

No. 803,344.

PATENTED OCT. 31, 1905.

J. S. HULL.  
HORSE COLLAR.  
APPLICATION FILED SEPT. 28, 1904.

FIG. 1

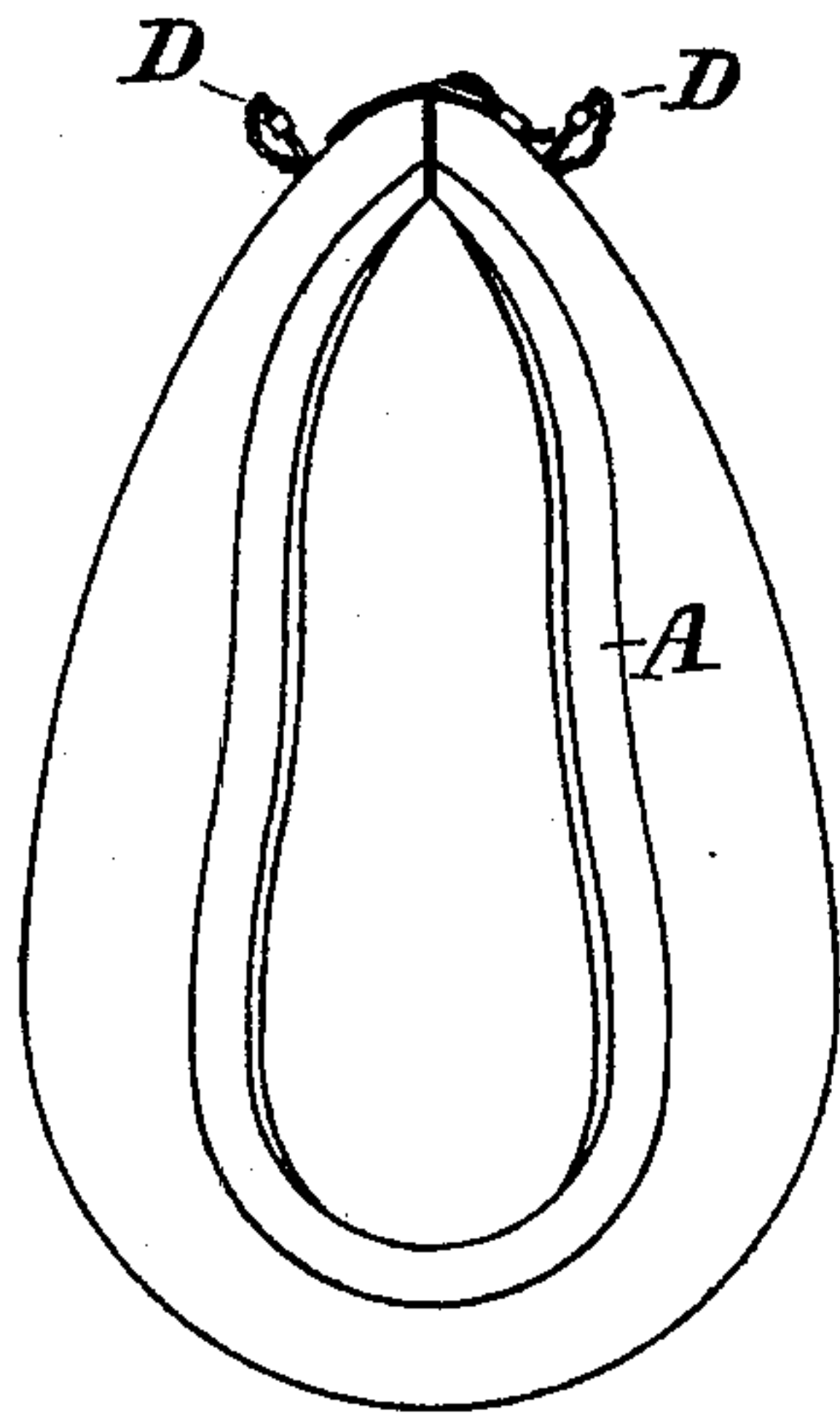
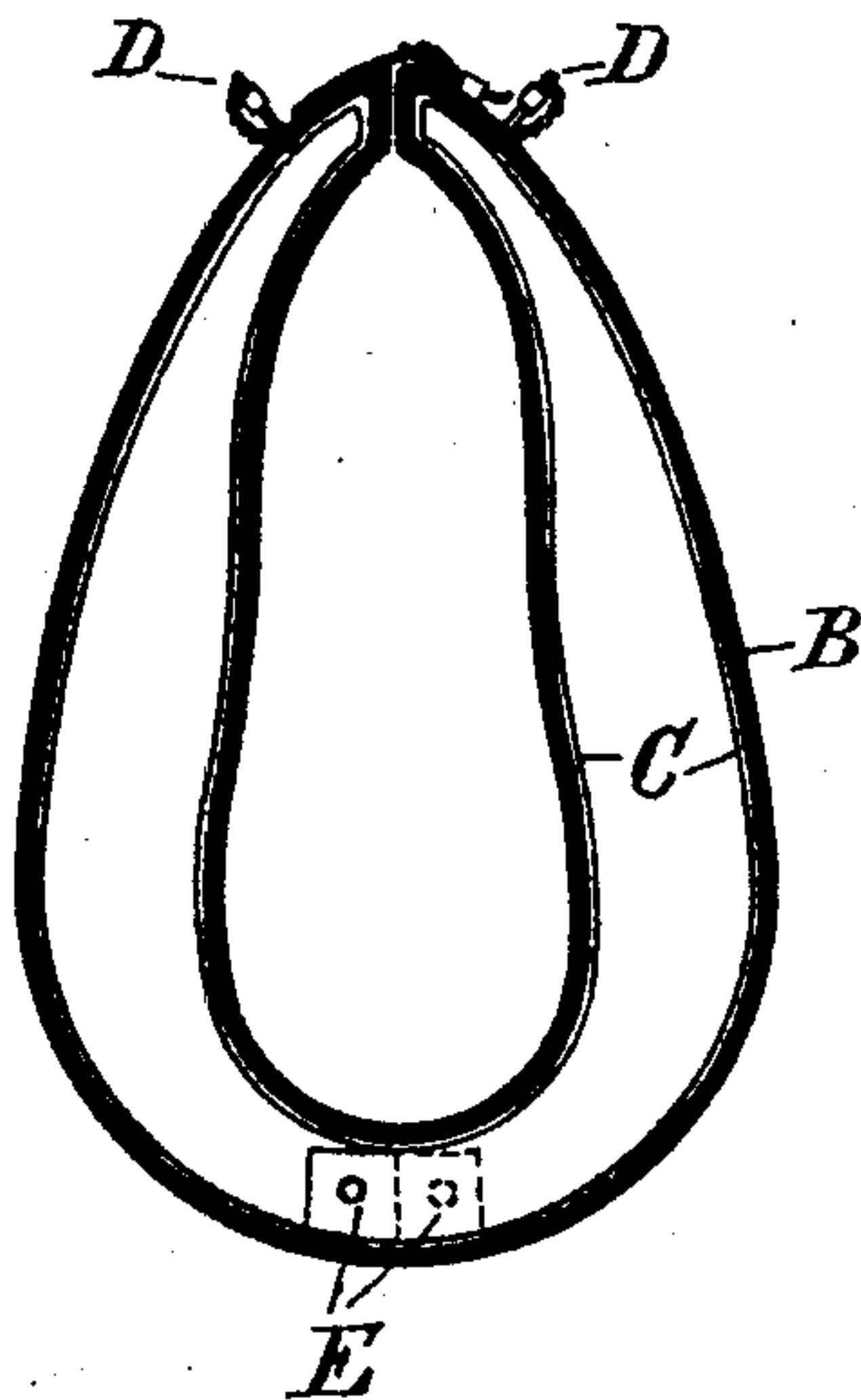


