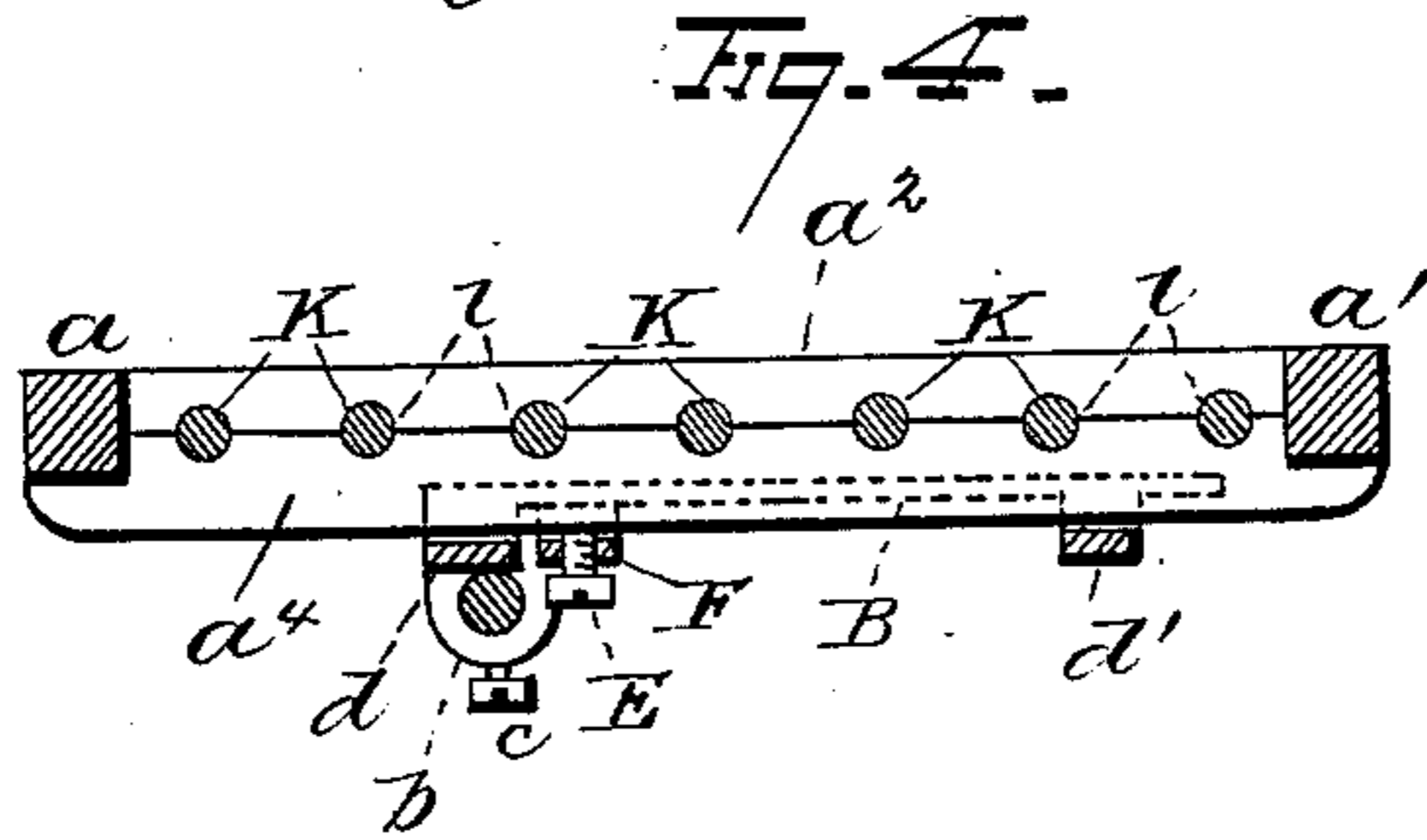
