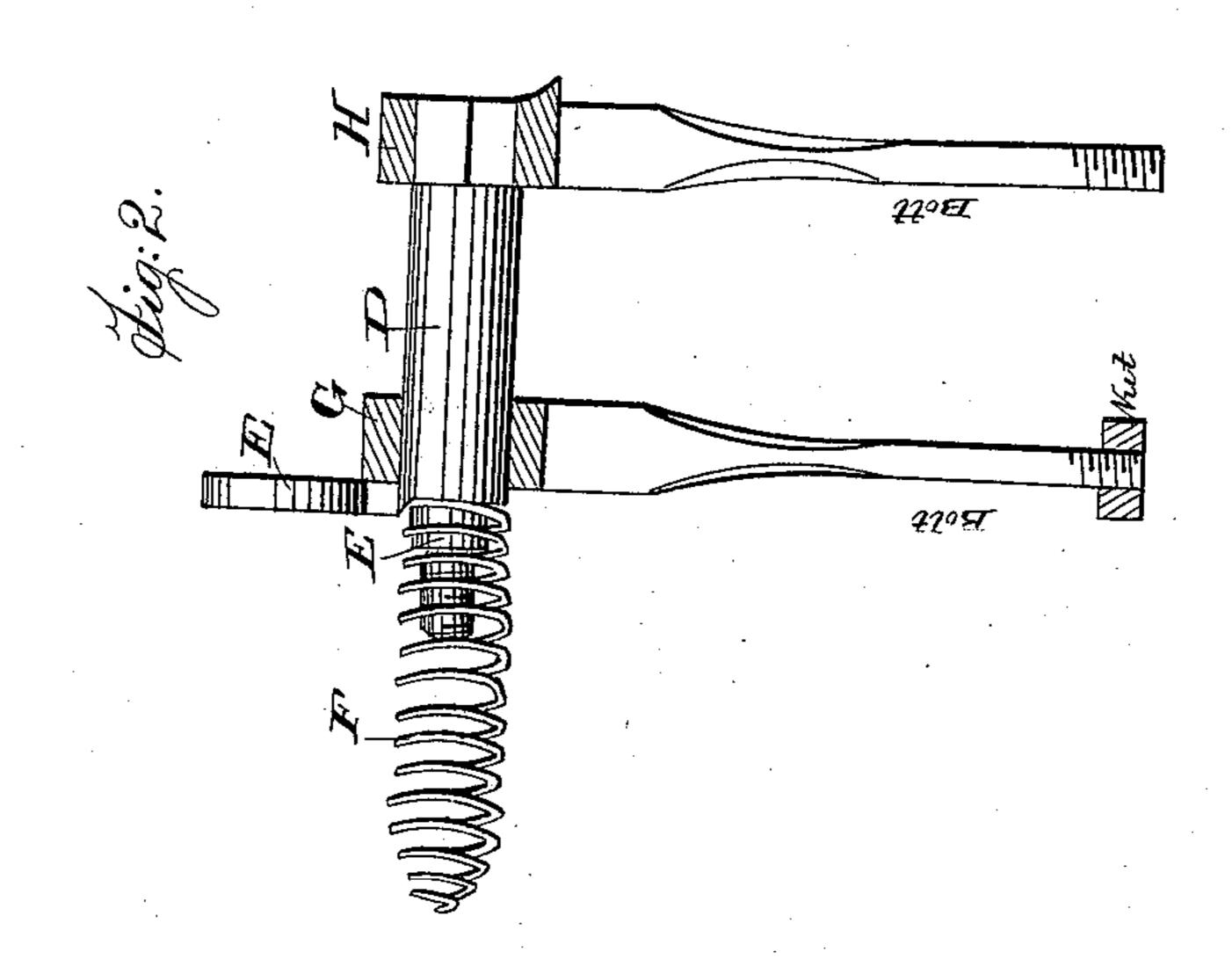
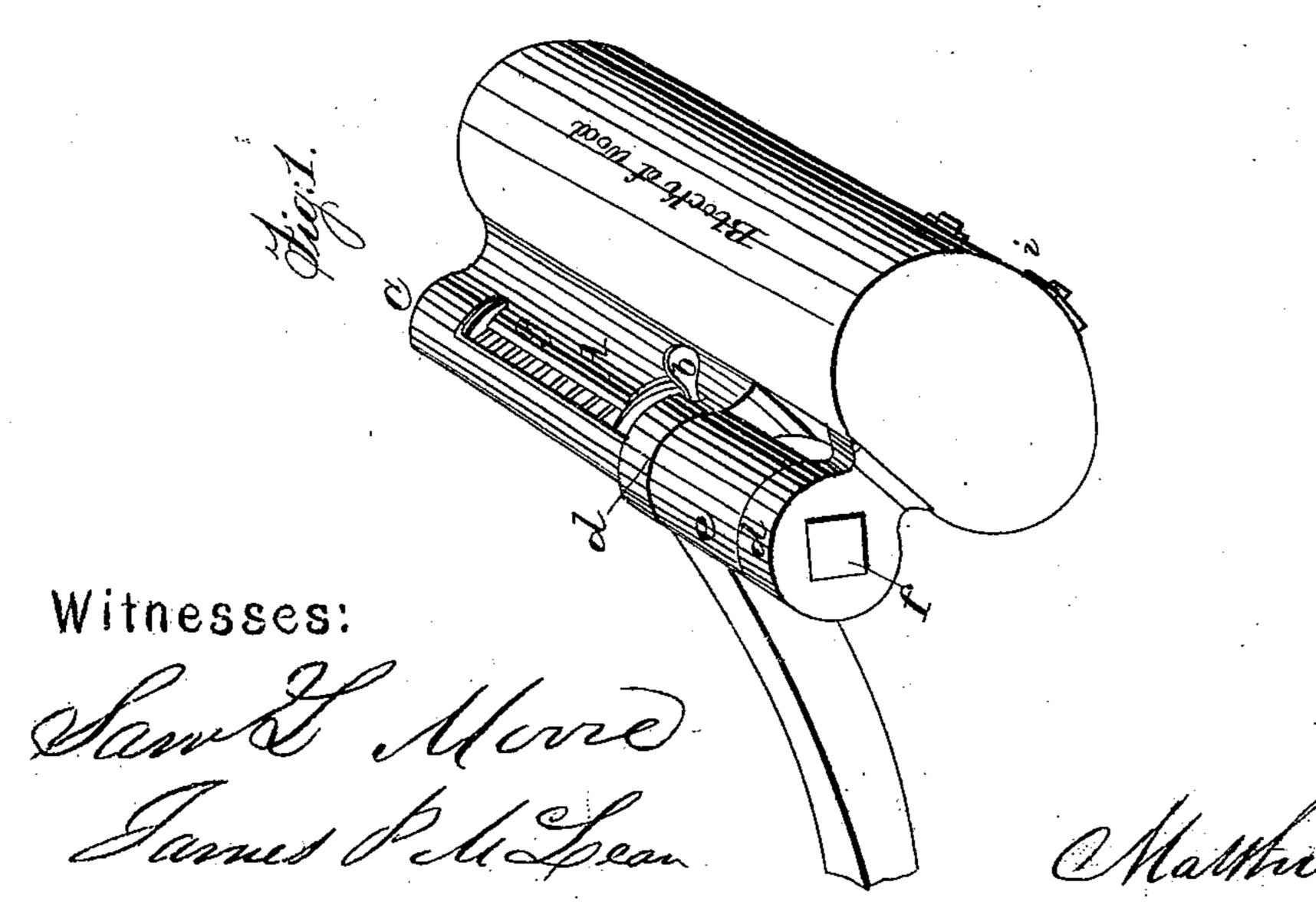
## M. SOVEREL.

