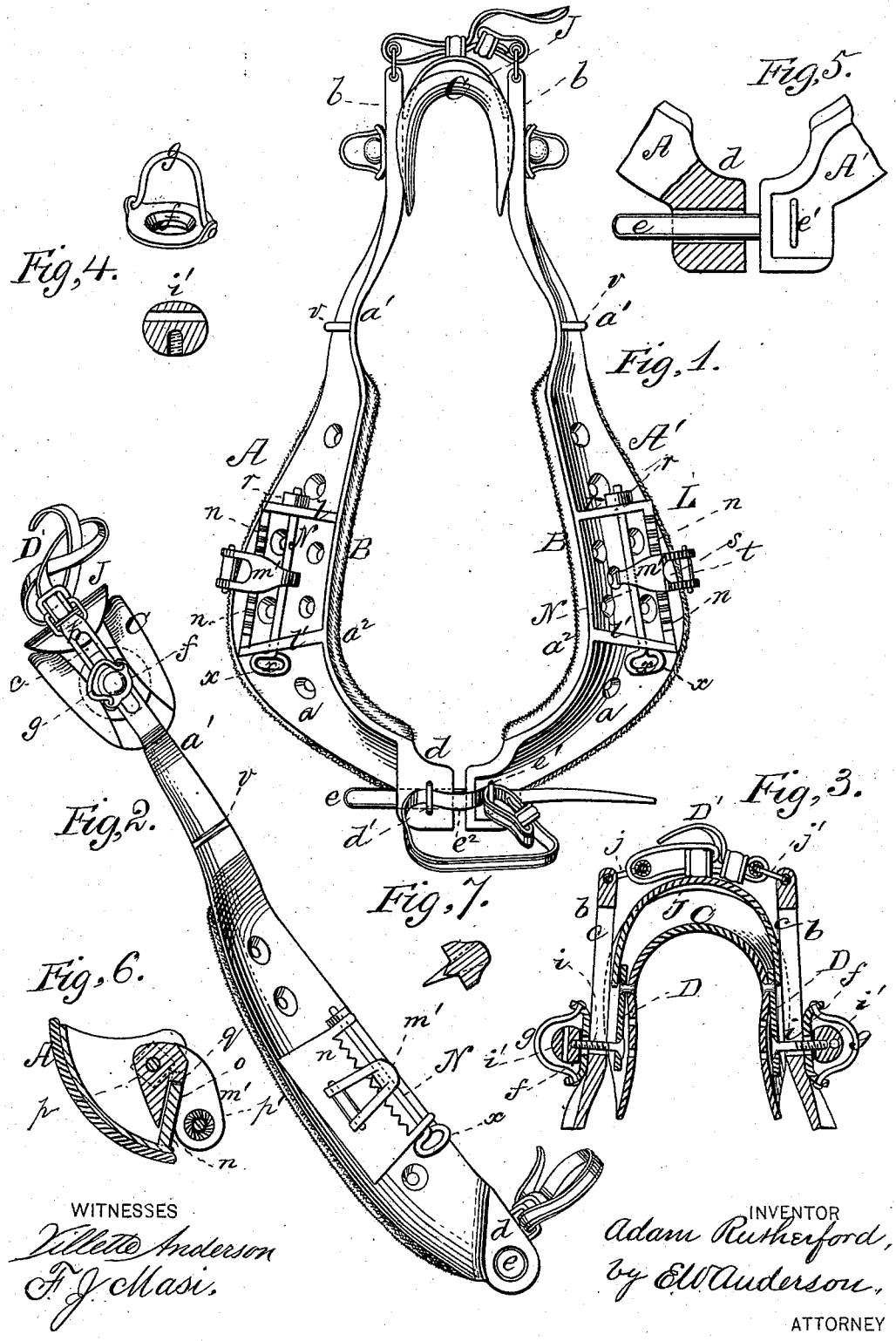
A. RUTHERFORD.

Combined Collar and Hames.

No. 217,157. Patented July 1, 1879.



WITNESSES

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ADAM RUTHERFORD, OF WALLA WALLA, WASHINGTON TERRITORY.

IMPROVEMENT IN COMBINED COLLAR AND HAMES.

Specification forming part of Letters Patent No. **217,157**, dated July 1, 1879; application filed January 6, 1879.

