No. 674,259. Patented May 14, 1901.

O. A. DEAN.

COUPLING FOR HAME TUGS AND TRACES.

(No Model.) (Application filed July 20, 1900.)

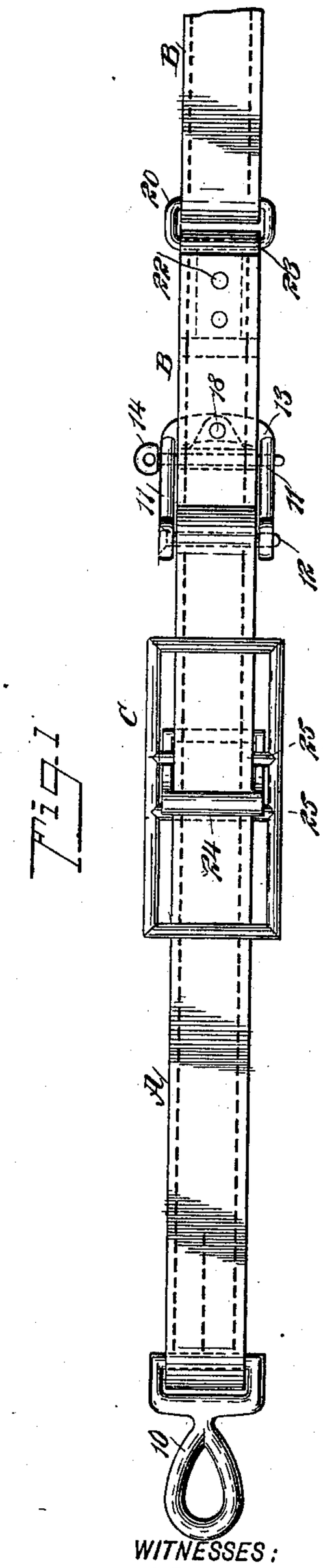

FIG. 1.

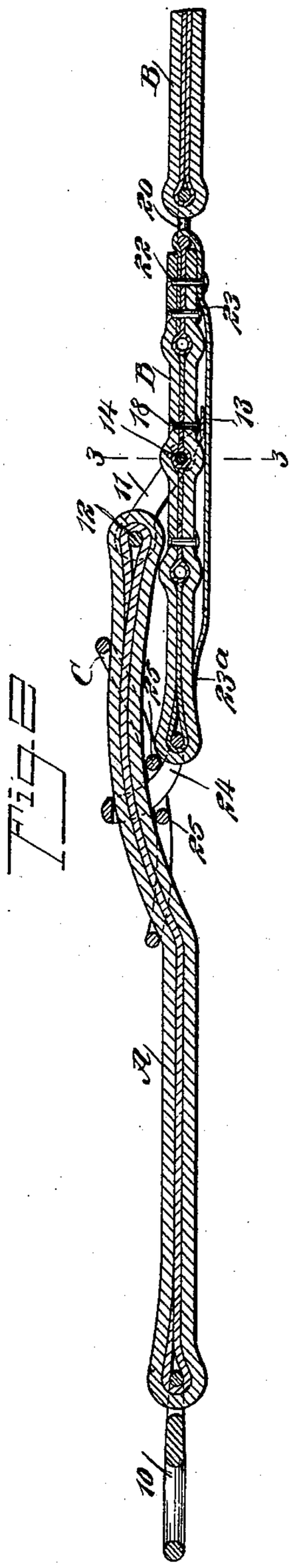

FIG. 2.

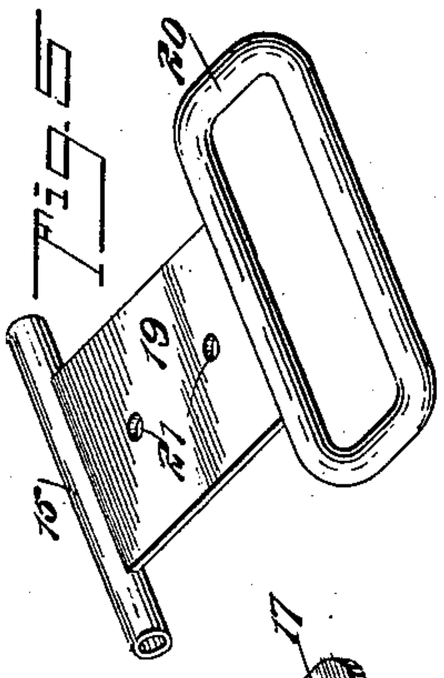

FIG. 4.