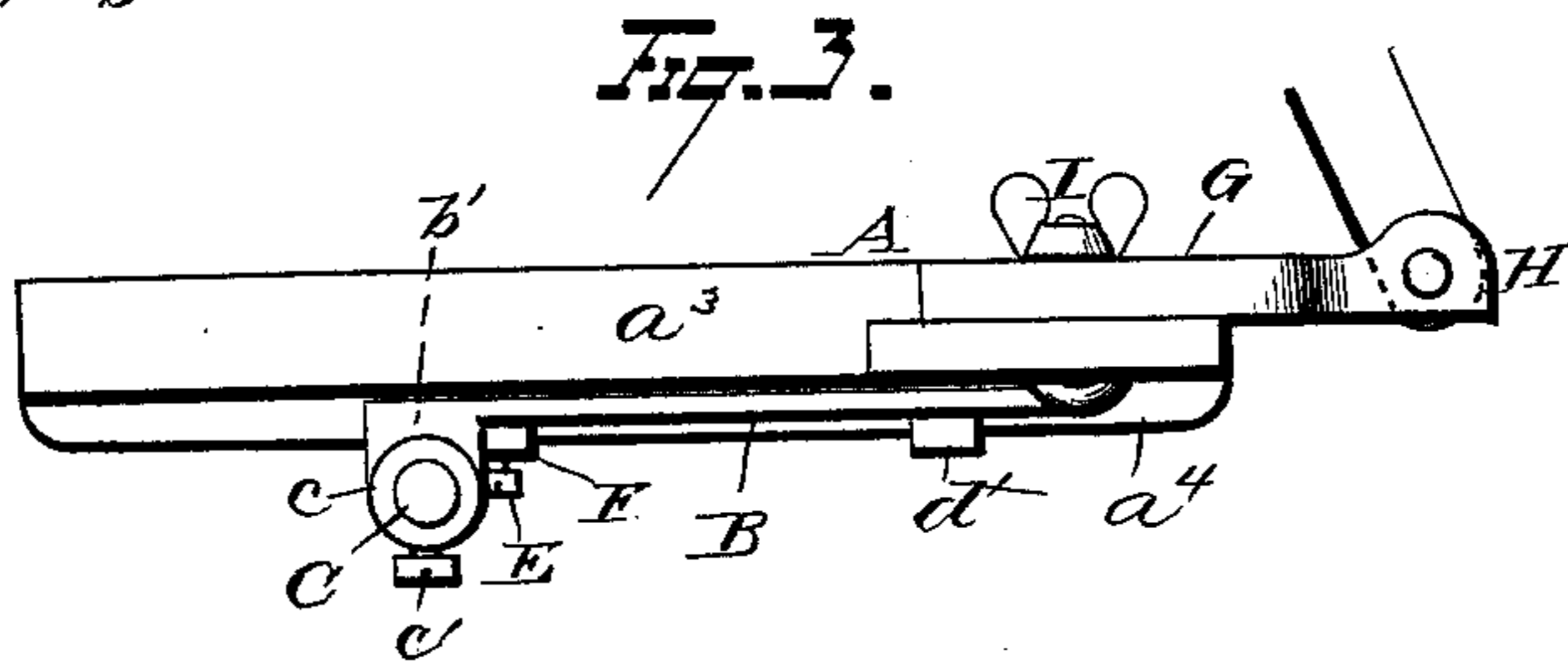
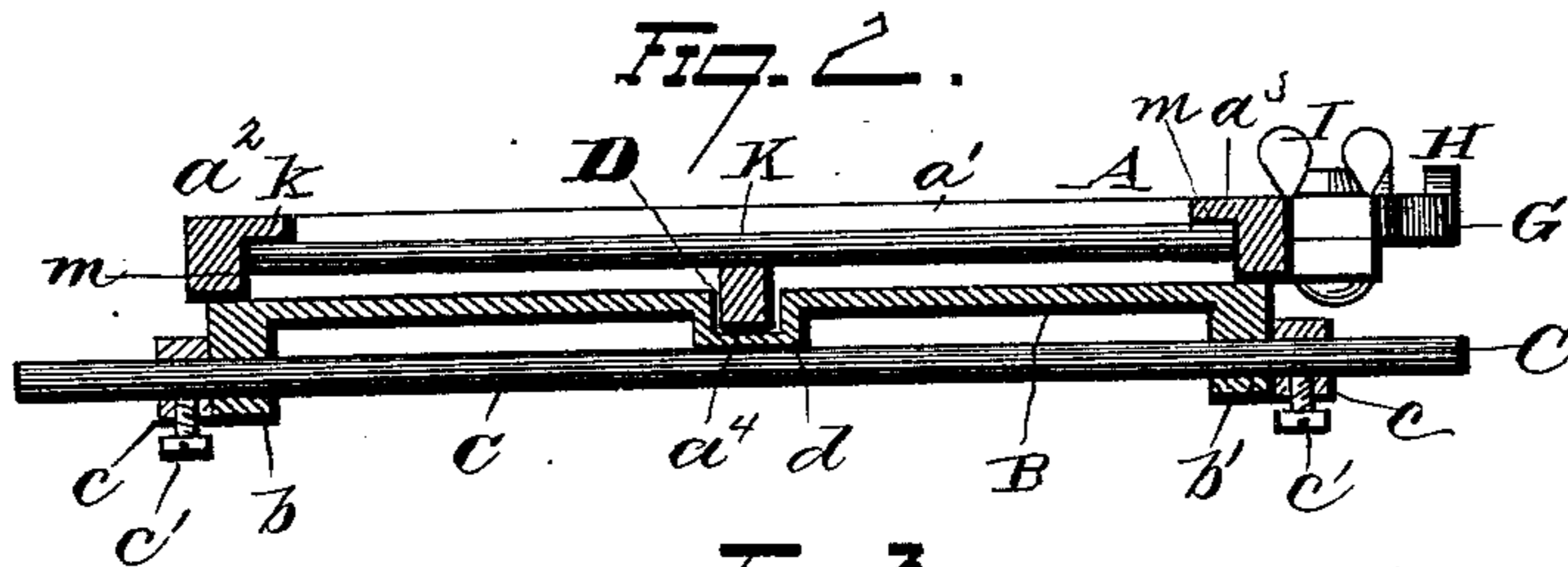
