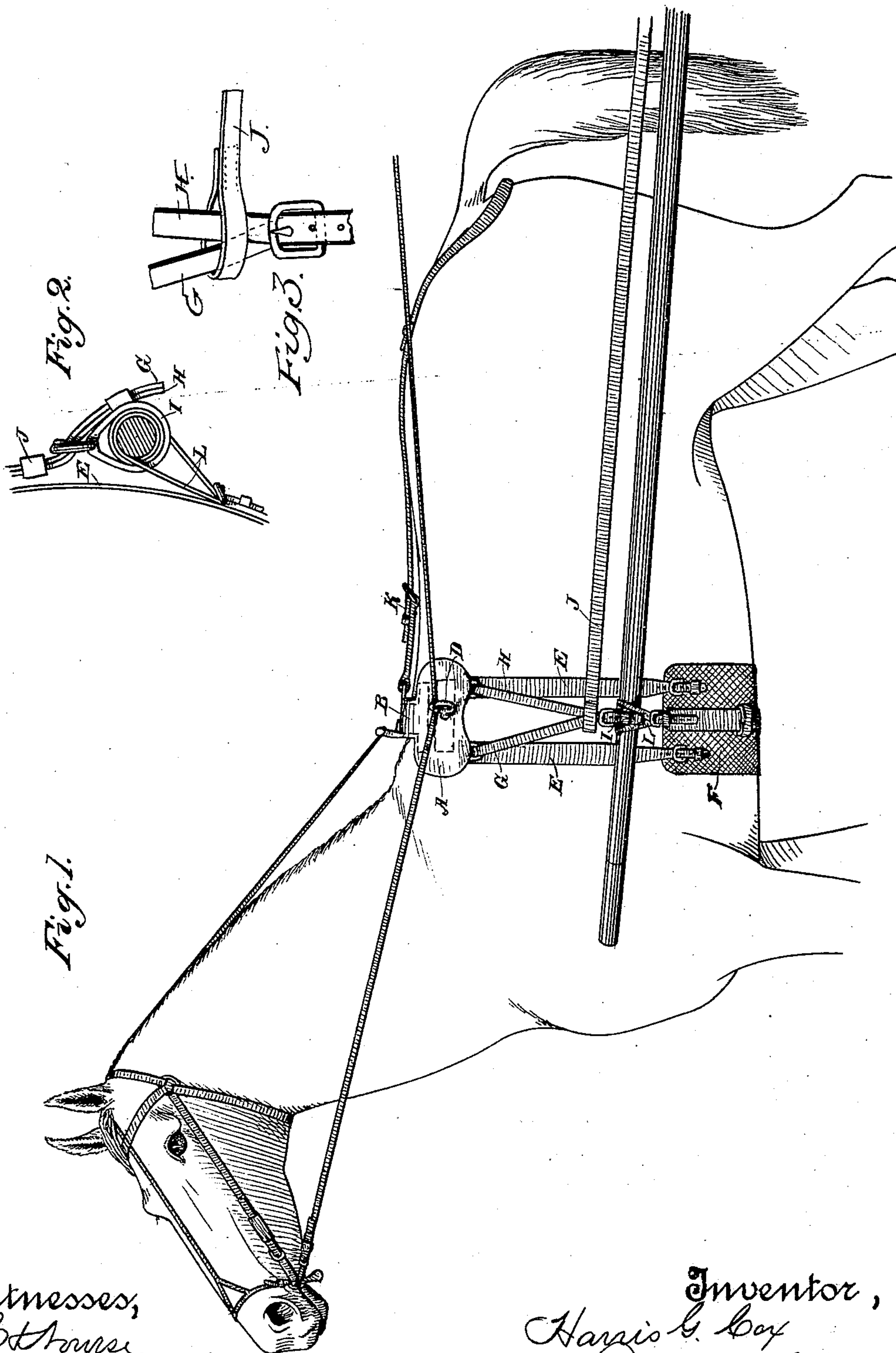


(No Model.)

H. G. COX.
HARNESS.

No. 459,887.

Patented Sept. 22, 1891.



Witnesses,
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UNITED STATES PATENT OFFICE.