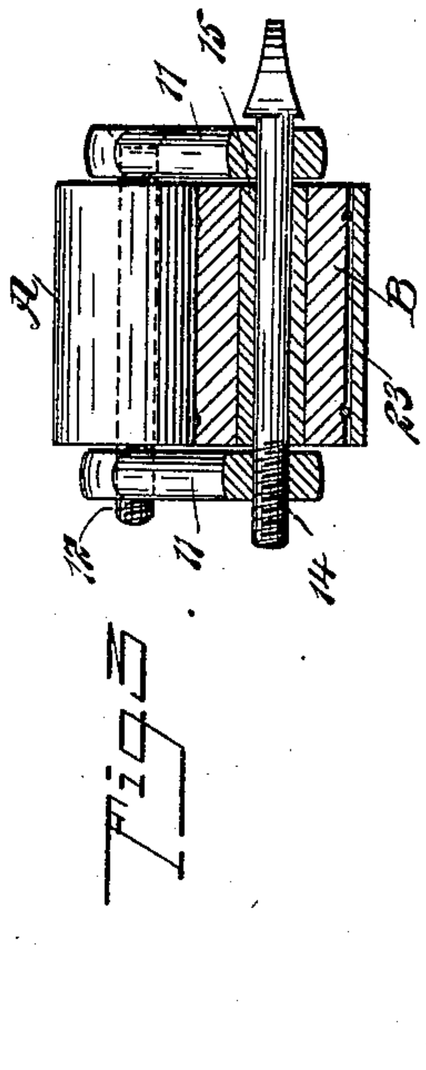

FIG. 3.

WITNESSES:

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ORANGE ARMSTRONG DEAN, OF TOULON, ILLINOIS.

COUPLING FOR HAME-TUGS AND TRACES.

SPECIFICATION forming part of Letters Patent No. 674,259, dated May 14, 1901.

Application filed July 20, 1900. Serial No. 24,299. (No model.)

To all whom it may concern:

Be it known that I, ORANGE ARMSTRONG DEAN, a citizen of the United States, and a resident of Toulon, in the county of Stark and State of Illinois, have invented a new and Improved Coupling for Hame-Tugs and Traces, of which the following is a full, clear, and exact description.

My invention relates to that class of harness-couplings employed to connect a hame-tug with a trace; and the purpose of the invention is to render a coupling of this character very simple and capable of quick and convenient adjustment and to so construct and apply the couplings that the hame-tugs and traces may be made lighter and yet will stand much more strain than when connected in the usual way and so that the pull or strain on the hame-tugs and traces will be about equally divided.

Another purpose of the invention is to provide a coupling for hame-tugs and traces by means of which the trace may be lengthened and shortened through the medium of the hame-tug without necessitating the formation of holes in the trace.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of a hame-tug, a portion of a trace, and the improved coupling connecting the two parts. Fig. 2 is a longitudinal section through the parts shown in Fig. 1. Fig. 3 is a transverse section taken practically on the line 3 3 of Fig. 2, and Figs. 4 and 5 are detail views of the sleeves or eyelets used in connection with the coupling.

