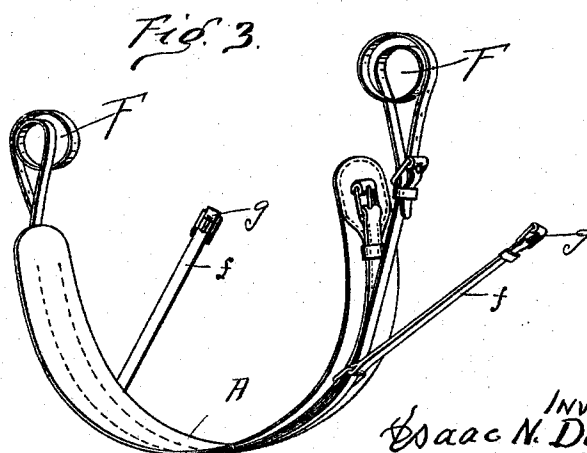
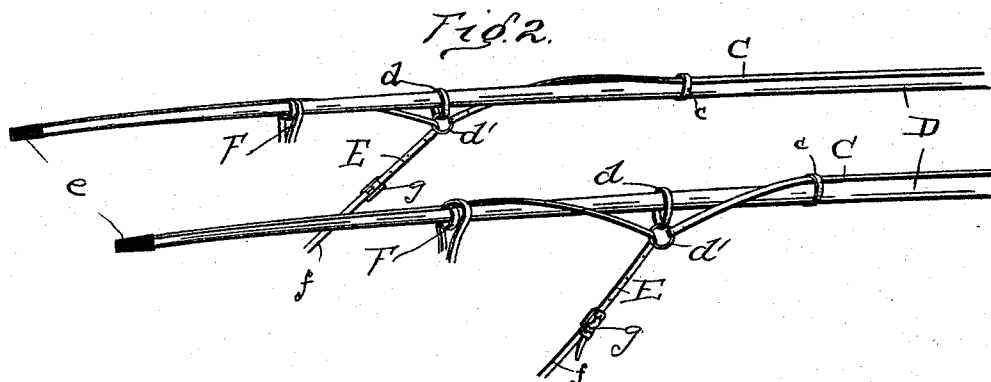
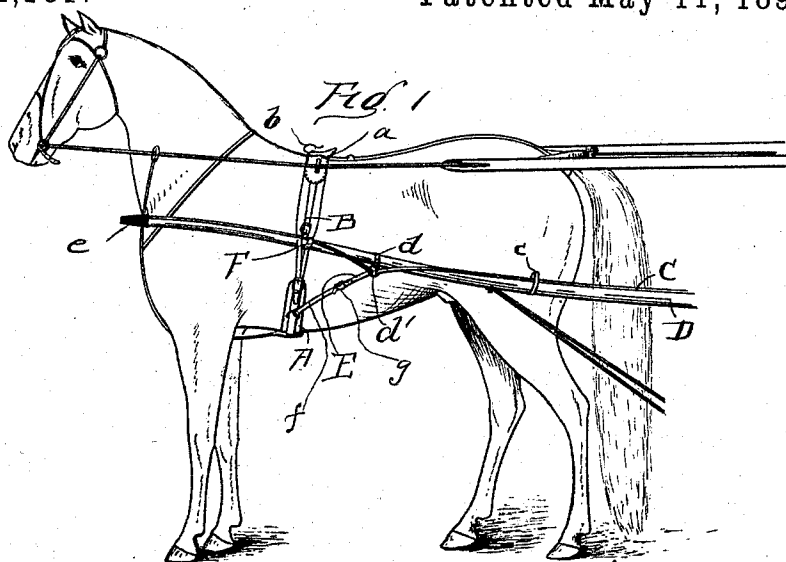


(No Model.)

I. N. DARR.
HARNESS.

No. 582,181.

Patented May 11, 1897.