To all whom it may concern:

Be it known that I, ADAM RUTHERFORD, of Walla Walla, in the county of Walla Walla and Territory of Washington, have invented a new and valuable Improvement in Combined Collar and Hames; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my invention. Fig. 2 is a perspective view of the side thereof. Fig. 3 is a vertical section of the upper part of the collar-hames; and Figs. 4, 5, 6, and 7 are details.

The nature of the invention consists in the construction and novel arrangement of parts, as hereinafter shown and described.

In the annexed drawings, the letters A A′ designate the metallic portions of my combined collar and hames, the same being concavo-convex at their bearing parts *a*, and provided upon their convex faces with a pad or cushion, B. This latter extends upward as far as the metallic parts A A′ bear against the animal's shoulder, and is secured to the body-pieces aforesaid in any suitable manner.

Above the pad the collar-plates are bent out from each other in curved form, as shown at a^1, Fig. 1, for the purpose of preventing the friction of the said plates from bruising the bones of the neck. Above these bends plates A A′ have an extension, *b b*, in the sides of which are longitudinal slots *c c*, the object of which will hereinafter appear.

The plate A has at its lower extremity a transverse eye, *d*, upon which is a loop, *d′*, projecting to the front, and the plate A′ has a projecting pin, *e*, designed to enter the said eye, and likewise provided with a loop, e^1, to which is attached a strap, e^2, in any suitable manner, by means of which the lower portions of the said plates are secured together.

C indicates a leather cap, of the general form of the letter **U**, fitting snugly between the extensions *b* of plates A A′, and having at each side securely riveted the guard-plates D. These are made of any suitable metal, and are provided each with a projecting screw-threaded spur, *i*, extending through slots *c* a sufficient distance. Upon each of these spurs is passed a washer, *f*, to which is secured the rein-ring *g*, and the cap is adjusted up or down, and secured by means of nuts *i′* screwed upon the projecting ends of spurs *i* aforesaid.

At the upper ends of the plates A A′ are secured, respectively, the roller-loops *j* and *j′*, and the upper parts of the collar-plates are connected together around the animal's neck by means of a strap, D′, attached to loop *j′*, passing through loop *j*, and looped about itself to prevent slipping. Above the cap is a metallic guard, J, having a loop at its highest part for the reception of strap D′, which thus holds it in place. This guard is designed to prevent the strap from breaking down or cutting through the cap and injuring the horse's neck.

L indicates the draft attachment, consisting, essentially, of the flanges *l l′*, arranged at a suitable distance apart above and below the lower bend, a^2, of the plates A A′, a ratcheted rib, *n*, connecting said flanges, a dog, *m′*, straddling said rib, and an adjusting-rod, N, having an eye, *x*, at its lower end for attaching the breast-straps.

The rib and flanges usually are in one piece with the plates A A′, but may be separate therefrom and secured thereon in any desired way. The dog *m′* has a deep notch, *o*, and at its bottom a tooth, *q*, by means of which it is made to straddle the ratchet, with one branch, *p*, inside and the other, *p′*, outside of the same.

The dog being adjusted to the desired position, the rod N is passed up from below through registering-holes in the flanges and dog, and is secured in position by a nut, *r*, screwed on its projecting end. This rod holds the tooth *q* engaged with the ratchet, and to raise or lower it the dog must be removed. The outer branch, *p′*, of the dog is forked, as shown at *s*, and the branches of the fork are connected by a rod, *t*, over which the hooks on the traces or tugs are engaged.

As shown in Fig. 1, the plates A A′ are provided with numerous holes, which serve to lighten them without lessening their strength materially, and their bends a^1 are strengthened by one or more ribs, *v*, the form of which may

be curved, zigzag, straight, or of any other configuration I may elect.

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

1. The combined collar and hames, consisting of the slotted plates A A′, having the rib-guarded concaves a^1 near the upper parts, the pads B extending to the concaves, and above the latter the cap C, its guard-plates D, and the rein-ring attachments passing through the slots of the plates A A′, as specified.

2. The combination, with the collar-plate A, having a shouldered eye, d, and a loop, d', of the collar-plate A′, having a shouldered pin, e, extending through said eye, and provided with a loop, e^1, and a fastening-strap, e^2, thereby forming a solid or rigid joint, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ADAM RUTHERFORD.

Witnesses:
CHARLES ROBERT BERTRAM,
JOHN JACOB SPANSAIL.