F. REYNOLDS & G. D. HAYES.

Harness-Couplings.

No. 216,700. Patented June 17, 1879.

Fig: 1.

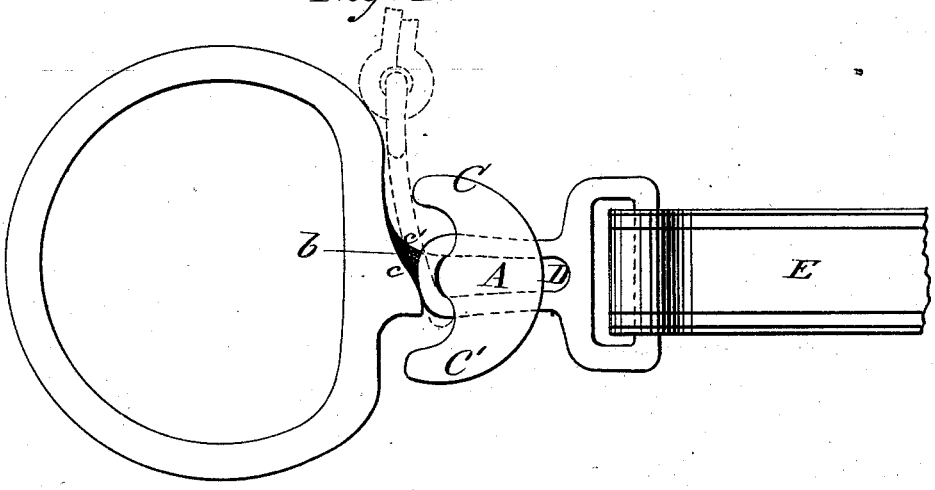


Fig: 2.

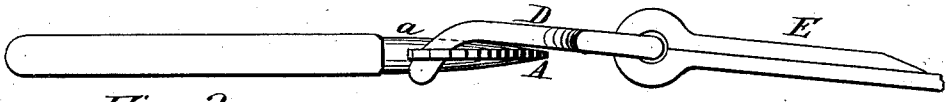


Fig: 3.

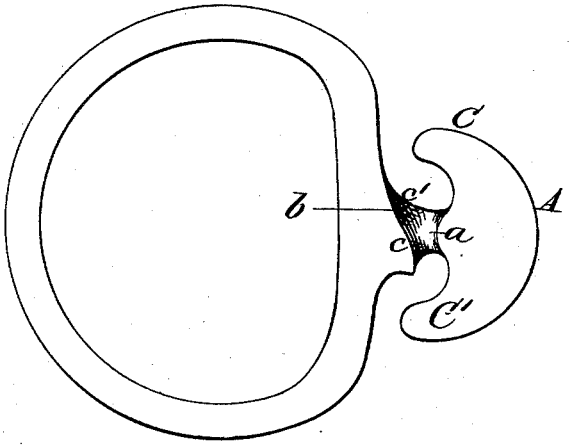
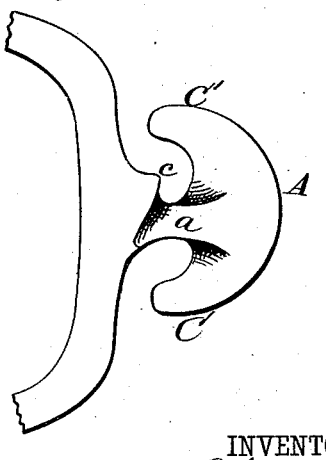


Fig: 4.



WITNESSES:

Achilles Scheckel.

C. Sedgwick

INVENTOR:

F. Reynolds

G. D. Hayes

BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK REYNOLDS AND GEORGE DE BRETON HAYES, OF SHELBY, IOWA.

IMPROVEMENT IN HARNESS-COUPLINGS.

Specification forming part of Letters Patent No. **216,700**, dated June 17, 1879; application filed February 20, 1879.

To all whom it may concern:

Be it known that we, FRANK REYNOLDS and GEORGE D. HAYES, of Shelby, in the county of Shelby and State of Iowa, have invented a new and Improved Harness-Coupler, of which the following is a specification.

The object of this invention is to produce a coupling for the traces and other parts of the harness which is perfectly secure and safe, and is at the same time capable of being easily and quickly coupled and uncoupled.

It consists in making the T-head of the coupler with a neck rising from an eccentric base inclined in the direction in which the loop is turned to uncouple, so that the loop is stopped when its slot is in line with the T-head, and thus a guide is furnished which enables it to be quickly uncoupled.

In the accompanying drawings, Figure 1 is an outside view of the complete coupling. Fig. 2 is an edge view of the same. Figs. 3 and 4 are views of the two sides of the T-head.

Similar letters of reference indicate corresponding parts.

Referring to the drawing, A represents the T-head of the coupling, the neck whereof connecting it with the ring B is indicated by the letter *a*.

The surface *b* of the ring side of the slot around the neck is made eccentrically, so that the opening under the arm C of the head is wider than under the arm C′. This is produced by carrying the side *c* of the surface up to and around the neck, under arm C′, and thence running it out at the back, as in Fig. 4, while the side *c′* is run down directly from the arm, as in Figs. 1 and 3, curving directly into the ring, forming no connection with the side *c*, and thus an eccentric base *b* is formed for the movement of the loop D, which is attached to a part of the harness indicated by the letter E.

To connect the loop and head together, the loop is turned with bent end up. The arm C′ is then passed through the loop, and the end allowed to rest against the neck on that side. The head is then slipped up through until the loop rests on the base *b*, as in the dotted lines, Fig. 1. The loop is then turned under and out from the head to the position it occupies in Fig. 1, when the coupling is made, and it is impossible for it to become uncoupled until it takes the position indicated by the dotted lines, Fig. 1.

To uncouple, it the loop is turned around under the C side of the arm. The side *c′* catches the adjacent side of the slot in the loop, and thus prevents it from going beyond the line of the head, thus furnishing a stop or guide by which it can be quickly and easily uncoupled.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

An improved harness-coupling consisting of a T-shaped head provided with an eccentrically-grooved neck or shank, and adapted to receive and hold a suitable hook, D, all substantially as shown and described.

FRANK REYNOLDS.
GEORGE DE BRETON HAYES.

Witnesses:
M. A. TRAVIS,
JOHN G. BEAL.