A represents a hame-tug, which is provided with the usual eye 10 for attachment to a hame, and at the inner end of the hame-tug A a stirrup 11 is located, the sides of which stirrup are curved downward and rearward, as shown best in Fig. 2, and the stirrup is pivoted to the hame-tug through the medium of a suitable pin 12. The lower end 13 of the stirrup is preferably made flat and has sliding engagement with the inner face of the trace B. Apertures are made in the sides of the stirrup slightly in front of the flat section 13, and the wall of one of these apertures is provided with a thread. These apertures are adapted to receive a pin 14, having a suitable head at one end and an exterior thread at the opposite end, and this pin is passed through said apertures in the stirrup 11, as illustrated in Fig. 3. The said pin is likewise passed through any one of a series of eyelets or sleeves 15, which are embedded in the front section of the trace B, and these eyelets or sleeves extend from one side edge of the trace to the other. Sundry of the sleeves or eyelets 15 are provided with shanks 16, having one or more apertures 17 therein, and the eyelets or sleeves are held in place by passing rivets 18 through the trace and through the apertures 17 in the shanks of the eyelets; but the rear eyelet or sleeve 15 is connected by a plate 19 with a link 20, which link serves to connect the two sections of the trace, and this plate has apertures 21 made therein adapted to receive rivets 22.

One end of a leather guard-strip 23 is placed between the members of the forward section of the trace B in engagement with the plate 19 and is secured by means of the said rivets 22, one or more of which rivets likewise pass through the rear portion of the strip 23 at the rear end of the forward section of the trace B as the strip is carried around one longitudinal member of the link 20 and then to the back of the trace, as shown in Fig. 2. This guard-strip 23 is made to extend at the back of the trace to the forward portion of the front section thereof, as shown at 23^a in Fig. 2, and prevents the rivets or enlargements formed in the trace by the introduction of the eyelets from chafing the animal.

A bail 24 is pivoted in the forward end portion of the forward section B of the trace, and this bail extends outward, and the hame-tug A is passed beneath the outer end member of this bail and likewise through a frame C, preferably rectangular, and over central cross-bars 25, which are formed transversely upon the said frame, the bail 24 extending out through the space between the said cross-bars.

Under this construction it will be observed that a hame and trace may be shortened and lengthened, according to the eyelet or sleeve

15, that receives the pin 14, the pin being always passed through the stirrup 11 when the pin is in locking position, and when an adjustment of parts of the harness is to be made the pin 14 is entirely removed from engagement with the stirrup 11 and the trace. The frame C is usually slightly curved upward at its ends, and the arrangement of the frame and the manner in which the bail 24 is passed through the frame and engages with the hame-tug serve to take undue strain from the pin 14.

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

1. The combination, with a trace having eyelets secured therein, of a hame-tug, a stirrup pivoted to the rear end portion of the hame-tug, the said trace passing through said stirrup and the stirrup having apertures in its sides, one aperture having a threaded wall, and a threaded pin which enters the apertures in the stirrup and is passed through any one of the said eyelets, for the purpose described.

2. The combination, with a trace having transverse eyelets secured therein, and an outwardly-extending bail pivoted at the forward end of the trace, of a frame having cross-bars between which the bail of the trace is passed, a hame-tug which is passed through the said frame, over the cross-bars and in engagement with the said bail, a stirrup pivoted to the rear end of the hame-tug, and a locking-pin adapted to be passed through the side portions of the stirrup and through any one of the said eyelets, substantially as described.

3. The combination, with the sections of a trace, eyelets located transversely in the forward section of the trace, sundry of the eyelets having apertured shanks, rivets passed through the apertures of the said shanks and through the trace, the rear eyelet in the forward section of the trace being provided with a rearwardly-extending plate adapted to receive rivets, and a link secured to said plate, the rear section of the trace being pivotally attached to the said link, and a guard-strip attached to the forward section of the trace, which strip is passed through the said link and extends longitudinally at the back of the forward section of the trace, of a frame located over the forward end of the forward section of the trace and provided with transverse bars between its ends, a bail pivoted to the forward end of the forward section of the trace, which bail extends out through the space between the bars of the frame, a hame-tug passed through the said frame above the cross-bars and in engagement with the bail, a stirrup pivoted at the rear end of the hame-tug and having engagement with the rear face of the forward section of the trace, and a locking-pin removably placed in the said stirrup, which locking-pin is adapted to pass through any one of the eyelets in the trace, as specified.

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

ORANGE ARMSTRONG DEAN.

Witnesses:

JOHN P. WILLIAMS,

JAMES ISAAC NEWTON.