T. E. CLARK.

Safety-Attachment for Bridles.

No. 202,522. Patented April 16, 1878.

Fig. 1

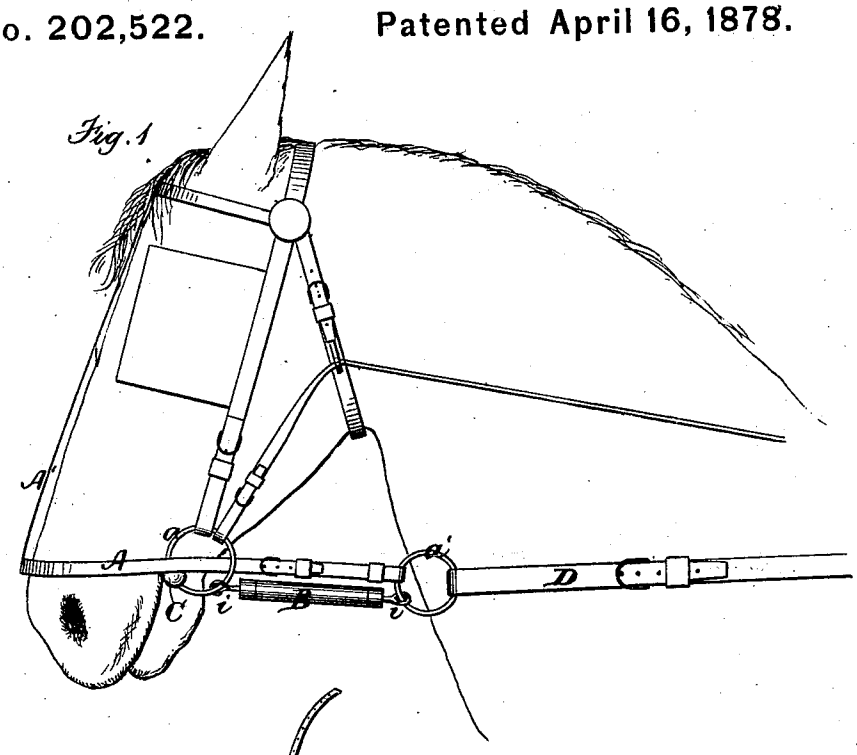


Fig. 2.

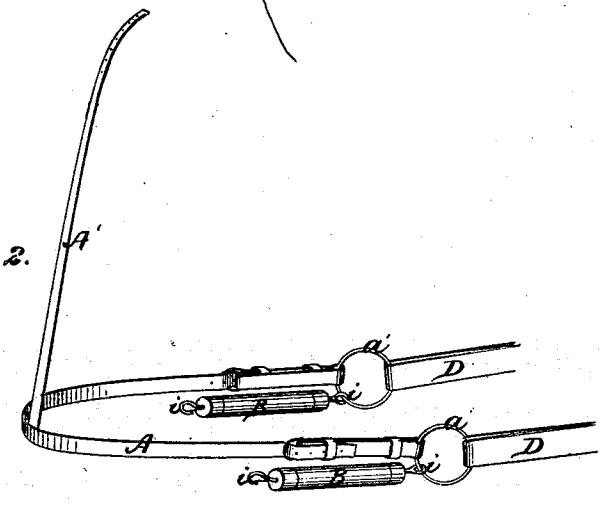


Fig. 3.

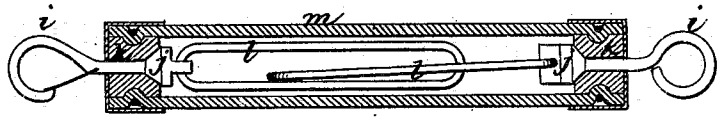
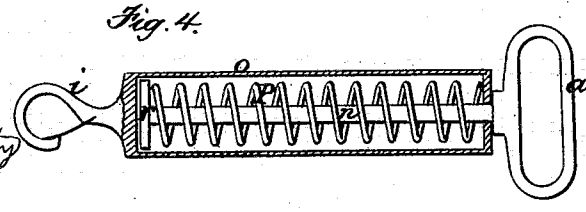


Fig. 4.



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UNITED STATES PATENT OFFICE.

T. EMORY CLARK, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SAFETY-ATTACHMENTS FOR BRIDLES.

Specification forming part of Letters Patent No. **202,522**, dated April 16, 1878; application filed March 1, 1878.

To all whom it may concern:

Be it known that I, T. EMORY CLARK, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Safety Attachments for Bridles, of which the following is a specification:

This invention has for its object to provide a safety attachment for harness-bridles, whereby the driver can easily control and hold a headstrong animal, without injury or material discomfort to such animal.

The invention consists, as a whole, in a safety attachment for bridles composed of a nose-strap, adapted to be connected to the reins in such manner as to form a continuation thereof over or around the nose of the animal, and two spring-couplings adapted to connect the reins to the ends of the bit, said nose-strap and couplings being so arranged that when the reins are lightly held or pulled the draft thereon will be sustained entirely by the bit through the spring-couplings, but when extra power is applied to the reins the couplings will extend and allow the reins to pull the nose-strap backwardly against the nose of the animal, as I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side view of a horse's head provided with my attachment. Fig. 2 represents a perspective view of the attachment removed from the horse. Fig. 3 represents a sectional view of different forms of the spring-couplings.

