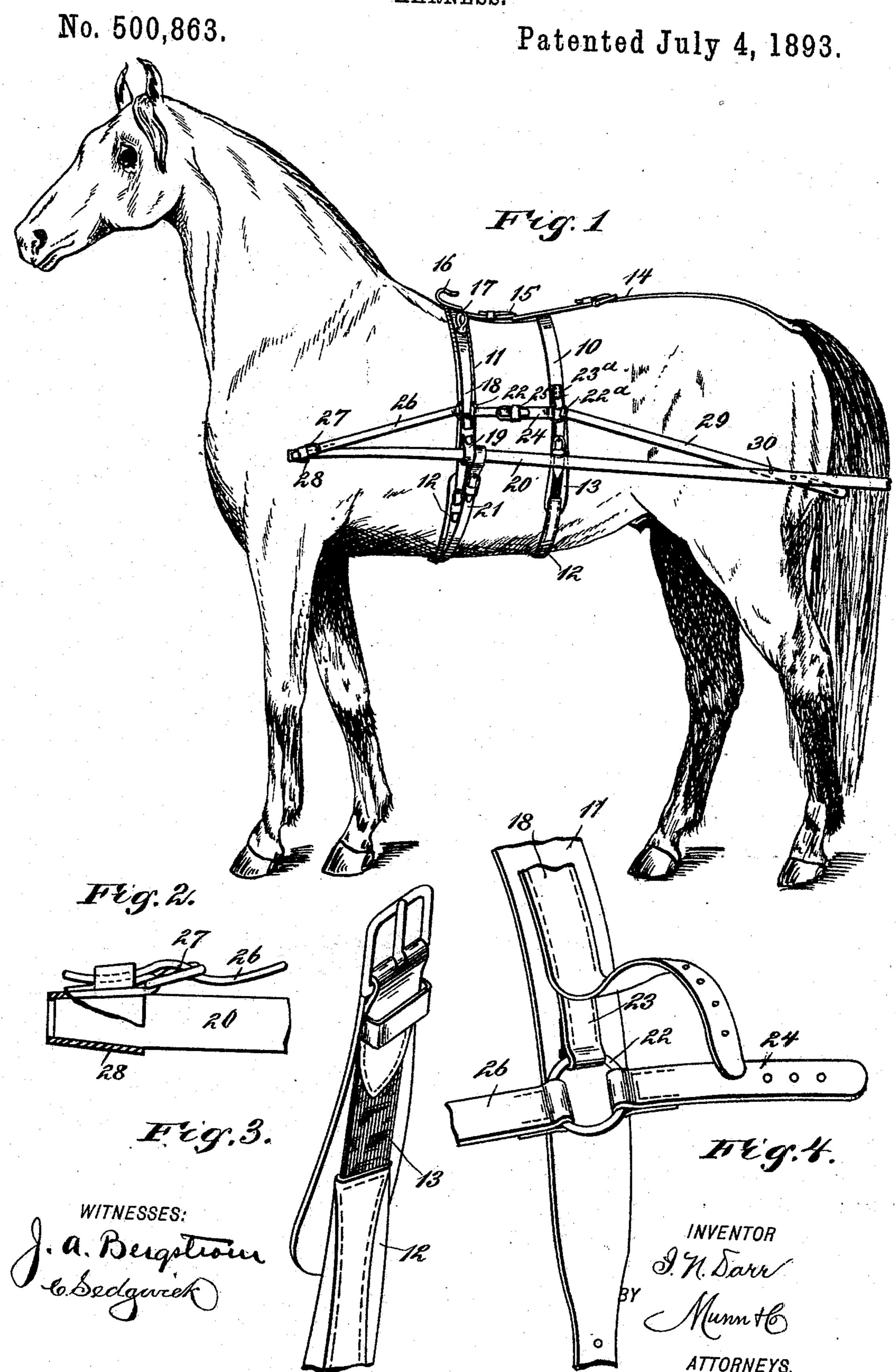
I. N. DARR.
HARNESS.



## United States Patent Office.

ISAAC N. DARR, OF MONTICELLO, ILLINOIS.

## HARNESS.

SPECIFICATION forming part of Letters Patent No. 500,863, dated July 4, 1893.

Application filed October 4, 1892. Serial No. 447,832. (No model.)

alike.