WITNESSES:
S. J. Cross
Bertha Finch

INVENTOR.
Isaac N. Darr
By Fred W. Bond
Attorney.

UNITED STATES PATENT OFFICE.

ISAAC N. DARR, OF NEW BERLIN, OHIO.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 582,181, dated May 11, 1897.

Application filed June 29, 1896. Serial No. 597,321. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. DARR, a citizen of the United States, residing at New Berlin, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Harness; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation showing my improved harness placed in proper position upon a horse. Fig. 2 is a view showing the thills of a vehicle and illustrating the position of the traces or draft-straps and the holdback-straps. Fig. 3 is a view showing the bottom or lower portion of the girth and the front or forward sections or portions of the draft-straps attached thereto.

The present invention has relation to harness; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the bottom or lower portion of the girth, which is constructed in the ordinary manner, reference being had to properly attaching my improved parts thereto, and to which the back-band B or upper portion of the girth proper is connected, said back-band B being provided with the ordinary terret-rings *a* and the checkrein-hook *b*.

The draft-straps or traces C are connected at their rear ends to the whiffletree or to the thills D, as desired, and extended substantially parallel with the thills or shafts to the loops *c*, which loops are connected to the thills in any convenient and well-known manner. The front or forward portions of the draft-straps or traces are preferably inclined downward, as illustrated in Figs. 1 and 2, and are held in their lowered positions by means of the loops *d* and the rings *d'* or their equivalents, the loops *d* being connected to the thills or shafts D. Through the rings *d'* are passed the holdback-straps E, which holdback-straps are held in parallel position to the thills or shafts by means of the wrapped straps F, said

straps being wound or wrapped around the thills or shafts D, the holdback-straps being bound with the thills. The holdback-straps E extend forward and are connected to the front or forward ends of the thills D by means of the cups or sockets *e* or their equivalents.

To the part A of the girth proper are attached the straps *f*, which straps extend rearward and upward, as illustrated in the drawings, and are provided with the buckles *g*, which buckles are for the purpose of connecting the holdback-straps E. Said holdback-straps extend forward and downward from a point where they are passed through the rings *d'*, thereby connecting the girth with the rings *d'* and the holdback-straps E. The straps *f* form continuations of the draft-straps or traces C, by which arrangement the pull is upon the girth A during the time the vehicle is drawn or pulled forward. When the holdback-straps E are brought into use to check the forward movement of the vehicle, the pull is first upon the rings *d'*, which has a tendency to elevate or draw the rings upward and shift the pull to the girth A by means of the resistance upon the rings *d'* by means of the draft-straps C, by which arrangement the ultimate pull is upon the girth A, whether the vehicle is being drawn forward or held against forward movement while descending an incline or overcoming momentum.

The buckles *g* are for the purpose of adjusting the length of the straps E, located forward of the rings *d'*, by which arrangement the desired amount of tension and adjustment is provided in reference to the length of the holdback-straps.

It will be understood that the upper and lower sections of the girth proper are to be connected in the ordinary manner by the use of suitable straps and buckles.

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

1. The combination of the draft-straps C, located substantially parallel to the thills of the vehicle with their lower ends extended below the thills, the holdback-straps E, located substantially parallel to the thills with their rear ends extended below the thills forward and downward and connected to the straps *f*, said straps *f*, attached at their for-

ward ends to the girth A, substantially as and for the purpose specified.

2. The combination of the girth A, provided with straps extended rearward and upward,
5 holdback-straps connected at their forward ends to the thills and their rear ends connected to the girth-straps, and the draft-straps located substantially parallel to the thills with
10 their forward ends extended downward and connected at the rear of the holdback-straps, substantially as and for the purpose specified.

3. The combination of the girth A, the hold-

back-straps, and draft-straps or traces, said holdback and draft straps connected together at the rear of the girth, and arranged as de- 15 scribed, for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ISAAC N. DARR.

Witnesses:

J. A. JEFFERS,

F. W. BOND.