

(No Model.)

E. L. SMITH.
REIN GRIP.

No. 434,362.

Patented Aug. 12, 1890.

Fig. 1.

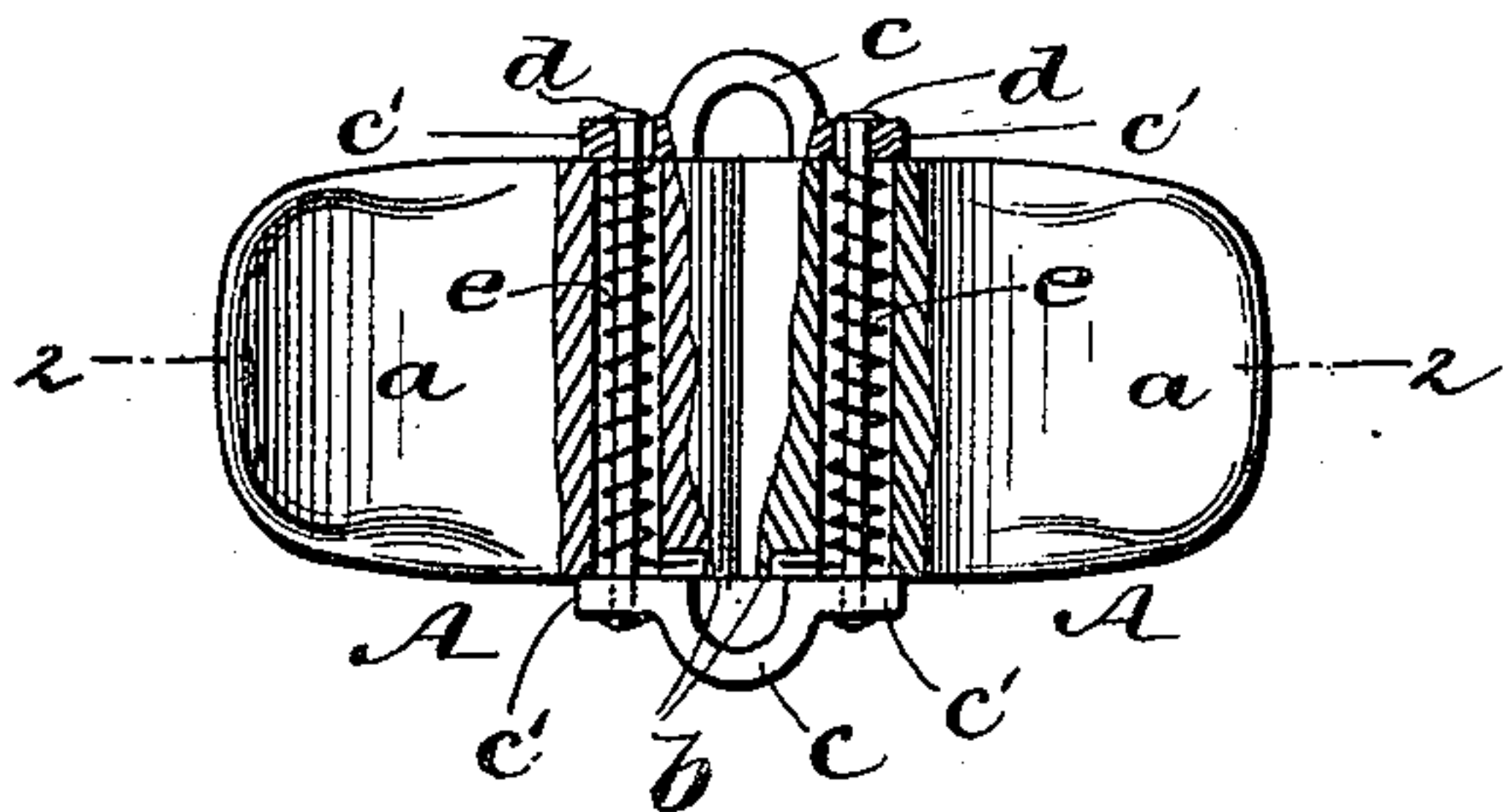


Fig. 2.

