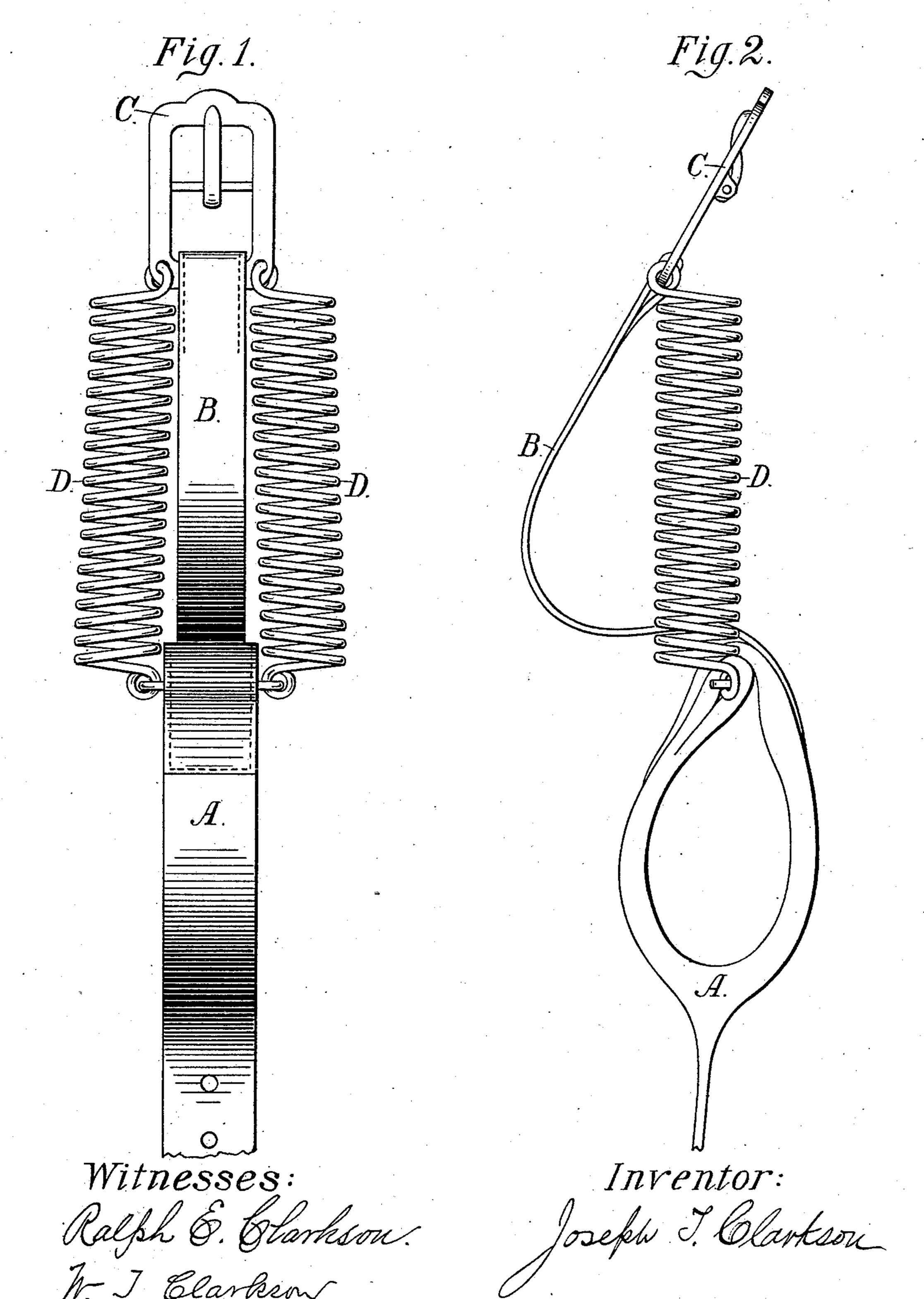
J. T. CLARKSON.

HARNESS.

No. 293,950.

Patented Feb. 19, 1884.



United States Patent Office.

JOSEPH T. CLARKSON, OF AMESBURY, MASSACHUSETTS.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 293,950, dated February 19, 1884.

Application filed July 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, Joseph T. Clarkson, a citizen of the United States, residing at Amesbury, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Harness, of which the following is a specification.

The object of my invention is to prevent the motion which is communicated to the shafts of vehicles by the rising and falling of the horse's back when in motion. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 is a

15 side elevation, of my invention.

Similar letters refer to similar parts throughout the several views.

The lug A, in which the shafts are carried, is attached to the "lug-buckle" C by spiral 20 springs D. The lug-buckle C is attached to the saddle in the usual manner. The strap B is fastened to the lug A and the buckle C, and is designed to limit the elasticity of the springs, as well as to act as a safety-strap in case the 25 springs should give way.

The elastic connection between the lug and

the saddle may be obtained by substituting rubber or other flexible material for the springs; but I think the best results are obtainable with the brass or steel spiral springs, as shown. If 30 necessary, springs may be put on below the lug, so as to make a complete elastic connection above and below.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a shaft-lug, of the elastic connection shown and described, and the limit or safety strap, all substantially as set forth.

2. The combination, with the shaft-support 40 A, provided with a suitable attaching-buckle, of the elastic connection, all substantially as shown and described.

3. The combination, with a shaft-lug, of the spiral springs D D, limit-strap B, and buckle 45 C, all substantially as and for the purpose described.

JOSEPH T. CLARKSON.

Witnesses:

GEORGE H. BRIGGS, W. T. CLARKSON.