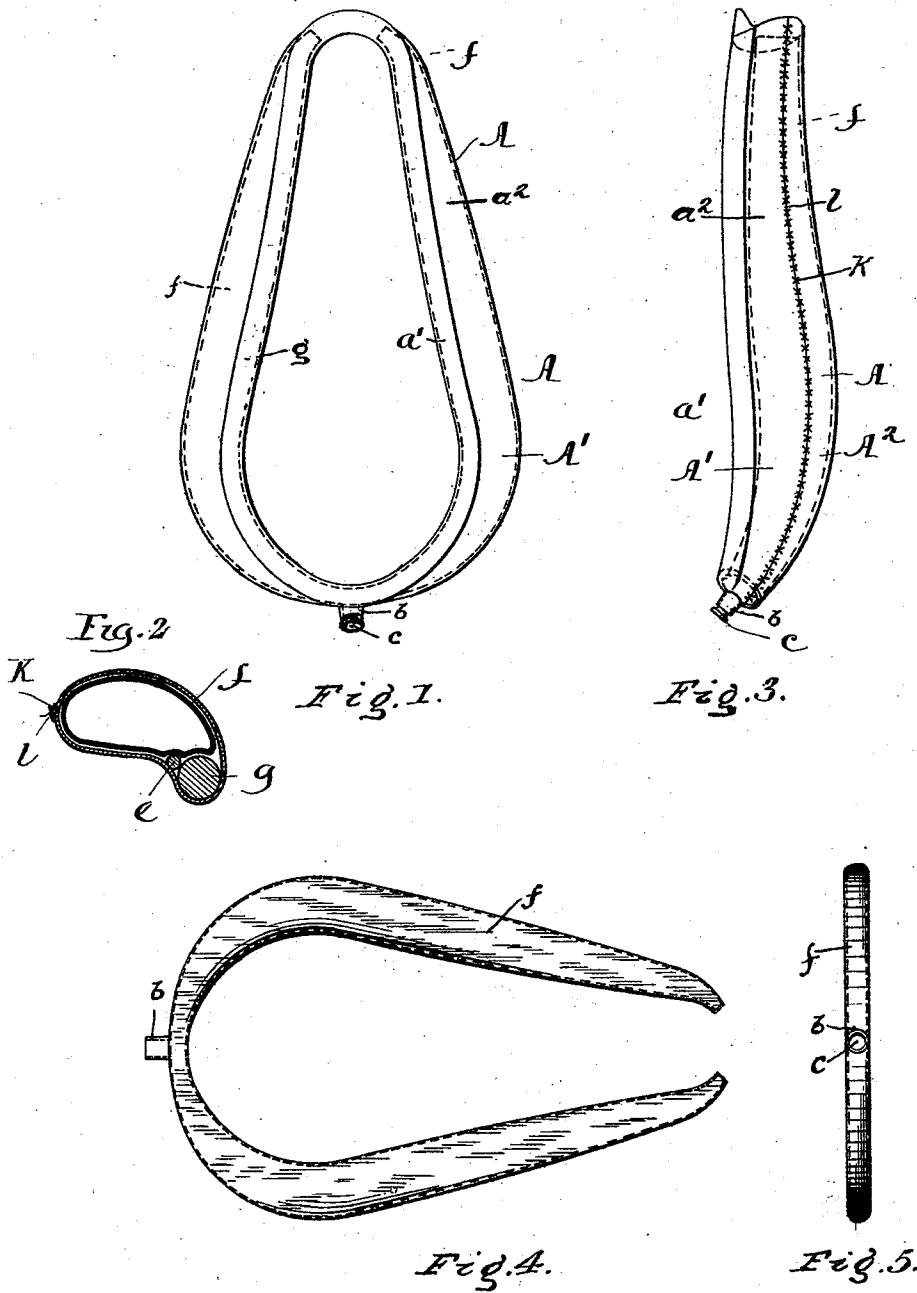


(No Model.)

E. C. PHILLIPS.
HORSE COLLAR.

No. 528,490.