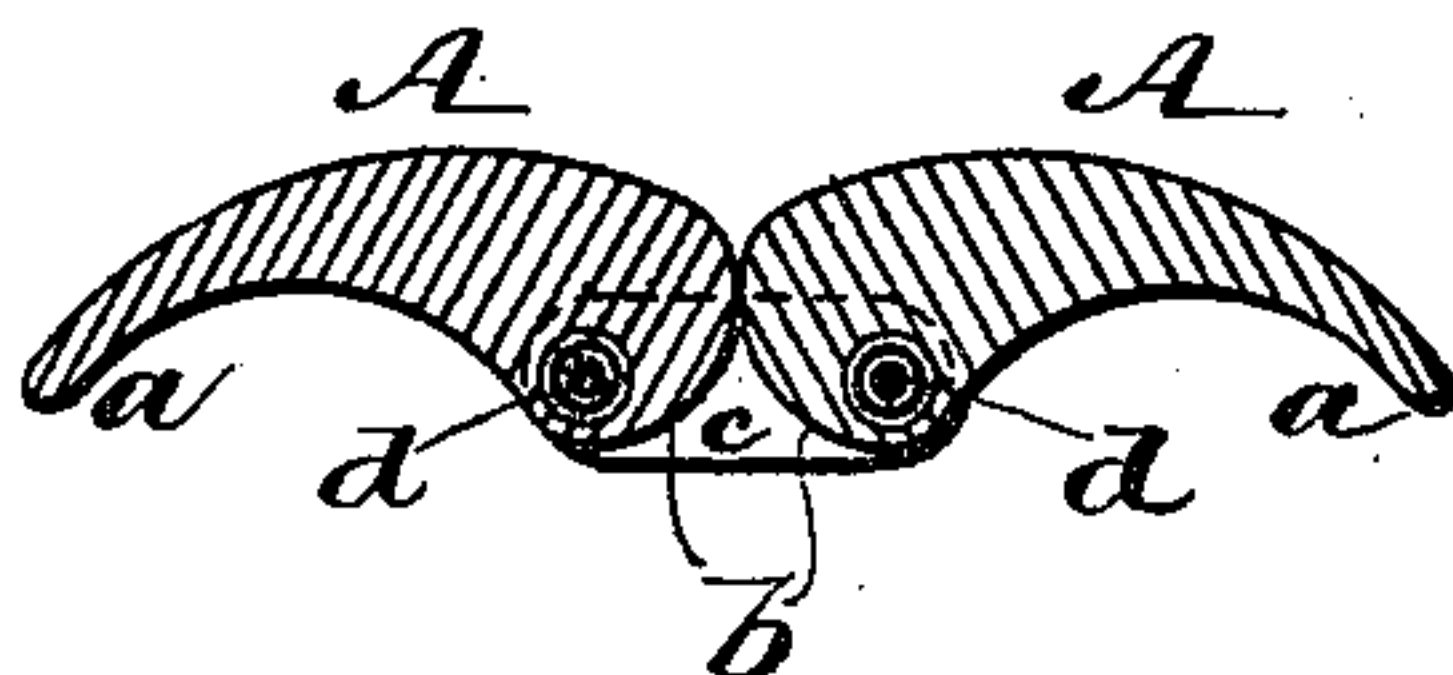


Fig. 3.

