

E. Capen

Truss

N<sup>o</sup> 62,000.

Patented Feb. 12, 1867.

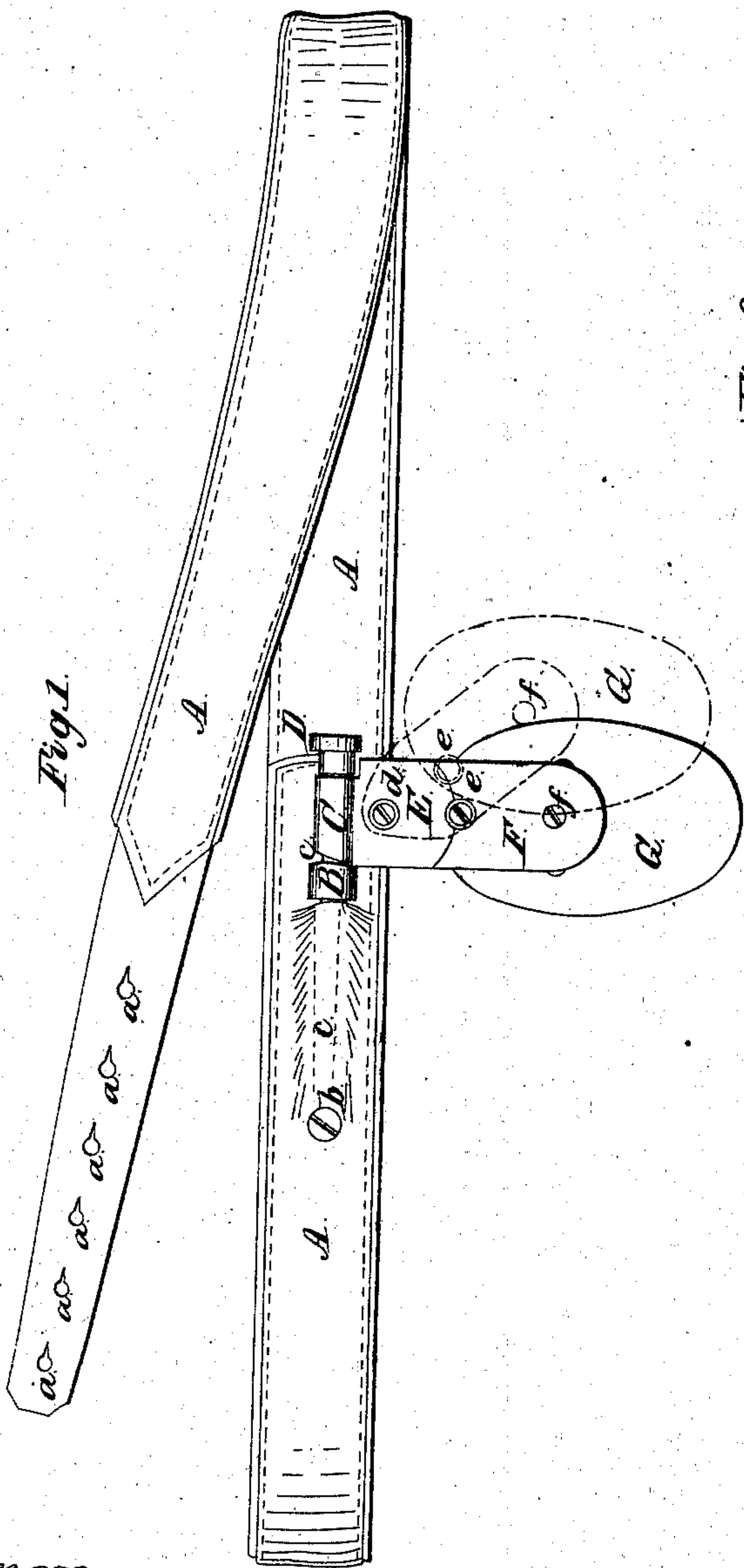


Fig. 3.