Similar letters of reference refer to corresponding parts.

In the drawings, A represents the nose-strap, and B B represents the spring-couplings. C represents the bit of a harness-bridle, provided with end rings *a*, as usual. D D represent the reins, which, instead of being attached directly to the rings of the bit, as ordinarily, are connected thereto by the intermediate couplings B. These couplings are constructed in any desired manner, so that they will expand under longitudinal strain, and recoil or retract automatically, and are provided with snap-hooks *i i*, or other suitable devices, whereby they may be connected to the bit-rings *a*, and to rings a^1, with which the ends of the rings are preferably provided, although the couplings may be connected to the reins in any suitable manner. The nose-strap A is connected to the rings a^1, as shown, or otherwise attached to the reins, and extends forward over the nose of the animal, as shown in Fig. 1, said strap forming a connection between the reins, making the same practically continuous from the hands of the driver to the nose of the animal. I prefer to pass the strap A through the bit-rings *a*, to prevent it from sagging, it being desirable that the strap should be located just above the nostrils, so that, when pressed against the nose of the animal, it will partially compress the nostrils and obstruct the breathing of the animal. I also prefer to support the nose-strap by a central strap, A′, which extends upwardly, and is buckled or otherwise connected to the upper portion of the bridle, this strap being rendered adjustable by a series of holes, so that the height of the nose-strap can be readily regulated. This strap A′ is not essential in all cases, however, as, with a horse having a straight nose or face, the rings *a* will be a sufficient support for the nose-strap.

The nose-strap A and couplings B B are so arranged that the ordinary pressure or draft of the reins in driving and guiding the animal will be exerted entirely on the bit through the couplings, the nose-strap being inoperative; but when the horse is difficult to manage, and extra power is applied to the reins, the consequent yielding of the springs will cause the draft or strain on the reins to be exerted on the nose-strap as well as on the bit, the nose-strap being drawn against the nose of the animal and caused to partially compress his nostrils, as well as to draw his head back.

It is well known that a horse's nose is sensitive to pressure, and it will be seen that the power of the driver brought to bear on this sensitive portion, together with the partial obstruction of the nostrils, as well as the power of the driver exerted at the same time on the bit, and augmented by the recoiling power of the spring-couplings, will enable a horse to be readily checked and kept under control without inflicting injury or unnecessary pain. The nose-strap also constitutes a safeguard against the running away of the horse in case of the breakage of the bit or the removal of

the same from the animal's mouth, and may be used for this purpose with or without the spring-couplings B B, the reins being attached to the bits by any suitable non-elastic devices if the spring-couplings are not used.

The couplings B B, as before mentioned, may be made in any desired manner, and I do not limit myself to any particular construction, so long as said couplings are adapted to expand under longitudinal strain and to contract or recoil automatically. I prefer to construct each coupling so that it will become rigid after being extended to a sufficient length to enable the power of the driver to be exerted on the nose-strap.

In Fig. 3 I have shown one form of coupling, the same being composed of two chain-links, *l l*, provided at their ends with snap-hooks *i i*, or other means for attaching the coupling to the rings *a* a^1. The outer end of each link is provided with an enlargement, *j*, into which the hooks *i i* are screwed and fitted in collars *k k*. To these collars are securely attached the opposite ends of a rubber tube, *m*, which incloses the links *l l*, and constitutes the spring of the coupling, the shanks of the hooks *i i* passing through apertures in the collars *k*. The spring or tube *m*, when in its normal condition, holds the links *l l* in a telescoped condition, and when the links are drawn outwardly the spring *m* expands longitudinally, and when the proximate ends of the links abut against each other they prevent the coupling from being farther extended, and make it practically rigid.

In Fig. 4 another form of coupling is shown, in which a ring, a^2, at one end, is rigidly attached to a rod, *n*, and a snap-hook, *i*, at the other end, is rigidly attached to a tube, *o*, which incloses the rod *n*. P represents a spiral spring, which surrounds the rod *n*, and bears at one end against a head, *r*, formed on the end of said rod, and at the other against the end of the tube *o*, through which the rod passes. The rod *n* and ring a^2 are adapted to slide in and out of the tube, the spring being compressed when the rod is drawn out. I prefer this latter construction as being the strongest and most durable.

I claim as my invention—

1. A safety attachment for bridles, consisting of a nose-strap, A, adapted to be connected to the reins and form a continuation thereof over the nose of the animal, and the spring-couplings B B, adapted to connect the reins to the ends of the bit, as set forth.

2. The safety attachment consisting of the nose-strap A, the rings a^1 attached to the ends of the said strap and adapted to receive the ends of the reins, and the spring-couplings B, each connected at one end to one of the rings, a^1, and provided at the other end with means for attachment to the bit, as set forth.

3. The combination of the reins D, connected, as described, to the bit, and the nose-strap A, connected to the reins and forming a continuation thereof over the nose of the animal.

4. The combination of the reins D, the bit C, the spring-couplings B, connecting the reins with the bit, and the nose-strap A connected to the ends of the reins and forming a continuation thereof over the nose of the animal, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

T. EMORY CLARK.

Witnesses:
C. F. BROWN,
GEO. W. PIERCE.