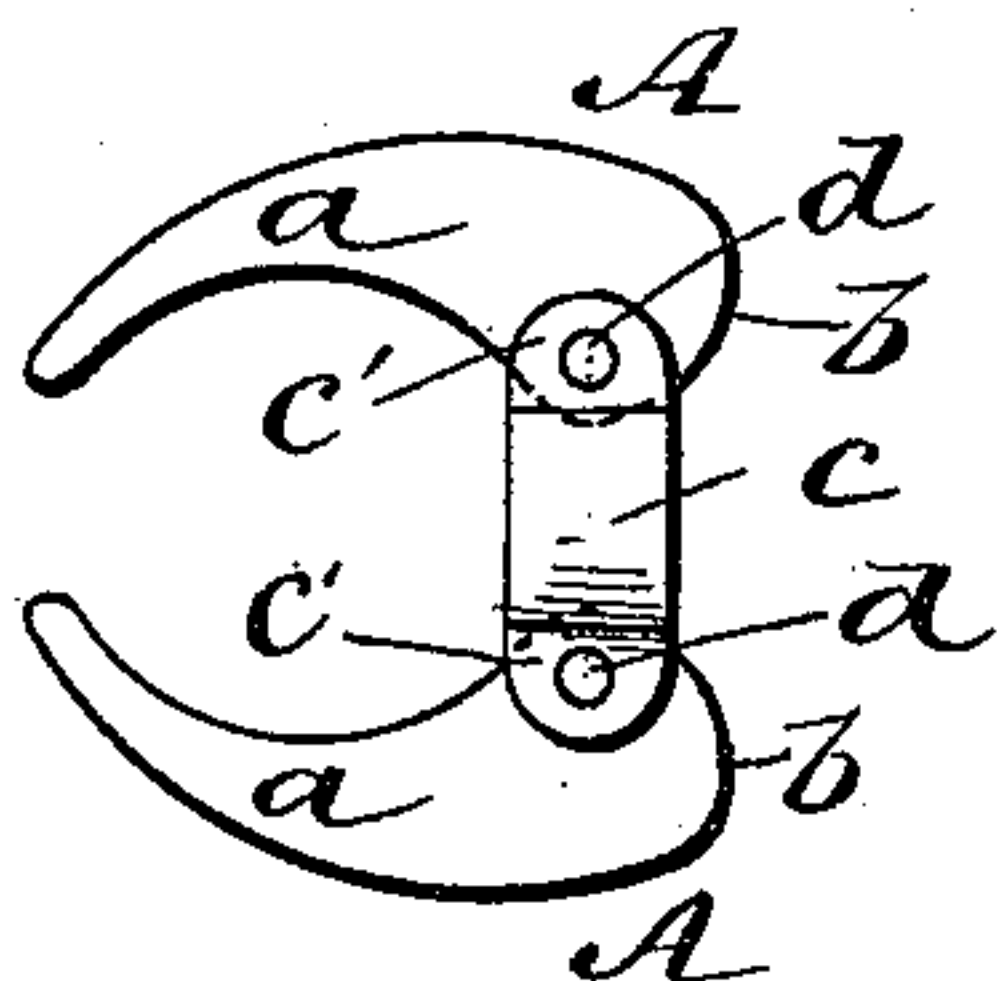
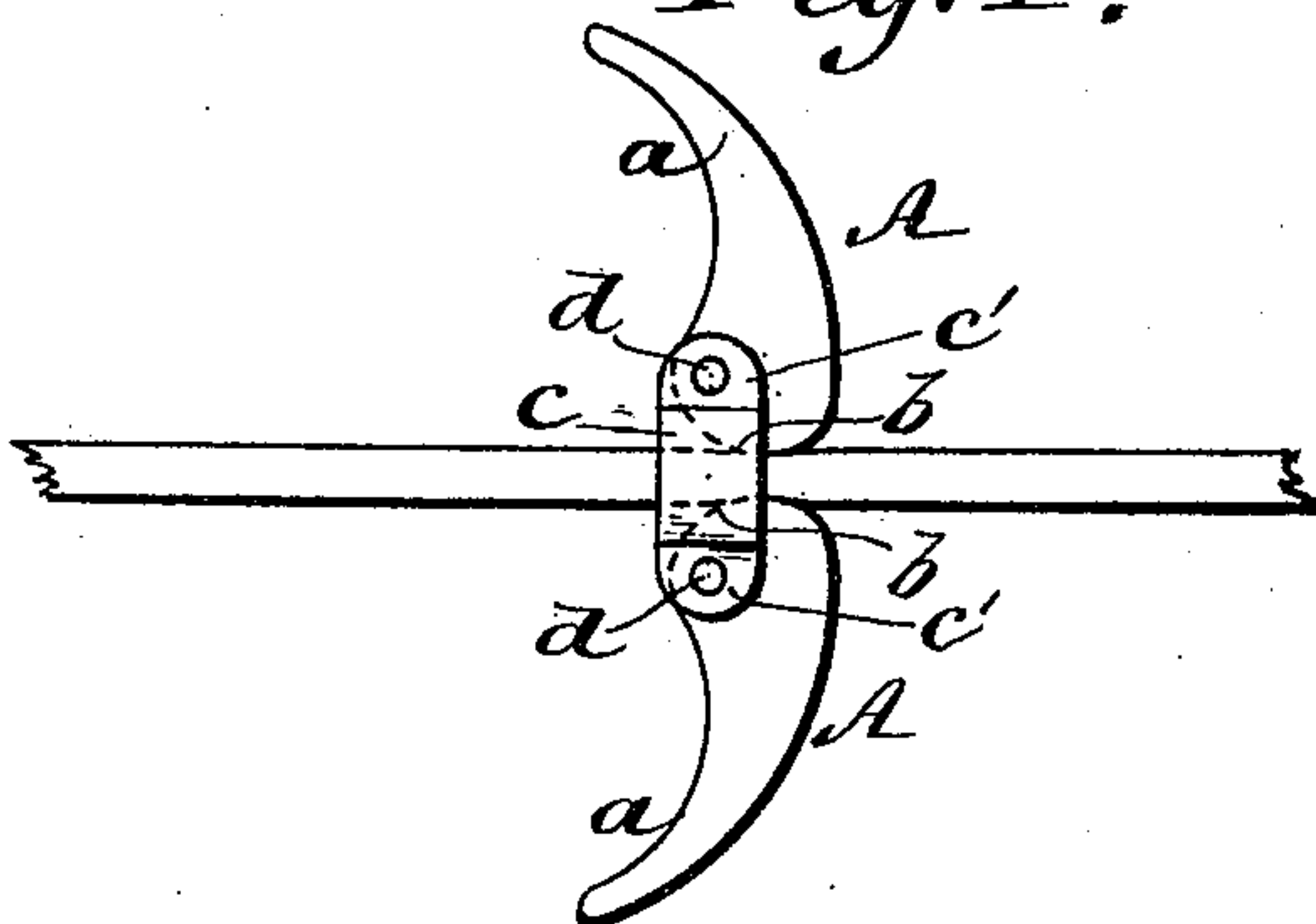


