached by means of a suitable set-screw, C, working in a slot, *a'*, upon the collar, and which is intended to adjust the same upward or downward, so as to readily adjust the collar within certain limits to animals of different sizes. The lower ends of the two parts or sections A A' are adapted to be secured together in such manner as to slightly yield separately and successively to the natural movements of the shoulders of the horse, and to this end are provided with a clasp or fastening, D, pivotally secured to one part or section, A', by means of the link or loop *b*, and provided at the opposite end with holes or openings which engage with headed pins *f f* upon the opposite part or section, A, to secure the two sections

together, a slide, *d*, working in the bearings *e*, being adapted to project under the heads of the pins *f f* to hold the clasp D in a locked position, as shown. Upon the front of the clasp D is provided a metallic loop, *g*, to receive one end of a martingale or strap, while upon the outer surfaces of said halves or sections are attached self-adjusting or other desired devices necessary for the transmission of traction power and for connecting and supporting other portions of the harness.

The front or inner portion of the collar thus constructed is designed to encircle the neck of the draft-animal precisely at the point of impact of the ordinary collar, the remaining portion being of varying width according to the purposes for which the implement is designed, extending backward over the shoulder, thus protecting it from friction by the traction attachments extending the area of application of the traction force over the entire surface of the shoulder of the animal, and promoting (by adjustment of the traction devices) an exact and equitable distribution of this force over the entire area covered by the collar, so that while the width of this implement is not greatly different from that of the ordinary collar its front or inner portion rests near the point of the animal's neck where the rear part of the present ordinary collar touches the shoulder. From this point it extends backward, presenting a concave surface to the shoulder of the animal and adapting itself very closely to the conformation of the shoulder and breast.

As already stated, the halves or sections forming this implement may be made of one or more sheets of metal, either horizontal layers or separated from each other in whole or in part for the purpose of ventilation or to secure the effect of springs in the distribution of force and to prevent injury to the shoulder from sudden or concentrated applications of force.

The interior sheet of which the collar is composed may be solid and imperforate, or may have a series of perforations designed to facilitate ventilation and to prevent sweating and heating under the collar. The outer or inner surfaces of the sections A A' may be covered with leather, cloth, or any other sub-

stance desired, either for their preservation, ornamentation, or to improve their efficiency, or to absorb perspiration.

When the collar is made of more than one sheet or thickness, the different laminae may be united either by the edges being turned over upon each other, by screws, rivets, or other devices, so as to leave the interior surface perfectly smooth and capable of being exactly fitted to the shoulder of the horse without any protuberances or roughening whatever.

Having thus described my invention, I claim as new and useful—

1. A horse-collar formed, as described, of one or more metallic sheets having the edges thereof bent or lapped over and provided with a small curve or roll, B, around the front portion thereof, and the sides of said collar being provided with suitable traction attachments, all substantially as and for the purpose described.

2. A horse-collar formed, as described, and provided with the clasp or fastening D, pivotally secured at one end to one section of the collar and connected at the opposite end to the other section thereof by headed pins *f*, engaging with corresponding holes in said clasp or fastening, a slide, *d*, working in bearings *e*, engaging with said headed pins *f* to hold the clasp or fastening in a locked position, substantially as described.

3. A horse-collar formed of two or more metallic plates, the edges whereof are bent or lapped over one upon the other, substantially as and for the purpose specified.

4. A horse-collar formed, as described, of two parts or sections, A A', hinged together at their upper ends by a loop, *a*, and united together at the bottom by a clasp or fastening, D, and provided with a metallic cap, B', adjustably connected to one part or section, A, by means of the set-screw C, substantially as and for the purpose specified.

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

ALBION W. TOURGEE.

Witnesses:

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E. R. WHITESIDE.