FIG. 2



WITNESSES :

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# UNITED STATES PATENT OFFICE.

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## HORSE-COLLAR.

No. 803,344.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed September 28, 1904. Serial No. 226,294.

*To all whom it may concern:*

Be it known that I, JAMES SAMUEL HULL, a subject of the King of Great Britain, residing at Manly, near the city of Sydney, in the State of New South Wales, in the Commonwealth of Australia, have invented certain new and useful Improvements in Horse-Collars, of which the following is a specification.

My invention relates to improvements in horse-collars.

The object of this invention is to provide a horse-collar in which the pressure of the draft will be so distributed as to prevent the possibility of galling, chafing, or bruising the shoulder of the horse. To obtain this result, I construct a collar of ordinary external form, made of leather or any other suitable material. The portion of the collar which is usually stuffed or padded I construct hollow and place within the receptacle thus provided in either side of the collar a rubber air-reservoir, corresponding as nearly as possible both in size and form to the inside contour of the receptacle. An air-valve is provided, preferably at or near the top end of each of these pneumatic pads. At the lower end of each of these pads is a solid-rubber extension with an eyelet-hole therein. The portion of the collar constituting the casing of the receptacle for the pneumatic pad is made, preferably, of leather or canvas, which may be rendered waterproof for the purpose of preventing the sweat from the horse from penetrating to and perishing the rubber. For the purpose of insuring uniform strength and even pressure on every part of the pneumatic pads it is advisable that each of them should be formed of two sheets of flat rubber cut to the requisite size and shape and not only cemented along their edges, but also bound with strips of rubber or other suitable material. When it is desired to place the pneumatic pads in the collar, a cord is introduced by any suitable means, such as a packing-needle, at any suitable point in the throat of the collar and passed out through the opening at the top of one of the pad-receptacles. The end of this cord is then made fast to the eyelet-hole at the lower end of one of the pneumatic pads, which is then drawn thereby through the aper-

ture and into position within the pad-receptacle. The second pad is then introduced in a similar manner. When in position, the projections of the pneumatic pads, carrying the eyelet-holes and the tapered ends of the pads themselves, slightly overlap within the throat of the collar. When the pads are properly in position with the valves projecting through the apertures in collar provided for them, the ends of the pad-receptacles are closed by means of a few stitches, studs, or other suitable means. The pads are then pumped full of air by means of their valves, which pass through the collar at any suitable points, preferably near the top, and the collar is ready for use.

In the drawings, Figure 1 is an elevation of the collar. Fig. 2 is a vertical section of the collar.

A is the rim.

B is outer casing of pad-receptacle.

C is pneumatic pad in position within the casing.

D D are valves.

E is an eyelet-hole in a projecting piece of each of the pneumatic pads.

By reason of this construction of the rubber pads—that is to say, on account of their being of exactly the same size and form as the inner contour of their receptacles—the unequal strain and liability to friction apparent in most pneumatic collars hitherto constructed are completely obviated.

What I claim as my invention, and desire to secure by Letters Patent, is—

A pneumatic horse-collar comprising an outer casing and a pair of inner independent inflatable pads and having the lower ends thereof closed and overlapping one another, each pad being provided with an inflating valve and provided at its lower end with an opening for the attachment of a cord for introducing the pad within the casing.

Signed at Sydney this 30th day of June, 1904.

JAMES SAMUEL HULL.

Witnesses:

T. O. ALLEN,

W. S. RATTRAY.