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HARNESS.

SPECIFICATION forming part of Letters Patent No. 459,887, dated September 22, 1891.

Application filed April 6, 1891. Serial No. 387,876. (No model.)

To all whom it may concern:

Be it known that I, HARRIS G. COX, a citizen of the United States, residing at Alvarado, Alameda county, State of California, have invented an Improvement in Harness; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in driving-harness; and it consists of the constructions and combinations of devices which I shall hereinafter fully describe and claim.

Figure 1 is a view of my harness, showing its position on the horse. Fig. 2 is an edge view of the shaft connections. Fig. 3 is a detail to be referred to.

In the ordinary construction of harness a collar or breast-plate is employed, to which the traces are connected, and both of these devices are objectionable, because they interfere with the free movement of the horse's shoulders. This is especially the case in track-work, where it is desirable to give the horse the freest possible movement, in order to increase the stride and the speed at which he can travel. In my invention I dispense with both of these devices and leave the horse's shoulders and front part of his body entirely unimpeded.

A are the two pads of my saddle, having one or more connecting yokes or arches B, which extend over the back of the horse and unite the two saddle-pads. This arched portion is made of iron or steel, having ends projecting transversely of it, and the saddle-pad is built upon these ends, extending a considerable distance longitudinally, as shown. In the lower part of each pad is fixed another plate of steel or iron, having a hole in its center to receive the terret D, and this plate is riveted or otherwise secured within the pad, leaving a little space between its longitudinal edge and the lower edge of the transverse pad of the saddle-plate B. This allows a certain amount of flexibility to the saddle and enables it to adjust itself to the shape of the horse's back and to fit thereon without galling or chafing.

To the front and rear ends of the saddle, upon each side, are fixed the straps or billets E, and these connect either with a single broad girth F, as shown in the present case, or, if desired, two separate girths may be employed. I have

found a single broad girth, however, to answer all requirements.

G and H are two straps secured one to the front and the other to the rear end of this elongated saddle upon each side, and these straps converge to the point where the shaft-loop I is buckled through the two straps at their point of convergence.

J are the traces, and each trace is attached to the straps G and H at the point where they meet just above the buckle of the shaft-loop. In the present case the attachment is simply made by folding the end of the trace over and stitching it upon itself, so as to form a loop through which the straps G and H pass, (see Fig. 3,) and this loop is loosely supported upon the straps and is prevented from slipping off by the shaft-loop and its buckle.

K is the crupper-strap, attached to the rear of the saddle-plate and extending along the horse's back to the crupper, with which it is connected in the usual manner.

The operation of my harness will then be as follows: The saddle is placed upon the horse's back with the crupper and other parts in the usual position, the girth is buckled around the horse, and the straps of the second girth L at each end are wound around the shaft, passing through the shaft-loop in the usual manner to steady the shafts and the loops. The traces being attached to the vehicle and the usual headstall, check-strap, and reins being placed upon the horse's head, the harness will be in condition for use. Its operation will then be as follows: The strain of the draft will be applied through the traces to the front straps G of the converging straps attached to the saddle and shaft-loop, the application of the draft being, as shown, between the shaft-loop and the saddle by reason of the traces being attached as previously described. The length of the saddle and the angle of convergence may be considerably varied; but I have found that when constructed in about the proportion shown in the present drawings the harness is well adapted for all ordinary purposes of track or road work. The rear strap H acts in a like manner as a hold-back, and all the strain of pulling or holding back is thus brought upon the saddle and is taken off of the other parts of the horse's body to which it is usually applied.

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

5 The improvement in harness, consisting of the saddle, the girth, straps connecting the girths with the saddle, draft and holdback straps having their upper ends attached to the front and rear, respectively, of the saddle, their lower ends converging and connected
10 with the shaft-loop, and traces having the rear ends connected with the vehicle and the front

ends formed in a loop and surrounding the meeting ends of the draft and holdback straps above the shaft-loop, substantially as herein described.

In witness whereof I have hereunto set my hand.

HARRIS G. COX.

Witnesses:

S. H. NOURSE,
J. A. BAYLESS.