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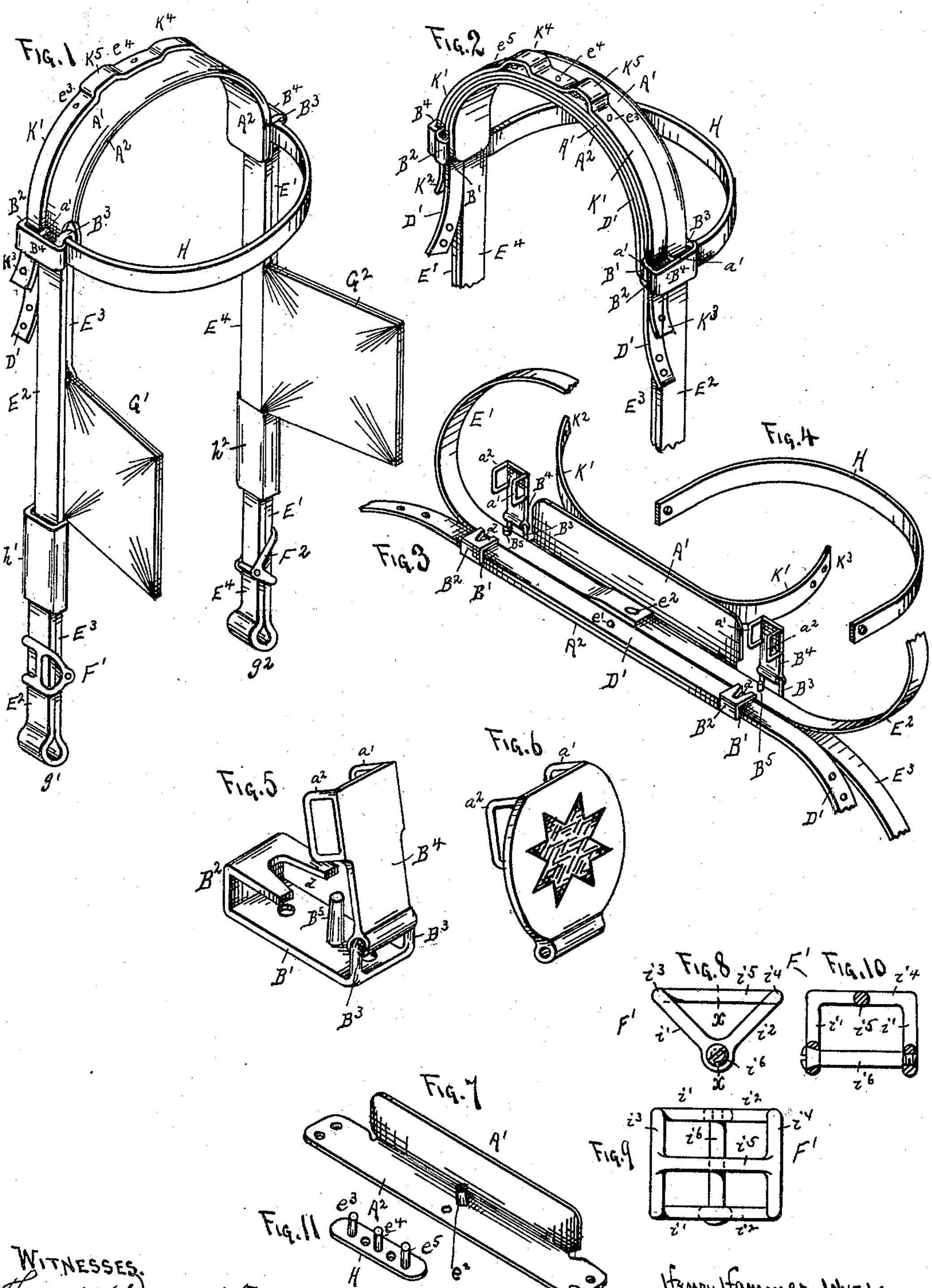
H. HAMMER.

BRIDLE.

(No Model.)

(Application filed Jan. 25, 1899.)



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UNITED STATES PATENT OFFICE.

