

No. 682,702.

Patented Sept. 17, 1901.

W. E. HOYT.
SEWING MACHINE TREADLE.
(Application filed Apr. 11, 1901.)

(No Model.)

Fig. 1.

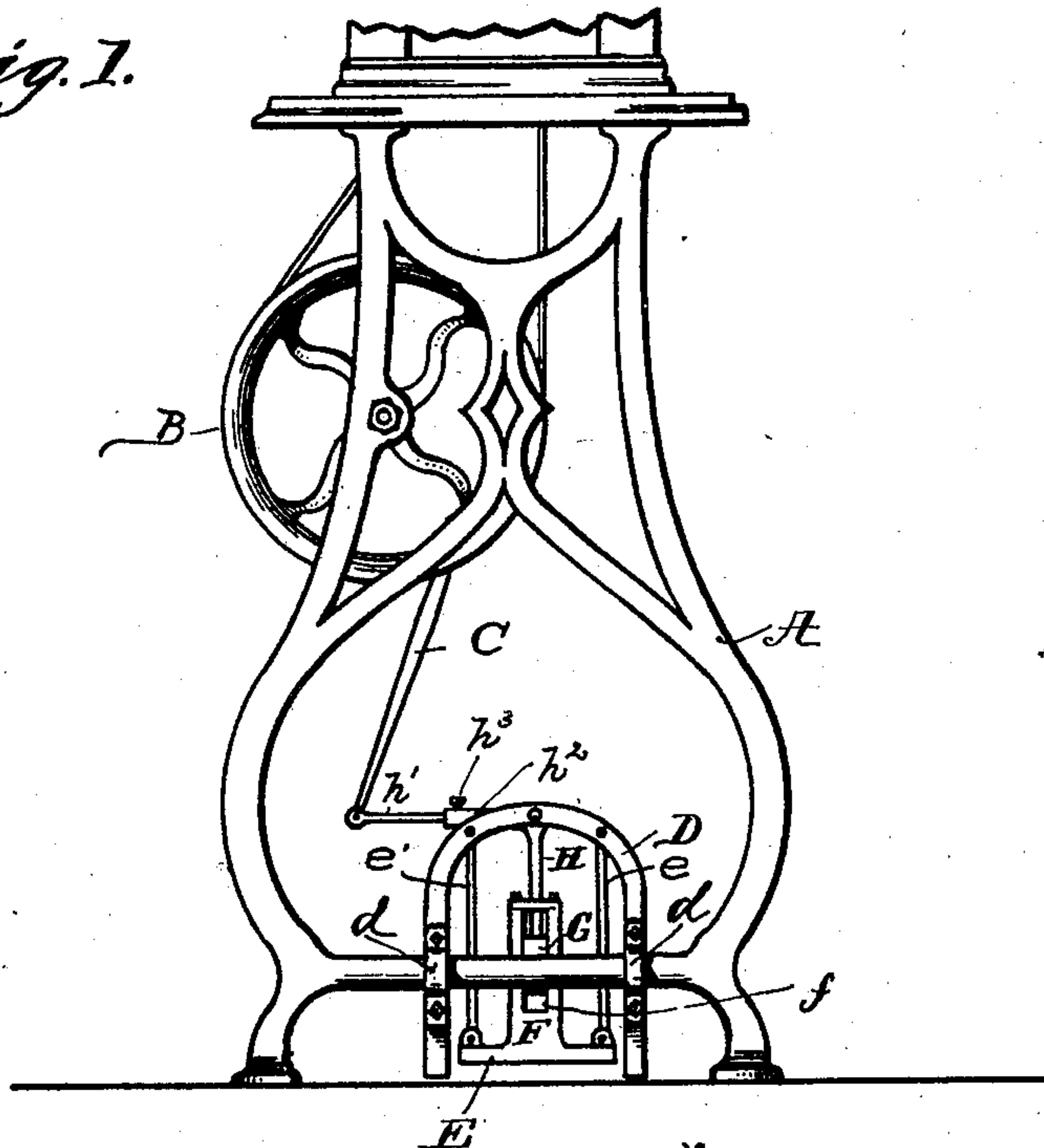
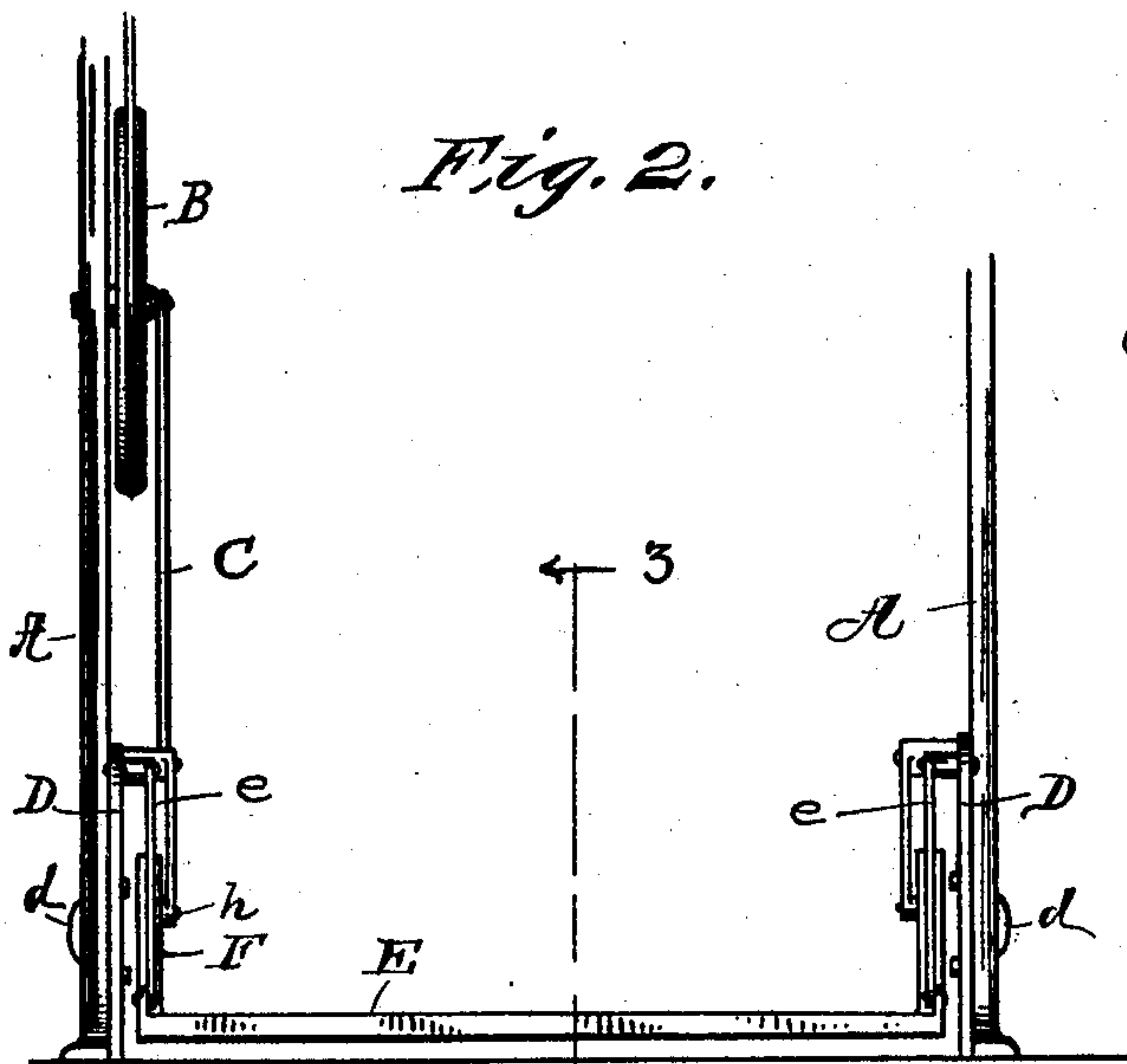