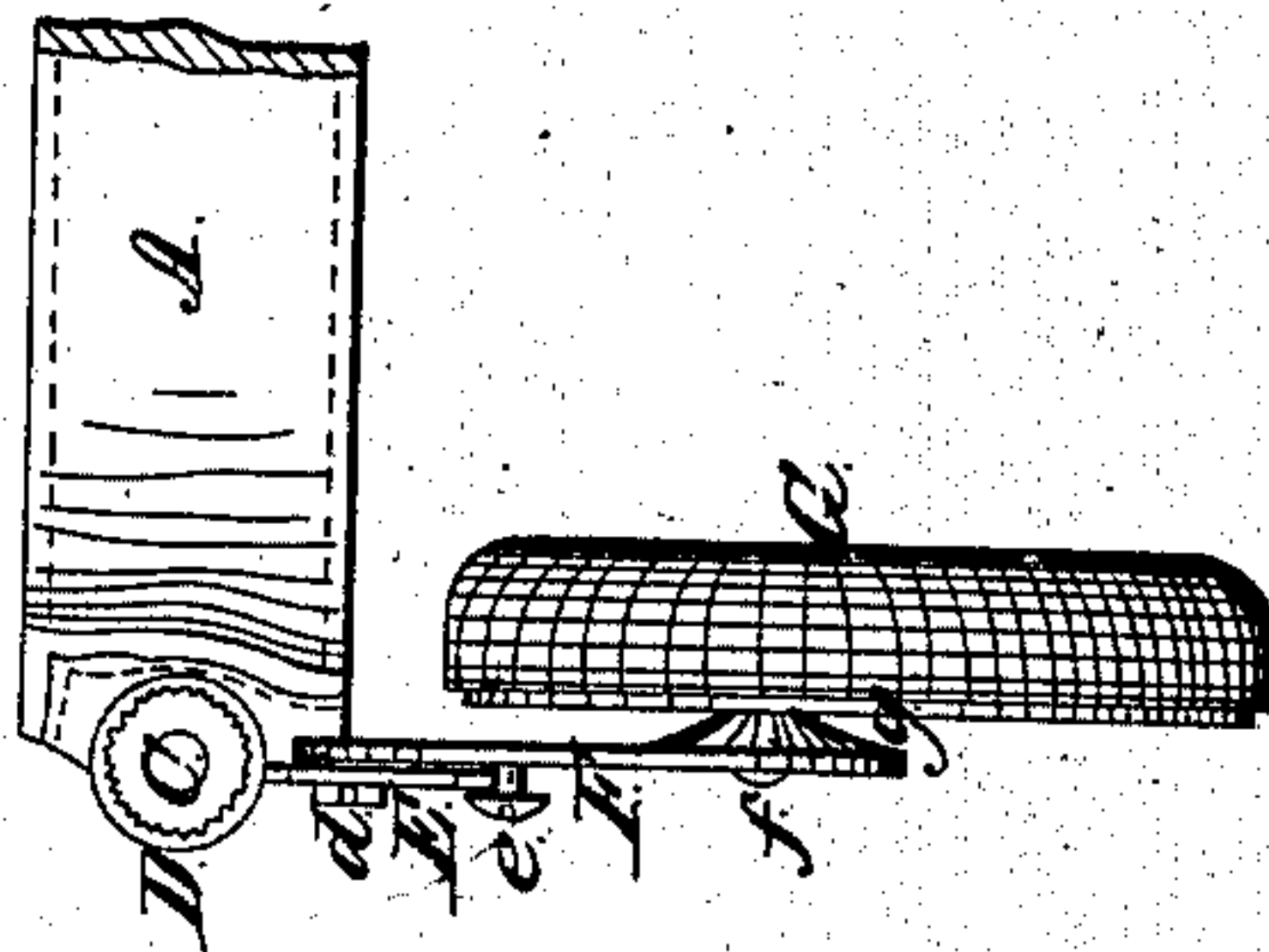
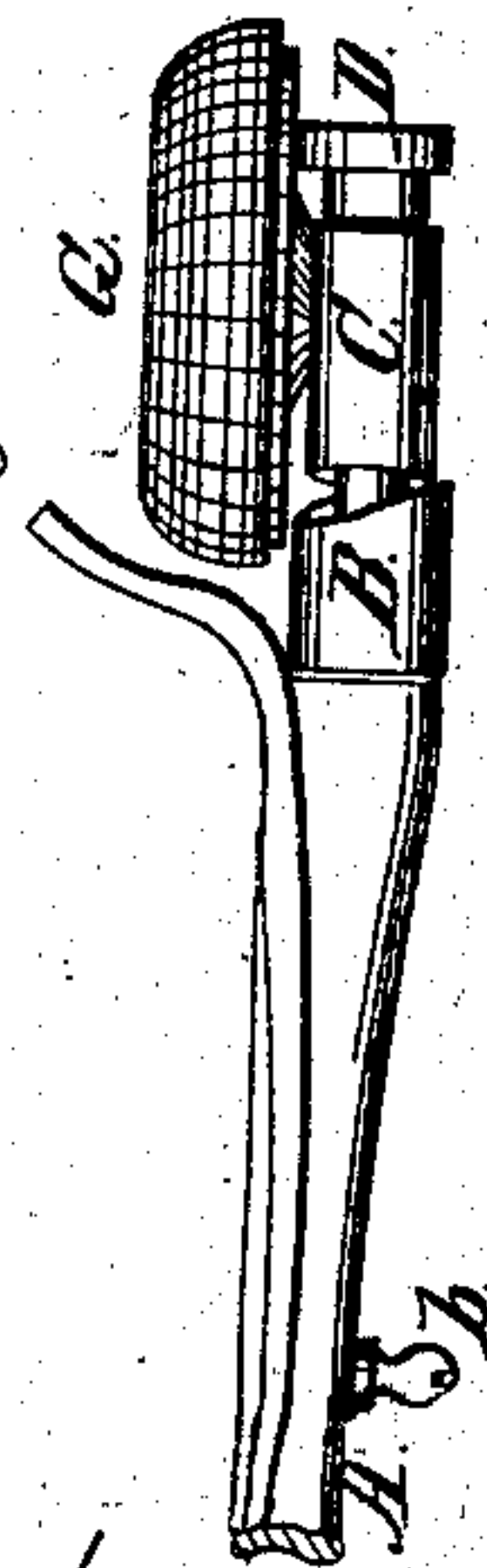