Patented Oct. 30, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

ELWOOD C. PHILLIPS, OF CHICAGO, ILLINOIS.

HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 528,490, dated October 30, 1894.

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To all whom it may concern:

Be it known that I, ELWOOD C. PHILLIPS, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Pneumatic Horse-Collars, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My present invention has for its object to provide a simple, cheap, durable and effective construction of pneumatic horse collars and this object I have accomplished by the improvements hereinafter described, illustrated in the accompanying drawings and particularly pointed out in the claims at the end of this specification.

Figure 1 is a front view of a horse collar embodying my invention. Fig. 2 is a sectional view taken at line 5^a—5^a of Fig. 1. Fig. 3 is a view in side elevation of Fig. 1. Figs. 4 and 5 are respectively front and bottom views of the separate air chamber employed in the construction shown in Fig. 1.

In the drawings A denotes a suitably shaped covering of any suitable material adapted to withstand the strain. Said covering or outer casing A is shown as being divided at l, the part A¹ thereof extending forwardly to form the fore-wale, and the part A² extending rearwardly to form the after-wale of the collar. The fore-wale A¹ is distended by inserting therein a roll g of hemp, cotton or other suitable material, and the after-wale A² is provided with a separate and removable covering f of highly elastic material, say rubber, to form an air chamber.

The casing A is provided at its lower portion with an opening through which the tubular extension b of the covering f will extend, and in this tubular extension the check valve c is placed.

The purpose of dividing the outer casing A as shown at l is to permit said casing to be opened for the insertion or removal of the separate air chamber covering f. When said air chamber is to be inserted the part A² of the outer covering is opened and after said air chamber has been inserted the part A² of the outer casing A is secured to the part A¹

of the outer casing A by means of a lacing cord K or other suitable means. After the air chamber has been inserted the same will be inflated by means of a pump applied at the check valve. The inflation of the air chamber will expand the outer casing and the collar will be ready for use.

Secured to the inner side of the covering A and intermediate the fore- and after-wales is the stay strip e preferably of stout wire.

The purposes of providing the stay strip e are to maintain the collar in proper shape and prevent distortion when deflated. The hames will set against the portion of the covering adjacent the stay strip e. It will thus be seen that any pressure exerted upon the collar by the hames will be transmitted to the shoulders of the horse through the medium of the body of air in the air chamber a and thereby uniformly distribute such pressure.

Manifestly other fluids may be substituted for air.

The stay strip e in this form of my invention and in that hereinbefore described, serves to hold the collar in shape both when inflated and deflated. When the air chamber f is in the position shown and has been inflated, it serves not only to maintain the proper shape of the after-wale but serves also to bear against and force outward and retain the roll g of the fore-wale within the narrow part of the outer chamber or casing. This feature is of importance as by this means the roll g is at all times retained in place and the necessity of dividing the fore-wale from the after-wale by the line of stitches, or providing other means for retaining the roll in place, is avoided. It is a well known fact that where the fore-wale and after-wale are formed as separate chambers or compartments divided by a line of stitches, it always makes a weak point in the collar because the sweat from the horses or rain gets into and speedily rots the same.

In my invention the fore-wale and after-wale are comprised within the same casing or covering, this casing being formed with a narrow portion that constitutes the fore-wale and in which the roll g is inclosed and by this arrangement the necessity of dividing the casing is avoided.

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

1. A horse collar comprising an outer casing A forming the cover for both the forewale and after-wale, said casing having a narrow part that constitutes the fore-wale and a broader part that constitutes the after-wale, a roll or filling *g* for the fore-wale located within the narrow part of said casing, and an air chamber *f* within the broader part of said casing and arranged to bear against the roll *g* and retain the same within the fore-wale, substantially as described.

2. A horse collar comprising an outer casing A having a narrow part forming the fore-wale and a broader part integral therewith forming the after-wale, the interior of said casing forming an undivided chamber, a roll or filling *g* for the fore-wale located within said narrow part of said casing and a stay strip *e* for retaining said casing in shape, substantially as described.

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