

C. T. STAUFENBEIL & J. STAEHLI.
Horse-Collar.

No. 202,201.

Patented April 9, 1878.

Fig. 1

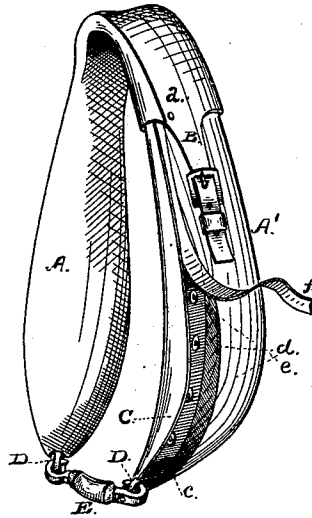


Fig. 4

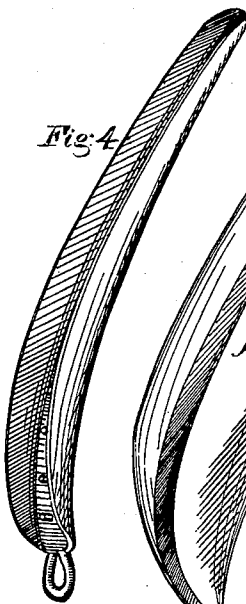


Fig. 2.



Fig. 3.

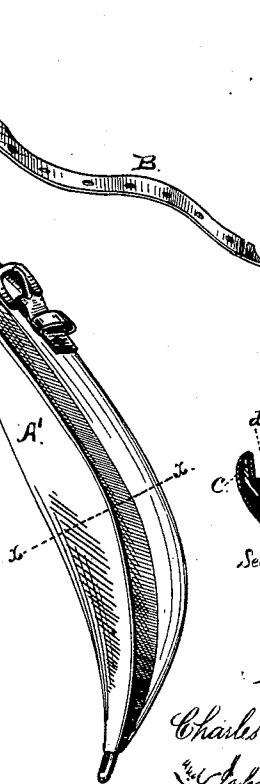
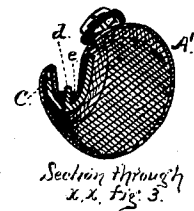
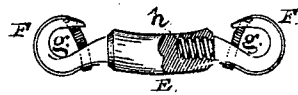


Fig. 5.



Section through
X-X, Fig. 3.

Fig. 6.



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CHARLES T. STAUFENBEIL AND JOHN STAEHLI, OF SAN FRANCISCO, CAL.

IMPROVEMENT IN HORSE-COLLARS.

Specification forming part of Letters Patent No. **202,201**, dated April 9, 1878; application filed February 12, 1878.

To all whom it may concern:

Be it known that we, CHARLES T. STAUFENBEIL and JOHN STAEHLI, both of the city and county of San Francisco, in the State of California, have invented a new and useful Improvement in Horse-Collars, which invention is fully set forth and described in the following specification and accompanying drawing.

In the drawing herein referred to, Figure 1 is a perspective view of our improved horse-collar. Figs. 2 and 3 are detail views of the two sides or halves of the collar. Fig. 4 is a view of the metal ribs over which the collar is formed. Fig. 5 is an end section of the rib, Fig. 3. Fig. 6 is a detail view, partly in section, of the hook-coupling.

Our invention consists in constructing the upper of one section of a two-part horse-collar with a pocket, and the upper end of the other section with a flattened neck, adapted to slide into the said pocket, the two parts being held together by means of a strap and buckle, so that the collar can be adjusted to fit horses of different sizes; and it consists, also, in the peculiar manner of making a horse-collar over metal ribs or frames without sewing or stitching, whereby the shape of the collar is better preserved, its manufacture is made simpler and more economical, and a stronger and more durable article is produced.

Our horse-collar, as shown in the drawing, is made in two halves or parts, A A', one having a sleeve or pocket, *a*, at its end, into which the end of the other half, A', is received, and the two parts being held together by means of the strap B on one part, A, and the buckle secured to the side of the other part, A'. Thus by drawing these parts more or less into each other and securing them by the strap and buckle, the size of our collar can be altered to fit the neck of the horse.

The halves or parts A A' are each formed over a metal rib, C, made of malleable iron, in the shape shown in the detail views, Figs. 4 and 5. This rib C is properly curved to fit or conform to the shape of the neck, and the groove *c* between the bent sides of the rib forms the channel to receive the hames. Within this groove are a number of projecting pins, *d d*, which are cast with the rib, and stand up

vertically at the bottom of the groove. The loop or eye D is also cast upon the end of the rib in position to receive the fastening or hook E. The pins *d d* constitute the means for securing the leather covering in place, without sewing or stitching, after it is drawn over the sides and edges of the rib, for the edges of the leather, after being drawn smoothly over the front and back of the collar, are pressed down into and along the groove *c* and upon the pins *d d*, and washers *e e* are afterward placed over the points of the pins and pressed down upon the leather, and the parts then securely held together by riveting the pins.

The longer limb of the rib C is placed toward the back of the collar, and against it the principal portion of the filling is laid, while the shorter and more curved limb of the rib, as seen at Fig. 5, forms the front of the collar.

After the leather is properly shaped over a block, and is drawn over the metal ribs C, and the ends or edges of it are secured over the pins *d* and held by the washers, these parts are protected and concealed from view by means of the leather strip *f*, which is glued down over the washers along the groove.

The rib C does not form the full width of the collar; but the proper shape is carried out beyond the side of the rib by the padding or filling, to give the necessary flexibility and roundness to the part bearing against the shoulder of the horse, and this padding is not carried up much beyond the top end of the rib, so that the ends of the collar may be suitably formed, the one into a pocket, *a*, and the other into the flat shape for passing one into the other.

It will be seen from the above description that our collar requires no stitching or sewing at any part, as the rib C, with its pins *d d*, serves to hold the leather covering securely and smoothly in place. This rib also gives greater strength to the collar, and preserves its shape against a heavy draft, and enables us to produce a better collar in a simpler and much cheaper manner.

The fastening E, for holding the bottom ends of the collar together, is formed of the hooks F F, having the spring-catches *g g* and the screw-threaded ends *h h*, which work into

the ends of the thimble E, so that when the hooks are caught into the eyes of the collar ends they may be drawn together the required distance by turning the thimble E, the threads of the two ends *h h* being, of course, cut in opposite directions.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A horse-collar formed in two separate halves or sections, with a pocket, *a*, on the upper end of one section and the flattened neck *a'* on the like end of the other section, of such size as to fit and slide into the said pocket, the two parts being held and secured together by means of the strap and buckle, substantially as herein described, for the purpose set forth.

2. A horse-collar in two separate halves or sections, *A A'*, formed over a metal rib or rim, *C*, without sewing or stitching, the leather covering thereof being held by means of metal pins or rivets *d d* formed within and of the same metal as the rib, substantially as herein described, for the purposes set forth.

3. In combination with a horse-collar formed in two separate halves or sections, substantially as herein described, and with the loops or eyes on the ends thereof, the extension hook-fastening composed of the parts *F F*, the spring-catches *g g*, and the screw-thimble *E*, constructed and arranged to operate substantially as herein described and shown.

4. The metal rib *C*, formed with a groove, *c*, and curved sides, with a loop or eye at its bottom end, and a series of pins, *d d*, projecting vertically from and along the bottom of the groove *c*, substantially as herein described, for the purposes set forth.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 12th day of January, 1878.

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JOHN STAEHLI. [L. S.]

Witnesses:

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