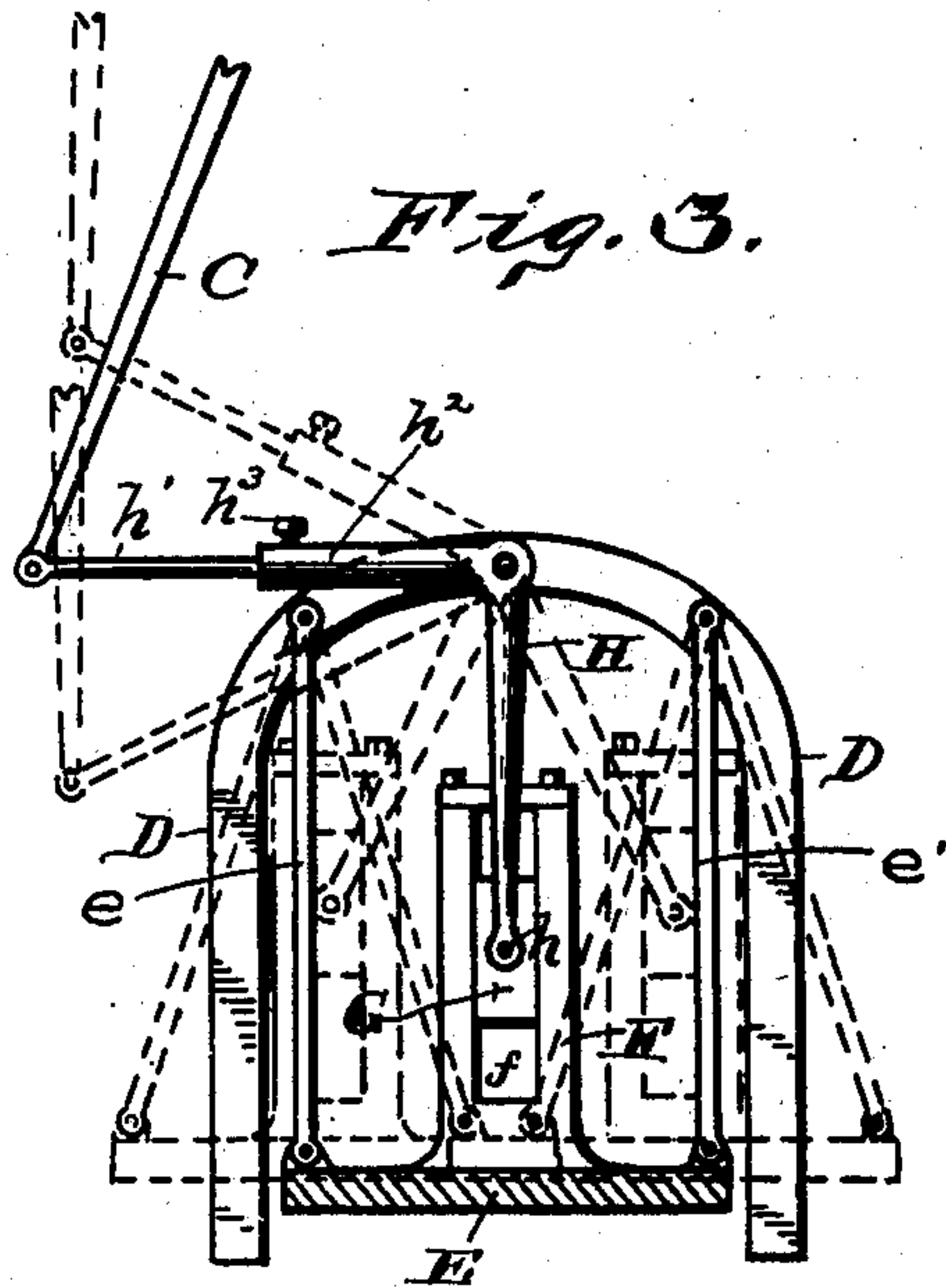
Fig. 2.