HENRY HAMMER, OF MOUNTAIN LAKE, MINNESOTA.

BRIDLE.

SPECIFICATION forming part of Letters Patent No. 646,983, dated April 10, 1900.

Application filed January 25, 1899. Serial No. 703,333. (No model.)

To all whom it may concern:

Be it known that I, HENRY HAMMER, a citizen of the United States, residing at Mountain Lake, in the county of Cottonwood and State of Minnesota, have made certain new and useful Improvements in Bridles, of which the following is a specification.

This invention relates to the bridles of horses' harness; and it consists in the construction, combination, and arrangement of parts, as hereinafter shown and described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a perspective view from the front of a portion of the upper part of a bridle with my improvements attached thereto. Fig. 2 is a similar view from the rear. Fig. 3 is a perspective view of the parts which comprise the improvements detached and partially disconnected to illustrate the construction more fully. Fig. 4 is a perspective view of the "front strap" detached. Fig. 5 is an enlarged perspective view of the combined buckle and fastener detached. Fig. 6 is an enlarged perspective view of the outer part of the combined buckle and "fastener" illustrating a modification in the construction. Fig. 7 is a perspective view of the crown-strap detached and opened out. Fig. 8 is an enlarged side view. Fig. 9 is an enlarged plan view of the "cheek strap" buckle detached, and Fig. 10 is a cross-section on the line $x\ x$ of Fig. 8. Fig. 11 is a perspective view of the coupling-plate detached.

The "crown-strap" portion of the bridle which passes over the top of the head of the horse in the rear of the ears is shown in Fig. 7 and is formed in a double width or over twice as wide as in the ordinary construction and folded over one half upon the other half lengthwise, the upper half A′ being shorter than the lower half A^2, as shown in Fig. 7, its object and advantages to be hereinafter shown. Attached to the extended ends of the part A^2 are combined buckles and fasteners adapted to receive and support the various straps which go to make up the bridle. These combined buckles and fasteners consist of a base B′, secured to the ends of the part A^2, preferably by rivets, and with one end B^2 projecting outward and then inward parallel to the base B′, as shown, while the other end of the base is formed into a loop B^3, into which a plate B^4 is hinged, as shown. The free end of the plate B^4 is provided with loops $a'\ a^2$, adapted to pass inward alongside the inwardly-projecting end B^2, so that when a strap is passed through the two loops $a'\ a^2$ and between the end B^2 and the bottom of the base B′ the base and the plate B^4 will be locked together, as hereinafter explained. Rising from the base B′, near the loop B^3, is a stud B^5, whose upper end is in close proximity to the under side of the top plate B^4 when the latter is closed down, as in Figs. 1 and 2. The end B^2 is formed with its inner edge cut out, as shown at d, to provide for the insertion of the riveting-machine or other implement for attaching the parts together.

D′ is a narrow strap secured centrally to the lower part A^2 of the crown-strap, preferably by a rivet e', as shown in Fig. 3, and passing through the combined buckle and fastener at either end, as shown, and secured therein by the same rivet which secures the base B′ to the crown-strap. The ends of this strap D′ form the means for supporting the throat-strap, which is not shown in the drawings, as it forms no part of the present invention.

The cheek-straps E′ E^2 start at the center of the crown-strap A′ A^2 and are secured in any desired manner, as by a rivet, as shown at e^2 in Fig. 3, and pass downward through the combined buckles and fasteners and fit over the studs B^5 therein and thence downward through buckles F′ F^2 and end in the bit-loop, as shown.

E^3 E^4 represent other straps, forming part of the cheek-straps, lying parallel to the straps E′ E^2 and starting from the stud B^5, by which they are held, and pass downward through the buckles F′ F^2 and formed into loops $g'\ g^2$ for the bits (the bits not being shown, as they form no part of the present invention) and thence upward again through the buckles F′ F^2 and the ends passed into loops $h'\ h^2$ on the straps E^3 E^4, by which they are held.

The "blinders" G′ G^2, when blinders are used, will be secured in place between the two parts of the cheek-straps, as shown.

