

E. ELY.
NECK-YOKE.

No. 172,005.

Patented Jan. 11, 1876.

Fig. 1

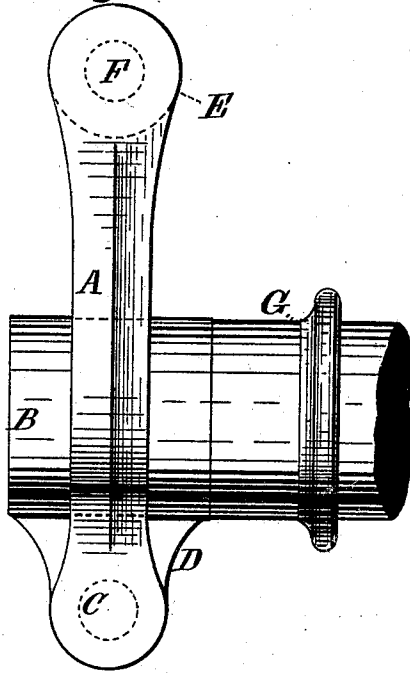
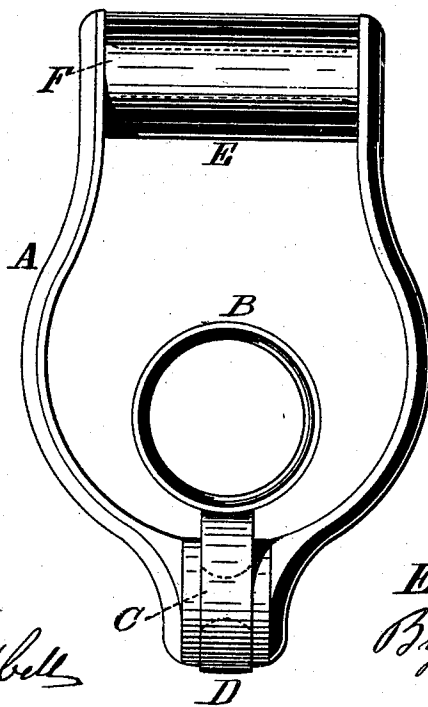


Fig. 2



Witnesses.

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ELLSWORTH ELY, OF BUFFALO, NEW YORK.

IMPROVEMENT IN NECK-YOKES.

Specification forming part of Letters Patent No. **172,005**, dated January 11, 1876; application filed April 29, 1875.

To all whom it may concern:

Be it known that I, ELLSWORTH ELY, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Neck-Yoke End-Couplings, of which the following is a specification:

The nature of my invention consists in the combination of a cast-metal neck-yoke ferrule, an oscillated or jointed bail or frame, and a friction-roller, the ferrule and friction-roller being cast in their places, thereby connecting the whole together without the use of a bolt.

In the accompanying drawings, Figure 1 represents a side elevation, and Fig. 2 a front view.

A is the bail or frame. It is arranged to swing or vibrate on the ferrule-joint D by means of the pin C, (shown in dotted lines in Figs. 1 and 2,) which is cast in one piece with the frame A. This forms a close, well-fitted joint at little expense, and, being without a removable bolt, it is not liable to get out of order. E represents the friction-roller, which receives the breast-strap. It is intended to take the place of the ordinary breast-strap slide. The roller E is also cast in its place upon the pin F on frame A. (Shown in dotted lines in Figs. 1 and 2.) The pins or bearings C

F and frame A are all cast in one piece, after which the ferrule B, its joint or connection D, and the friction-roller E are cast in their places, as shown in Figs. 1 and 2, in the usual manner known to molders, similar to the method of making cast swivels, so as to form the necessary movable joints. G, in Fig. 1, represents a portion of a neck-yoke broken off near the end.

The object in making the frame A so as to oscillate easily is to provide the means for a swaying or lateral movement of the neck-yoke, and consequently the pole, when a forward wheel strikes a stone or other obstruction, and thereby relieve the horses from any undue strain resulting from a sudden movement of the pole.

I claim as my invention—

As a new article of manufacture, a neck-yoke end-coupling consisting of the frame A, having the pins F C formed in one piece with it, in combination with the jointed ferrule B, and friction-roller E cast thereon, substantially in the manner and for the purposes set forth.

ELLSWORTH ELY.

Witnesses:

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