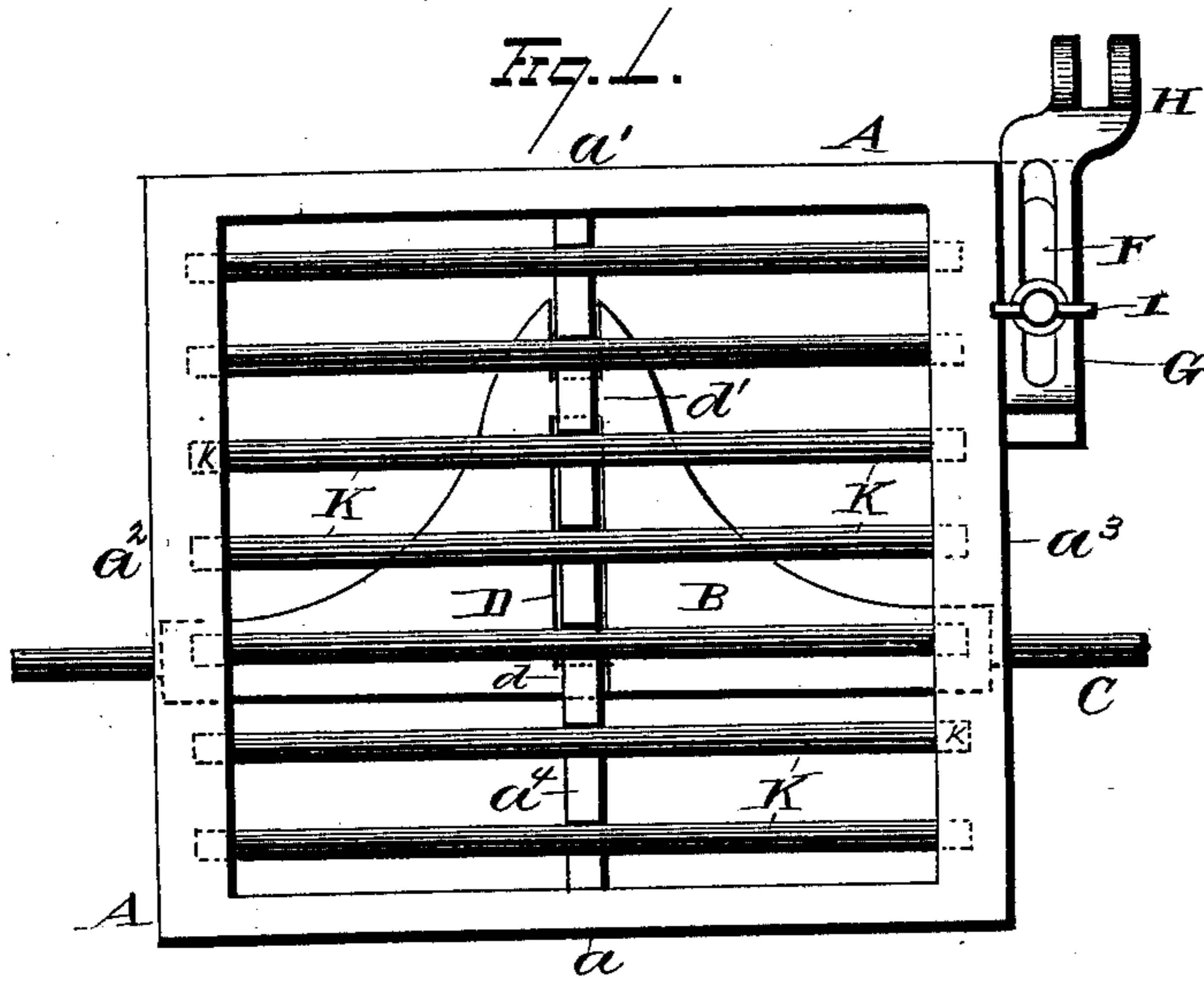