The front strap H is secured by passing its ends through the loop B^3 of the combined buckle and fastener and fitting the said ends over the studs B^5, so that when the top plate

B^4 is closed down, as in Figs. 1 and 2, the three straps through which the stud B^5 passes will be firmly held in place.

Secured upon top of the upper part A′ of the crown-strap is a narrow strap K′, preferably secured by rivets e^3 e^4 e^5, with its ends K^2 K^3 adapted to be passed through the loops a' a^2 and beneath the inwardly-projecting ends B^2 to "lock" the hinged top part B^4 of the combined buckle and fastener to the base B′, as before described. The strap K′ may be formed with loops K^4 K^5 for the passage of the "overcheck," if one be used. The depending ends K^2 K^3 may be utilized to carry the throat-loop, if preferred.

The construction of the buckles F′ F^2 is shown more clearly in Figs. 8 and 9, which represent one of them detached. These buckles consist of angular sides i' i^2, connected by cross-bars i^4 i^4, and the cross-bars connected by a horizontal bar i^5, the apexes of the angular sides being connected by another cross-bar i^6, the latter secured in place preferably by being screwed through the two parts i' i^2, as shown. This arrangement provides for holding all the parts of the straps firmly, while at the same time allowing them to be as readily adjusted as any other buckle.

As before stated, the crown-strap is formed in double width and folded over lengthwise, thus forming a "housing" or cover for the upper ends of the cheek and other straps to protect them from the weather, as well as to provide a more secure fastening than by the ordinary construction. By constructing the crown-strap in this shape I am enabled to use a much cheaper grade of leather than in the ordinary harness, as the cheek-straps in ordinary harness, on which the greatest strains come, have to be of much stronger and better leather than the crown-strap in my improved construction.

On the ordinary construction, with the crown-strap and cheek-straps in one piece, the whole combined crown and cheek straps have to be necessarily of the best quality of leather, whereas with the cheek-straps, which have to bear the greatest strains, formed separate from the crown-strap, which is not called on to bear so great a strain, the latter can be made of a much cheaper grade of leather, and yet be of ample strength to sustain all strains to which it may be subjected. This is an important feature of the invention.

By folding the double-width crown-strap over backward the rounded folded over edge is at all times presented in a forward position and toward the head of the horse and does not present a cut or sewed edge to the weather or toward the direction which the horse is moving, which is also an important advantage.

Then, again, by forming the two thicknesses of the crown-strap in one piece I save the expense of sewing the long seams, which would be necessary if the crown-strap were in two parts.

In ordinary bridles the front strap H is secured in place by being looped by its ends around the cheek-straps and bound in place by the fasteners, the loops on the ends of the straps H taking from three to five inches of leather on each end.

With my arrangement I use only about one inch of the strap H within the buckles at each end, thus effecting a saving of from two to four inches of leather on each end, which is a very important item.

The hinged top B^4 of the buckles may be ornamented to any extent to give them the appearance of rosettes, as shown in Fig. 6, or an ordinary rosette may be attached to the top plate, if preferred.

In Fig. 11 is shown a coupling-plate H, adapted to be placed within the folds of the front A′ A^2, with pins e^3 e^4 e^5, to receive and support the ends of the straps E′ E^2, which form of construction may be found of advantage under some circumstances.

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

1. In a bridle, the crown-strap body portion formed with an extension integral therewith and of a less length than the body portion in combination with the two side or cheek straps secured together and to the crown-strap at their upper meeting ends and covered and protected by said extension of the crown-strap when said extension is folded upon the body portion thereof, substantially as set forth.

2. In a bridle, a combined buckle and fastener consisting of a base having a stud rising therefrom and with one end projecting inward over a portion of the base-plate, a cover-plate hinged at one end to the base-plate and with depending loops embracing the sides of said inwardly-projecting portion, whereby the cheek-straps and front straps may be supported, and the end of the throat-strap utilized to lock the cover-plate to the base-plate by passing it through said depending loops and beneath the inward extension of said base-plate, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY HAMMER.

In presence of—
J. H. DICKMAN,
D. G. HILBERT.