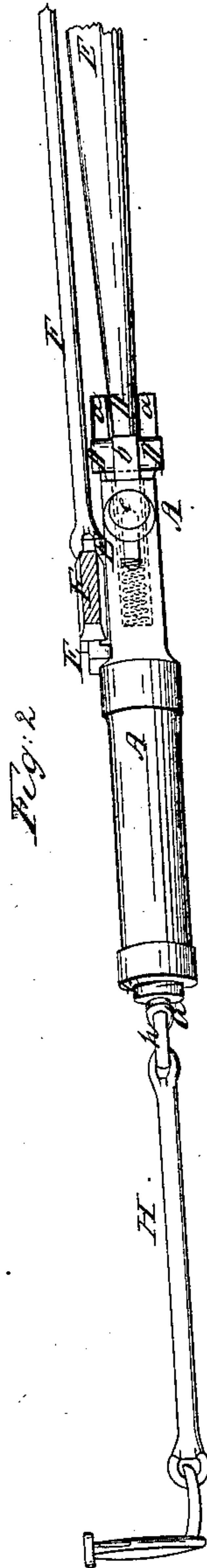
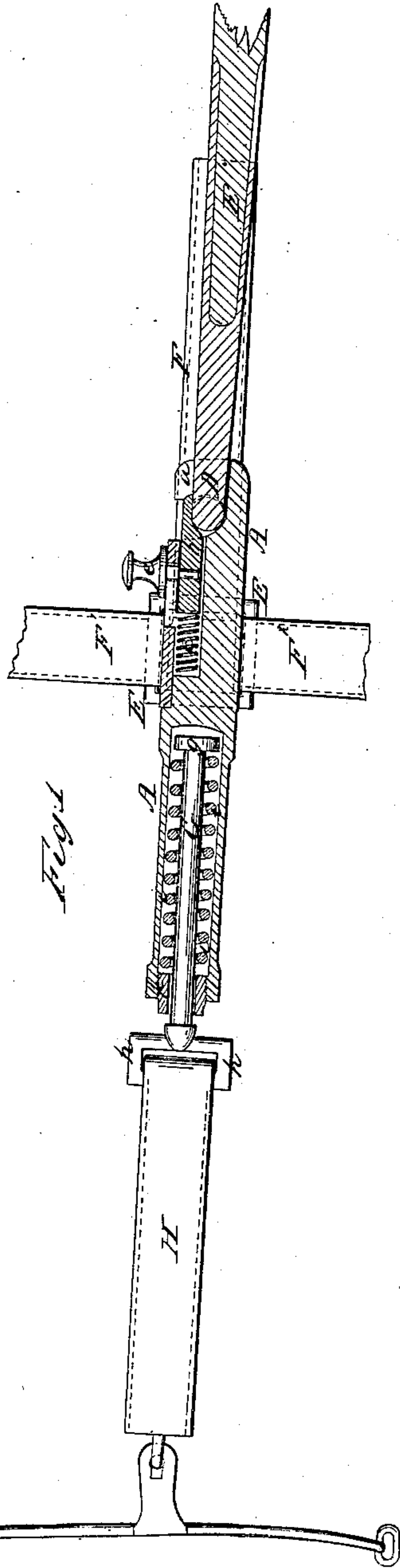


A. Avery

Harness.

N^o 30037.

Patented Sep 18, 1860.



Witnesses
James Scott
Belmont

Inventor
Austin Avery

UNITED STATES PATENT OFFICE.

AUSTIN AVERY, OF SOUTH WINDHAM, CONNECTICUT.

MODE OF ATTACHING HORSES TO VEHICLES.

Specification of Letters Patent No. 30,037, dated September 18, 1860.

To all whom it may concern:

Be it known that I, AUSTIN AVERY, of South Windham, in the county of Windham and State of Connecticut, have invented a new and Improved Mode of Attaching Horses to Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 shows the improved attachment for one side of a horse to the shafts, in section. Fig. 2 is a top view of the attachment.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in applying to the ends of short shafts of any one horse vehicle, metal ferrules with T-heads on their ends, that are rounding on the bottom and flat on the top; and attaching these shafts to the ends of metal tubes by a slotted eye and spring-bolt or latch joint, as will be hereinafter described, which tubes are attached by a swivel and spring bar to the hame straps, and to the belly band and breeching straps in such a manner that by simply detaching the shafts the horse will be free to walk from the vehicle as the ends of the shafts are the only part of them to be attached to the harness.

To enable those skilled in the art to fully understand my invention I will proceed to describe its construction and operation.

In the drawings, A is a tubular bar of a suitable length with slotted hooks *a*, on one end, as shown in the drawings Figs. 1 and 2, and a latch *b*, that plays in a hole cut in a direction with the axis of the bar A, and that is acted upon by a suitable spring *c*, which keeps the latch in the position represented in Figs. 1 and 2. This latch or spring bolt *b*, is not in the center of the bar A, but placed a little to one side of the axis of the bar, so as to form with the hooks *a*, an eye into which fits a T-piece D, that is on the end of the shaft E. The neck of this T-shaped shaft end passes into the slot between

the two hooks *a*, and rests on the bottom of the slot, while the right angular portions bear up against the spring latch *b*. The under side of the T-piece is made rounding so as to allow a slight play in the eye. *e*, is a button by which the latch can be drawn back to disconnect the shaft from the bar A.

On one side of the solid portion of the bar A, is formed a loop E, to which one side of the breeching strap F, tug strap F', and belly-band strap F², of the harness are suitably attached. The bar A, is thus attached to the harness at a point where the tug and breeching or hold-back straps are usually attached to the shaft.

It will be understood in this description that two bars are used, one for each end of the shafts, both of which are constructed and arranged exactly alike except that they are made one for the right and one the other for the left side of the horse, therefore a description of one will serve for a description of the other.

The hollow end of bar A, receives a rod G, with a head *g*, on one end and a swivel eye *h*, on the other, the rod is introduced into the bar A, and a spring *i*, of rubber or metal is slipped on the rod G, and confined in the bar by a cap *k*, as shown in Fig. 1. To the swivel eye *h*, the hame or trace strap H, is attached, as shown in Figs. 1 and 2. The object of allowing an end play to the strap H, is to give the horse free motion to his shoulders.

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

The metal tubular portion A, constructed substantially as described and furnished with a spring latch *b*, and slotted hooks *a*, *a*, for receiving the T-heads of the shafts and loops E, for receiving the tug and belly-band straps, as herein described.

AUSTIN AVERY.

Witnesses:

J. H. SCOTT,
B. GIROUX.