To all whom it may concern:

Be it known that I, Isaac N. Darr, of Monticello, in the county of Piatt and State of Illinois, have invented a new and Improved Har-5 ness, of which the following is a full, clear, and exact description.

My invention relates to improvements in harnesses, and especially to track harnesses; that is, to harnesses which are adapted for ro use on trotting horses when the latter are being speeded.

The object of my invention is to produce an extremely light and simple harness which, while serving to securely attach a horse to a 15 Eulky or other carriage, will in no wise interfere with the free and easy movement of the muscles of the horse.

To this end my invention consists in a harness, the construction of which will be here-

20 inafter described and claimed.

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

Figure 1 is a perspective view of the harness, as applied to a horse and sulky. Fig. 2 is a broken end view, partly in section, showing the manner in which connection is made with the front end of the shafts or thills. Fig. 30 3 is a perspective view of the buckle connection on the surcingle of the harness; and Fig. 4 is a perspective view showing the manner in which the shaft straps are connected with the saddle.

The harness is adapted to be used in connection with the ordinary bridle, but the breast plate or collar, the usual breeching, and the customary traces are dispensed with.

The saddle consists of two straps 10 and 11, 40 the latter being the saddle proper and the former being arranged behind the saddle proper and serving as a surcingle. These straps are adapted to extend over the back of the horse, as shown in Fig. 1, and each is 45 provided with a belly-girth 12. The girths are buckled to the straps 10 and 11 in the usual way, except that the girth of the surcingle has an elastic section 13 which enables it to fit snugly upon the horse without unduly 50 binding him.

which connects with the crupper, and the back strap at a point between the straps 10 and 11 is provided with an adjusting buckle 15. The front strap or saddle proper 11 has 55 the usual check hook 16 and terrets 17. The saddle proper 11 has also the usual lug straps 18 which carry the lugs or tugs 19 to receive

and support the shafts 20. A girth 21 of the usual kind extends be- 60 neath the belly of the horse and is buckled around the shafts so as to hold them down. Arranged upon the saddle proper and beneath the lug strap 18 is a ring 22 which is suspended by a strap 23, and this ring connects 65 by a strap 24 which has an adjusting buckle 25, with a similar ring 22° suspended by a strap 23<sup>a</sup> upon the surcingle or strap 10. The strap 23a has an adjusting buckle so that by regulating the length of the strap, the ring 22a 70 may be held at the desired height. If desired, a billet may be used to connect the ring 22a with the girth 12 beneath. Fig. 1 shows the above arrangement on one side of the harness, but it will be understood that both sides are 75

Extending diagonally downward and forward from the strap 22 on each side of the harness is a thill strap 26 which connects at its front end by means of a buckle 27 with a 8c ferrule 28 which is adapted to be slipped over the front end of the shaft or thill 20. By this means the shaft is properly supported, and when the horse backs, the shaft is carried back also in the usual manner.

Extending diagonally rearward and downward on each side of the harness, from the ring 22a, is a trace strap 29 which at its rear end is provided with a series of holes 30 adapted to connect with studs or hooks on the 90 shaft or thill, or to hook upon a whiffle-tree in the usual way. Any suitable strap may be used instead of the trace strap 29 and the connection with the vehicle may be made in any convenient way. It will thus be seen that 95 the ordinary heavy traces, breast plate or collar, and breeching, are dispensed with, and the heavy saddle is also dispensed with so that the horse may move very freely and the attachment to the shafts is still secure. It will 100 be noticed that the connection between the The harness has the usual back strap 14 I shafts and the rings 22<sup>a</sup> permits the necessary

movements of the shaft and horse in relation to each other.

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

1. A harness comprising the saddle proper and its girth the rings at opposite sides of the saddle the strap or surcingle 10 in rear of the saddle and also having opposite rings to transverse straps 24 adjustably connecting the two sets of rings, hold back straps extending forwardly from the forward rings and

draft straps or traces extending rearwardly from the rear rings, substantially as described.

2. A harness comprising the saddle proper 15 11, the parallel strap or surcingle in rear thereof and having an elastic section 13, rings carried by the saddle and surcingle and the forward and rearwardly extending straps 26, 29, substantially as described.

ISAAC N. DARR.

Witnesses:

JAMES MCPHERRON, THOMAS E. TULL.