WITNESSES:

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Fig. 3.



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SEWING-MACHINE TREADLE.

SPECIFICATION forming part of Letters Patent No. 682,702, dated September 17, 1901.

Application filed April 11, 1901. Serial No. 55,393. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. HOYT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Sewing-Machine Treadles, of which the following is a specification.

The object of this invention, primarily, is to provide a treadle for sewing-machines which will not compel the operator to raise the foot high off of the floor nor appreciably raise the leg above the knee in order to obviate the serious complications and injurious physical effects which have been visited upon those who are compelled to operate such machines, and especially to relieve women, who, as a class, are the principal users of sewing-machines and are physically the most liable to injury.

The object of the invention is also to provide a treadle which will lie close to the floor and swing back and forth parallel therewith without rising far above it.

The object also is to provide an attachment which can be applied to any of the sewing-machines now on the market without delay or difficulty.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a detail in side elevation of a sewing-machine, showing the stand or base with my invention in operative position; Fig. 2, a detail of lower part of sewing-machine in front elevation with my invention applied, and Fig. 3 a detail in vertical section on the line 3 3 of Fig. 2.

Like letters of reference indicate like parts throughout the several views of the drawings.

A represents the legs of a sewing-machine, B the belt-wheel, and C the treadle-rod, all of usual construction. Bolted to the legs on either side of the machine by means of clips *d* are the frames D, which comprise two stems connected by an arch. These frames are on the inner sides of the legs, and suspended from them by links *e e'* is the treadle-board E. The links *e e'* are pivoted at their upper ends to the frame and to the treadle-board at their lower ends, providing a swinging suspension of the said board, which, however, in its

movements is compelled to retain a position parallel with the floor. Secured to the end of the treadle-board adjacent to the belt-wheel B is the standard F, having the longitudinal slot *f* and forming a guide for the sliding block G. Pivotally secured to the frame above the standard F is the bell-crank H, the lower end of which is pivotally secured by means of the crank-pin *h* to block G, and the other end of the bell-crank is pivotally connected with the treadle-rod, as shown. By reciprocating the treadle-board E the belt-wheel B will be rotated and the sewing-machine driven.

In order to adjust the mechanism to the machine, the upper arm of the bell-crank is made in two telescoping parts *h'* and *h²*, which are held at any desired adjustment by the screw-bolt *h³*.

As shown by the dotted lines in Fig. 3, the requisite stroke is obtained with very little rise of the treadle-board above the floor, and the movement is a to-and-fro one, very different from the rocking movement of the ordinary treadle.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent, is—

1. In a machine-treadle, supporting-frames secured to a treadle-board, links pivotally secured to the frames and to the treadle-board whereby the board will be capable of a to-and-fro movement parallel with the floor, a standard secured to the treadle-board having a slot forming a guide, a block having reciprocating movement in the slot and a bell-crank pivoted to one of the frames and having its lower end pivoted to the block and the other end pivotally secured to the treadle-rod of the machine, substantially as described and shown.

2. The combination, of a treadle-board having a horizontal to-and-fro movement, a vertical slideway secured to the board, a block having reciprocating movement controlled by the slideway, a bell-crank pivoted at its one end to the block and at its other end to the treadle-rod, substantially as described and shown.

3. The combination, of a treadle-board suspended by links so as to have a to-and-fro movement parallel with the floor, a vertical

slideway secured to the treadle-board, a block
moving in and guided by said slideway, a bell-
crank having a two-part telescoping arm, said
bell-crank being pivotally secured to a sta-
5 tionary support at its middle and to a treadle-
rod at one end and to the sliding block at the
other, substantially as described and shown.

In witness whereof I have hereunto set my
hand and seal at New York this 30th day of
March, A. D. 1901.

WILLIAM E. HOYT. [L. s.]

Witnesses:

MICHAEL DIEMERT,
LOUIS V. RISEDORF.