

J. P. TOLMAN.
DRIVING-REINS.

No. 177,302.

Patented May 9, 1876.

Fig. 1.

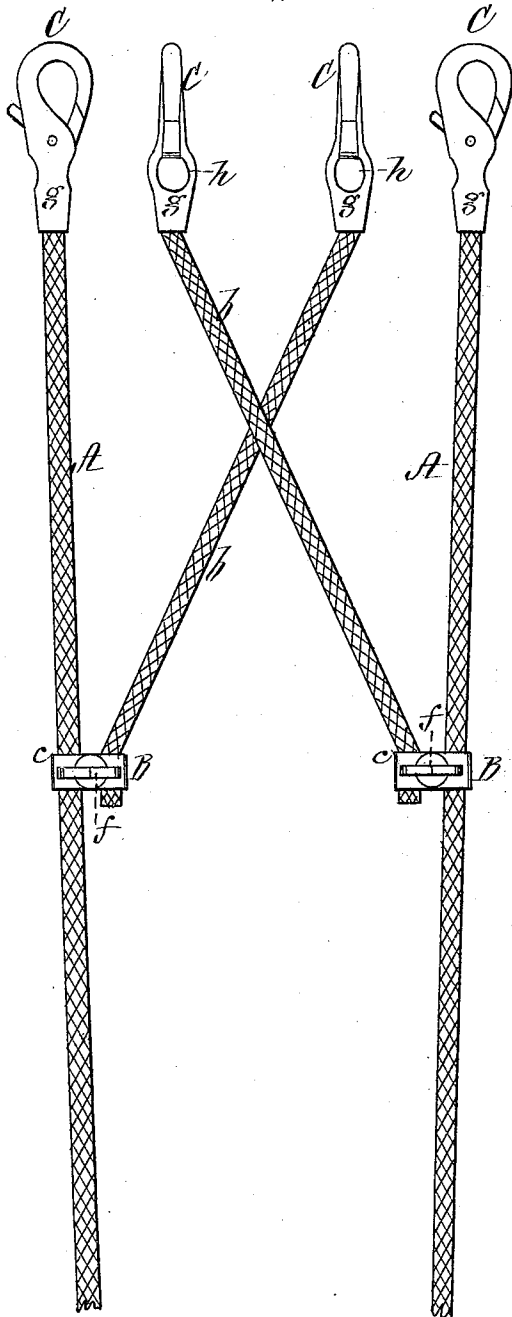


Fig. 2.

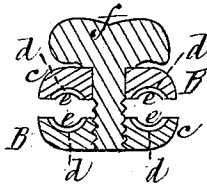


Fig. 3.

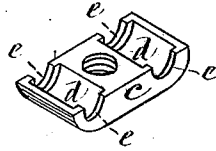


Fig. 4.



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UNITED STATES PATENT OFFICE

JAMES P. TOLMAN, OF BOSTON, ASSIGNOR TO THE SILVER LAKE COMPANY,
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IMPROVEMENT IN DRIVING-REINS.

Specification forming part of Letters Patent No. 177,302, dated May 9, 1876; application filed April 22, 1876.

To all whom it may concern:

Be it known that I, JAMES P. TOLMAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Driving-Reins, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents my improved driving-reins arranged for a pair of horses. Fig. 2 is a section through the adjustable clamp employed for making the connections. Fig. 3 is a perspective view of one of the halves or portions of the clamp inverted. Fig. 4 represents the snap-hook employed for attaching the reins to the bits, the lower portion or socket of the hook being shown in section.

The object of my invention is to furnish a cheap and reliable substitute for the ordinary leather reins, to be used particularly for agricultural purposes, and having all the advantages of adjustability heretofore afforded by straps and buckles; and my invention consists in driving reins or lines composed of cord in which the connections are formed by means of adjustable clamps of peculiar construction, the reins being provided with snap-hooks, by which they are attached to the bits.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A A, Fig. 1, represent a pair of driving-reins composed of cord, (preferably braided,) and arranged for a pair of horses, the portions *b b* being attached to the main portions A A by means of adjustable metallic clamps B B, one end of each of the portions A and *b* being provided with a snap-hook, C, by which it is attached to the bit in the horse's mouth. The cord of which the reins are composed should be coated with a water-proof glazing, to protect it from the weather, and thus increase its durability.

The clamps B are each composed of two portions, *c c*, each of which is provided with two semicircular grooves, *d*, for the reception

of the cord, each groove having at each of its ends a holding lip or flange, *e*, which bites or is pressed into the cord when the latter is confined within the clamp by turning the thumb-screw *f*, by which the two portions of the clamp are drawn toward each other and held together, and by means of these clamps the portions *b b* of the reins may be readily adjusted in different positions upon the portions A A by simply loosening the thumb-screws *f*, which is a great convenience, no screw-driver, wrench, or other instrument being required. Furthermore, these clamps are cheap, simple, and effective, the holding-lips *e* rendering the parts perfectly secure, and effectually preventing any liability of slip.

Each of the hooks C is provided at its inner end with a tapering socket or thimble, *g*, through which the end of the cord is passed until it projects through the eye *h*. A common wood-screw, *i*, (previously tinned to prevent rust, which would destroy the cord in contact therewith,) is then inserted into the end of the cord at its center, and screwed in until its head is sunk beneath the end of the cord, when the latter is pulled down into the socket *g*, as seen in Fig. 4, the screw acting as a wedge to spread the cord and hold it firmly in place within the socket, and prevent it from being withdrawn therefrom, all necessity of tying or splicing, as heretofore, being thus avoided, and straps and buckles entirely dispensed with, the reins having all the advantages of adjustability afforded by the more costly leather reins in general use, and they are, consequently, particularly adapted for agricultural purposes, where cheapness, lightness, and strength are required.

The hooks C and clamps B are made, preferably, of malleable iron, tinned to prevent rust, which would injure or destroy the cord in contact therewith.

Instead of a screw, *i*, a wedge may be employed, if preferred, and the construction of the snap-hook beyond the socket *g* may be varied, as desired.

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

1. As a new article of manufacture, driving-reins composed of cord, and provided with ad-

justable clamps B and snap-hooks C, substantially as and for the purpose set forth.

2. An adjustable clamp, B, composed of two portions, *c c*, each having two grooves, *d*, with holding-lips *e*, in combination with the thumb-screw *f*, for connecting the different portions of driving-reins composed of cord, substantially as described.

3. In combination with driving-reins composed of cord, a snap-hook, C, provided with

a tapering socket, *g*, for the reception of the end of the cord, secured therein by a screw or wedge, substantially as set forth.

Witness my hand this 15th day of April, A. D. 1876.

JAMES P. TOLMAN.

In presence of—

P. E. TESCHEMACHER,
W. J. CAMBRIDGE.