## Thill-Coupling.

No. 14,417.

Patented Mar. 11, 1856.





inventor

Matthias Twerel

## UNITED STATES PATENT OFFICE.

MATTHIAS SOVEREL, OF ORANGE, NEW JERSEY.

MODE OF SECURING THILLS TO AXLES,

Specification of Letters Patent No. 14,417, dated March 11, 1856.

To all whom it may concern:

Be it known that I, MATTHIAS SOVEREL, of Orange, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Securing the Bolts that Connect the Thills to the Axletree of a Wagon; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, which drawings are lettered to correspond with and make a part of this specification.

of this specification. Description.—Figure 1, letter (A,) repre-15 sents an oblique end, and side view, of my improved thill fastener, or safety bolt, attached to a block of wood. Letter (b,) is the catch, or lock, that prevents the bolt (f,)from moving endwise, unless the catch is 20 unlocked, and forced up into the horizontal opening of the spring chamber (c); the bottom part of catch (b,) (which is inside of the spring chamber,) forms the nut into which the bolt (f,) is screwed; that is more 25 fully illustrated at Fig. 2. Hence when the catch, and spring, are forced along the spring chamber (c,) the bolt is also carried with them sufficiently far to allow the thill (e<sub>1</sub>) to fall out of its place, or to be taken 30 out if required.  $(d_i)$  represents a bolt that passes through the axle tree, having a round eye sufficiently large to allow the bolt (f) to pass through it into the spring chamber; (J<sub>1</sub>) is another bolt that passes through the 35 axletree, having a square eye to receive the

square end of the bolt (f); this arrangement

prevents the bolt from coming unscrewed, by any movement of the shaft (e.)

Fig. 2, letter (D,) is the thill bolt. (E, E,) represents the catch, and nut, which 40 prevents the bolt (D), from moving endwise. (F,) is the spiral spring. (G, and H,) are sections of the eyes of the bolts (d,) and (J,) Fig. 1.

The great risk of losing the nuts of the 45 bolts, which connect the thills of a wagon to the axletrees, and by which means our lives are often endangered, has been obviated by the above simple arrangement, the separate parts of which are not new, but 50 the mode of combining the spiral spring and the nut (or catch) for the purpose of operating the bolts, at the same time, keeping it fixed at either extreme if required, by means of the transverse slot at either end 55 of the spring chamber, I believe to be new, novel, and useful.

Thérefore what I claim as new, and novel, and desire to secure by Letters Patent, is—

The combination of the spiral spring (F,) 60 and the catch or nut (E, E,) and the eye of the bolt (H,) Fig. 2, and the spring chamber and slots (c,) Fig. 1, substantially as described in the above specification.

In testimony whereof I hereunto sub- 65 scribe my name in the presence of two witnesses.

## MATTHIAS SOVEREL.

Witnesses:

Saml. L. Moore, James P. McLean.