Fig. 4.



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REIN-GRIP.

SPECIFICATION forming part of Letters Patent No. 434,362, dated August 12, 1890.

Application filed February 21, 1890. Serial No. 341,263. (No model.)

To all whom it may concern:

Be it known that I, ELVIN L. SMITH, of Mansfield, in the county of Bristol and State of Massachusetts, have invented a new and Improved Rein-Grip, of which the following is a full, clear, and exact description.

In driving spirited horses with reins it is difficult to hold them safely with the same, owing to their liability to slip through the grasp of the driver, this being more especially the case when the team or single animal is driven in cold weather and gloves are a necessity to protect the hands, thus weakening their grasp upon the reins.

The object of this invention is to provide a small neat device, which is located upon the driving-reins or a riding-bridle, and that will afford an abutment thereon, which is adjustable, whereby a firm grip upon the reins is assured at all times under all conditions of service.

To this end my invention consists in certain features of construction and combinations of parts, as is hereinafter described, and indicated in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the device in expanded adjustment, a portion being broken away to expose the interior parts. Fig. 2 is a longitudinal section on the line 2 2 in Fig. 1. Fig. 3 is a side view of the appliance in folded adjustment; and Fig. 4 represents the grip attachment in position upon a driving-rein to which it is clamped.

The rein-gripping device consists of two similarly-shaped cam-blocks A, which are provided with curved wings *a*, the cam portions *b*, that are integral with these wings, being held oppositely by the bracket-plates *c*.

It is essential, for the proper working of the device, that the cam-blocks A should have free rocking movement between the bracket-plates *c*. To permit this the plates *c* are held spaced apart by the parallel rods *d*, that are secured by their ends in the flanges *c'* of the bracket-plates, and upon which rods the cam-blocks A have been previously mounted. The transverse orifices made through the blocks A for their loose engagement with the rods *d* have such a diametrical size proportioned to that of the rods as will permit the intro-

duction of the spiral springs *e* within these holes when the parts are assembled, the springs having been placed upon the rods, as shown in Fig. 1, have one end of each fastened to the flange *c'* of a bracket-plate, the opposite ends of said springs being interlocked with the cam-blocks A in such a manner that their torsional strength will be exerted to extend the wings *a* oppositely and throw the cam-faces of the blocks A toward each other. Preferably the bracket-plates *c* are curved outwardly at their centers, affording room for the edges of the rein or reins B, upon which the device is slid from one end. The lateral projection of the wings *a*, whereon the fingers of the driver's hand will abut when in use, furnish a means that will enable him to exert muscular strength for the control of the animal driven without depending upon the contractile power of the hands alone. By slight pressure exerted upon the free ends of the wings *a* these may be instantly folded into the position shown in Fig. 3, which will release the grip of the cam-faces upon the reins and allow the cam-blocks A to be shifted upon the same, a relaxation of compression upon the ends of the wings *a* resulting in the locking engagement of their cam-heads upon opposite sides of the driving-rein, as before stated.

In using the device herein described the same is preferably placed on one rein, as shown, but its use is not limited to contact with a single rein, as it is evident that it may be made to embrace two lines as well as one, or a gripping device may be applied to each rein where a team hard to control is to be driven.

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

The combination, with two similar cam-blocks having wings thereon, two bracket-plates, and two spacing parallel rods secured at their ends in the bracket-plate wings, of two spiral springs, which encircle the rods and engage the bracket-plates and cam-blocks with their opposite ends, substantially as set forth.

ELVIN L. SMITH.

Witnesses:

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