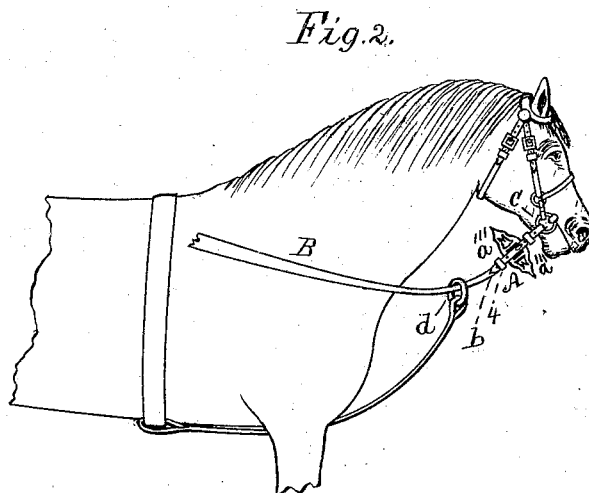
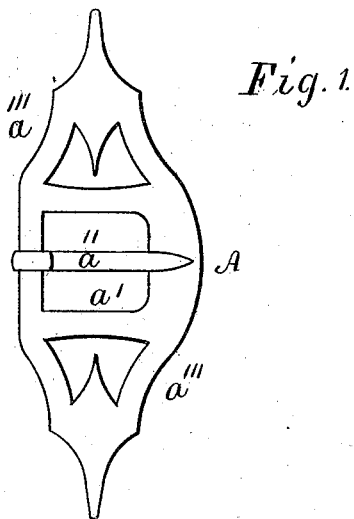


W. H. B. DIEHL.

Harness

No. 168,625.

Patented Oct. 11, 1875.



Witnesses:

Sam Morrison
Wm H. Morrison

Inventor:

William H. B. Diehl

UNITED STATES PATENT OFFICE.

WILLIAM H. B. DIEHL, OF RICHLAND CENTRE, PENNSYLVANIA.

IMPROVEMENT IN HARNESS.

Specification forming part of Letters Patent No. **168,625**, dated October 11, 1875; application filed July 28, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. B. DIEHL, of Richland Centre, in the county of Bucks and State of Pennsylvania, have invented an Improvement in Harness for Horses, of which the following is a specification:

The reins required in riding or driving a horse are generally connected with a martingale at a variable point between the bridle-bit and the breast of the animal, for the purpose of preventing the latter from throwing his head unduly upward; and as the connection is required to be not less than three or four inches from the bit, a broad piece of thick leather has heretofore been secured to each rein, for the purpose of preventing the ring of the martingale from slipping forward beyond the specified limit, when the rein is drawn upon by the rider or driver; but this thick piece of attached leather is very objectionable for several reasons, among which may be mentioned, that if made wide enough to prevent the martingale-ring from slipping over it into contact with the bridle-bit, it will have a clumsy and heavy appearance, and if made of thin leather it will not prevent the said ring from slipping over it when the rein is drawn upon by the rider or driver; and in either case it requires a great deal of stitching to make it reasonably durable.

The object of my invention is to avoid the above-mentioned objections, and to afford, in all respects, a better article, by the combination of a metallic buckle having a lateral projection at each of its two side edges with the rein and martingale, as will hereinafter be described with reference to the accompanying drawing, in which—

Figure 1 is a plan view of the improved buckle; and Fig. 2, the same buckle reduced in size, and applied to the rein and martingale of the horse.

The buckle A is made of metal, has a square opening, *a'*, of sufficient width to receive through it the width of the rein, and a swinging tongue, *a''*, like an ordinary harness-buckle, and a lateral projection, *a'''*, at each

of its two sides, and in the same plane with the under side of the main body or middle portion of the buckle, each projection *a''' a'''* being in length about equal to the width of the said middle portion, substantially as represented by Fig. 1.

The projections *a''' a'''* may be each in the form of a straight bar, with a knob on its outer end, or of any other simple, plain form; but the open ornamental form shown in Fig. 1 is preferred, as it combines strength with lightness in weight.

The buckle A is secured to the rein B by means of a short tug-strap, *b'*, sewed fast to the rein, and the billet or end of said rein extends forward, passes through the bridle-bit ring C, and then returns and passes through the buckle A by entering the square opening *a'* from the under side thereof, receives the end of the tongue *a''* through the desired hole in the billet, and finally enters the loop *d*, substantially as represented by Fig. 2. The hand end of the rein B is passed through the martingale-ring D in the usual manner.

It will be understood without any further explanation that the buckle A, constructed and applied as set forth, will effectually prevent the martingale-ring *d* from slipping beyond it toward the bit-ring, when the rein B is drawn upon, however strongly, by the rider or driver; and that the said buckle will be less clumsy, or more slightly, than the leather stop heretofore used; and, moreover, it will be lighter in weight, more easily applied to the rein, and more durable.

I claim as my invention—

The combination of the buckle A, provided with the lateral projections *a''' a'''*, and attached to the rein, which is connected to the bit, as described, with the ring D of the martingale, substantially in the manner and for the purpose hereinbefore set forth and described.

WILLIAM H. B. DIEHL.

Witnesses:

HENRY M. ERDMAN,
HOWARD S. BACHMAN.