



# UNITED STATES PATENT OFFICE.

EZRA STROUD, OF RICEFORD, MINNESOTA.

## IMPROVEMENT IN COMBINED COLLAR AND HAME.

Specification forming part of Letters Patent No. **188,081**, dated March 6, 1877; application filed December 30, 1876.

*To all whom it may concern:*

Be it known that I, EZRA STROUD, of Riceford, in the county of Houston and State of Minnesota, have invented a new and Improved Combined Collar and Hame, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved collar and hame combined; and Fig. 2 is a vertical transverse section of the same on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved collar and hame combined, which may be fitted in flexible and easy manner to any size of neck of a horse, and which admits the adjustment of the draft on the hame, and the convenient opening and closing of the collar and hame for putting the same on or off the neck.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

In the drawing, A represents a horse-collar, and B a hame, of the usual construction, seated securely thereon. The upper ends of the hame B are connected by adjustable clasps *a*, which are secured, by holes and screw-bolts *b*, to the upper part of the hame, with a lateral link, *d*, upon which swings a pivot-eye, *d'*, of the pad C, being prevented, by shoulders at both sides of the eye, against lateral motion. The clasps of the hame-sections admit the ready swinging of the hame in the link, while the swinging link-joint gives the required degree of flexibility to pad, collar, and hame, so that they fit lightly and without unnecessary pressure on the neck of the horses. The clasps *a* pass through slits of the upper ends of the collar, and produce thereby the connection of the upper parts of collar and hame. The pad C is made in its greater part of spring metal, covered with leather or japanned, to protect the same in proper manner. The adjustable clasps admit the widening or narrowing of the upper part of the collar and hame, as required by the neck of the horse. The uppermost ends of the hame are connected by a lateral strap applied to rings at the ends,

for the purpose of hanging up the collar and hame, and saving the pad thereby. The traces are applied to the compound draft-eye D of each hame-section, which draft-eye is formed of four bolts, *e*, of which the outer ones are passed through the hame, while the middle are screwed to the face of the same and curved back, so that the ends are in line with the outer bolts. The outer ends of these bolts have eyes *e'*, through which a vertical connecting-rod, *f*, is passed, which is screwed into the lower eyes, or secured by a spring-pin or otherwise. The compound draft-eye admits the adjusting of the draft to old or new harness, and to any size of horse, so as to be most effective. The rod may be readily taken out for attaching the traces and replaced, forming three eyes at different heights. The middle bolts may be taken off by loosening the screws, if desired to do so. The collar and hame are closed at the lower part by a spring, E, with locking-pin *g* of one hame-section, and a perforated hame-strap, E', of the other hame-section, which is guided by a loop or band, *g*<sup>1</sup>, to slide in below the spring, so that the pin of the same locks the strap by passing through one of the perforations of the strap and into a hole of the hame-iron. The spring E is fastened at the upper end to the hame, and provided with a handle at the lower free end, that rests on the loop or band *g*<sup>1</sup>, the spring being prevented from swinging too far by a second guide band or loop, *g*<sup>2</sup>. The hame-strap E' has also a raised piece for being taken hold of, and is applied, by a pivot-clasp, *h*, to a ring, *h'*, of the hame-section, for giving each side of the collar a certain degree of flexibility, and admitting the following of collar and hame to the motions of the shoulders of the horse, in conjunction with the flexible link-joint of the collar and hame with the pad.

Thus an easily-worn, yet nicely-fitting and flexible, collar and hame is furnished, that adapts itself to the size of the neck and the motions of the shoulders without exerting any injurious influence thereon.

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

1. The combination of adjustable clasps at the upper part of the hame with a lateral connecting-link, and a seat or eye swinging forward and backward upon it, substantially in the manner and for the purpose set forth.
2. The combination of the adjustable hame-clasps, passing through the slits of the upper ends of the collar, with a swinging jointing-link, to form flexible connection of collar and hame section with pad, substantially as specified.

EZRA STROUD.

Witnesses:

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