

M. TURLEY.  
HORSE-COLLARS.

No. 194,979.

Patented Sept. 11, 1877.

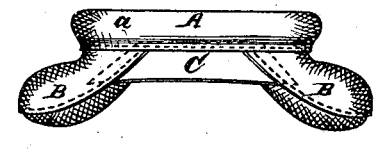
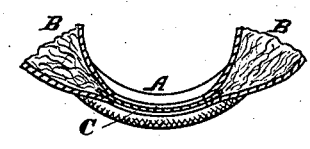
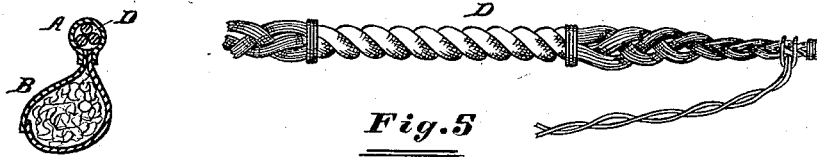
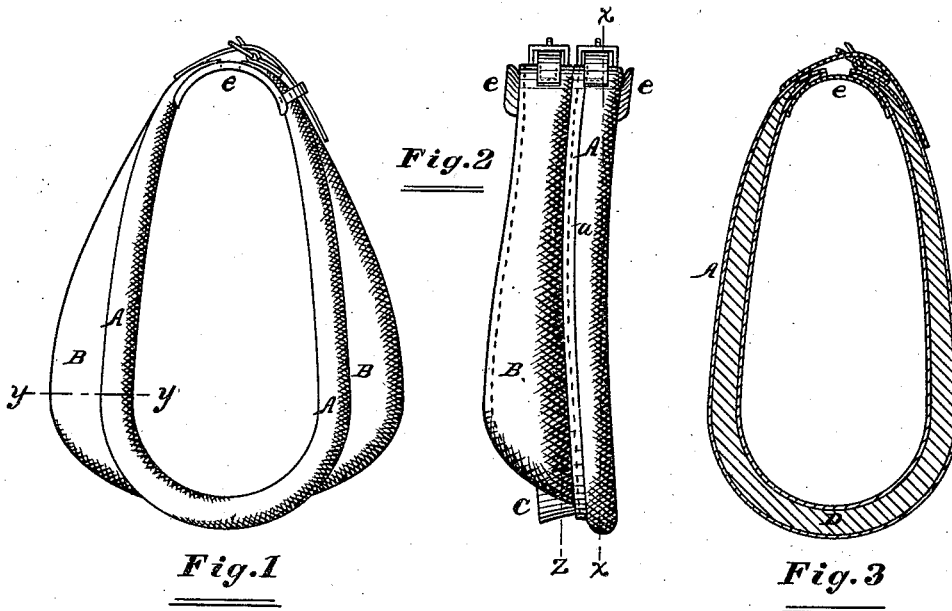


Fig. 4

Fig. 5

Fig. 6

Fig. 7

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# UNITED STATES PATENT OFFICE.

MARSHALL TURLEY, OF COUNCIL BLUFFS, IOWA.

## IMPROVEMENT IN HORSE-COLLARS.

Specification forming part of Letters Patent No. 194,979, dated September 11, 1877; application filed January 18, 1877.

### *To all whom it may concern:*

Be it known that I, MARSHALL TURLEY, of Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Horse-Collars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a front view; Fig. 2, a side view; Fig. 3, a section in the plane of the line  $x x$ ; Fig. 4, a section at  $y y$ ; Fig. 5, a perspective of the flexible filling; Fig. 6, a section at  $z$ , and Fig. 7 an end view of the lower end of the collar.

Like letters of reference indicate like parts.

My invention relates to flexible horse-collars; and has for its object the improvement, in the several particulars hereinafter set forth, of the construction of this class of collars. I also aim, as another feature of my invention, to facilitate the operation of constructing collars of this class by employing the means hereinafter described.

In the drawings, A represents a flexible tube, made, preferably, of a strip of leather, sewed or stitched together along its longitudinal edges, as represented at  $a$ .

B B are the pads. These pads are stitched to the tube or rim A, but do not meet at the bottom, their lower ends being a considerable distance from each other, as represented in Figs. 1, 2, and 6. The upper ends of the pads are made thin and flexible, and are connected by means of straps and buckles, or in any suitable manner. A strap and buckle may also be employed to draw the upper ends of the rim A closely together. A guard or shield,  $e$ , may also be used to prevent this part of the collar from chafing the horse.

C is a flexible apron, attached to the rim A and arranged between the lower ends of the pads B B. The lower ends of the pads, owing to the strain upon them, are liable to become detached from the rim. For this reason I attach the ends of the apron C to these ends of the pads, as well as to the rim, as represented in Fig. 6. The apron C, therefore, not only prevents the seams on this part of the collar

from chafing the horse, but also strengthens the attachment of the pads to the rim at these points. It also serves to keep the hames from contact with the horse.

D is a flexible continuous filling for the rim A. In the example shown, this filling consists of a rope, as I deem a filling of that kind preferable. This filling diminishes in size toward the ends, as shown in Fig. 5.

Heretofore such fillings have been sewed into the rim A, generally during the operation of sewing the latter to the pads. This operation is obviously difficult, and requires considerable time, care, and trouble.

To facilitate this operation I make the ends of the part D tapering, and draw it into the rim A by means of a cord attached to one end; and, after the edges of the rim are sewed together, to still further aid in inserting the part D, I lubricate it well. The cord used to draw the filling into the rim should be waxed, to prevent it from slipping off the end of the filling or rope D. After the filling is drawn into the rim this cord may be cut away.

By making the ends of the rope D tapering it may be the more easily drawn into the rim; and when the ends of the rope extend to the ends of the rim A, as in the example shown, the upper part of the collar will be yielding and flexible, and readily fit itself to that part of the horse on which it rests. The whole collar is thus made yielding or flexible, and may be more readily made than heretofore.

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

The combination, in a horse-collar, of the flexible tubular rim A, stuffed by means of a rope foundation extending the entire length of the rim, and made beveled or tapering at its upper ends, the pads B B attached fixedly to the said rim and not meeting each other at their lower ends, and the flexible apron C, arranged between the lower ends of the said pads, and attached thereto and to the flexible rim, substantially as and for the purposes specified.

MARSHALL TURLEY.

Witnesses:

F. F. WARNER,  
ULLMAN STRONG.