Fig. 2.



Witnesses.

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# United States Patent Office.

EPHRAIM CAPEN, OF BATAVIA, ILLINOIS.

Letters Patent No. 62,000, dated February 12, 1867.

## IMPROVEMENT IN TRUSSES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, EPHRAIM CAPEN, of Batavia, in the county of Kane, and State of Illinois, have invented a new and useful Improvement in Trusses; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

To enable those skilled in the art to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a front view of my invention.

Figure 2 is a plan or top view of the same; and

Figure 3 is a side or edge view thereof.

Similar letters of reference in the several figures indicate the same parts of my invention.

A represents the ordinary spring and belt, which passes around the body and holds the operating parts of the truss in position upon the rupture; *a* representing a series of slots or holes which are buttoned upon the button *b*, and thus secures the belt upon the wearer. Upon the end of the spring in the belt there is forged, or formed, or attached a rod, *c*, projecting out from the end of the belt, as shown, and upon said rod there is cast or otherwise permanently attached a stationary collar or shoulder, B, its abutting or outer surface sloping back as shown, forming an inclined abutment, against which the face of the movable collar C, adjacent thereto, rests and operates, as hereinafter set forth. The end of said rod *c* is cut in form of a screw, upon which the nut D is placed, by the turning of which the movable collar C is pressed against the aforesaid abutment B, as desired. The said movable collar C has a rotary as well as a sliding movement upon the said rod *c*, and attached thereto is the pendent arm E F, upon and to which the truss pad is secured or attached, as hereinafter described. The part E of the arm aforesaid forms one piece with the said movable collar C, and the part F is pivoted thereto at *d*, forming a joint or elbow, permitting the pad G to be moved laterally, as is indicated by the red lines in fig. 1, thus affording a great degree of adjustability to the pad. The said parts E F of the divided arm or lever are held securely together by the headed screw *e*, which clamps the lower edge of E securely, as shown clearly in fig. 3. The lower end of the arm F, where the pad is attached, is stamped out so as to form a boss, as shown at *g*, in fig. 3, thus allowing a free rotating and rocking motion to the pad, rendering it much easier to the wearer. By the arrangement of the sloping adjacent faces of the stationary and movable collars B C, hereinbefore described, it will be observed that any required degree of pressure upon the rupture may be secured by pressing or releasing the nut D upon or from the collar C. The outward pressure of the body upon the pad by means of the wedging of the collars aforesaid holds the nut D immovable, but by pressing the arm E F slightly inwards the nut is released, when it may be adjusted as desired. Instead of the frictional surfaces herein described for holding the pad in the required position, fine ratchet teeth may be cut upon the abutting faces of the shoulder B and collar C, but as these teeth would soon wear off and the truss become useless, I prefer the frictional arrangement herein described, as in this case the wearing of the faces only fits them more closely together as the nut can follow them up and keep the parts in proper position to effect the object desired. By reversing or swinging over the arm E F upon the shaft *c*, and readjusting the pad, which is done by taking out the screw *d* and reversing the face of the pad, and securing the arm F upon the opposite side of the arm E, the truss may be accommodated to the left side. The lateral adjustment of the pad is effected by slightly loosening the screw *e*, and moving the pad to the required position, when the screw is tightened to hold it firmly in place.

Having described the construction and operation of my invention, I will now specify what I claim, and desire to secure by Letters Patent:

1. I claim the combination and arrangement of the shaft *c*, provided with an inclined stationary shoulder B, the nut D, movable collar C, and its pad arm, operating substantially as described, for the purpose of adjusting and securing the requisite pressure as herein set forth and specified.
2. I claim constructing the pad arm in two parts E F pivoted together as described, for the purpose of affording a lateral adjustment to the pad as herein set forth.
3. I claim forming a boss, *g*, upon the arm F, whereunto the pad is attached substantially as and for the purposes specified and shown.

EPHRAIM CAPEN.

Witnesses:

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