O. H. TAYLOR.  
Sewing-Machine Treadle.

No. 220,192.

Patented Sept. 30, 1879.



WITNESSES

WITNESSES  
E. J. Nottingham  
A. Wright.

INVENTOR

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

OLIVER H. TAYLOR, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN SEWING-MACHINE TREADLES.

Specification forming part of Letters Patent No. **220,192**, dated September 30, 1879; application filed January 28, 1879.

*To all whom it may concern:*

Be it known that I, OLIVER H. TAYLOR, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Treadles for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in treadles for sewing-machines; the object being to provide a treadle which may be readily adjusted to regulate the relative movement of the heel and toe portions of the treadle, and also to provide means for regulating the leverage of the treadle.

A further object of my invention is to provide a treadle-surface that shall be easy to the feet, and readily replaced when unduly worn away, without disconnecting or disturbing the treadle; and to these several ends my invention consists, first, in the combination, with the frame of a treadle, of a treadle-carrier provided with lugs for securing the same to the treadle-rod, said frame being adjustably secured to said carrier, whereby the relative movement of the toe and heel portions of the treadle may be readily adjusted, as desired.

My invention further consists in the several details of construction and combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved treadle. Fig. 2 is a longitudinal section; Fig. 3, an edge view, illustrating the adjustable connections between the treadle and pitman-rod; and Fig. 4 is a transverse section through the foot-bars of the treadle.

A represents the treadle-frame, consisting of the front and rear bars,  $a a^1$ , end bars,  $a^2 a^3$ , and central cross-bar,  $a^4$ , all of which are cast in a single piece. B is the treadle-carrier, and is provided with lugs  $b b'$ , which serve as bearings for the treadle-shaft C, the carrier being held from longitudinal movement on said shaft C by means of the collars  $c$ , which latter are provided with set-screws  $c'$ , which engage with

the shaft. Carrier B is constructed with a central slot, D, and loops  $d d'$ .

The central cross-bar,  $a^4$ , of the treadle-frame is received within the elongated central slot, D, and the loops  $d d'$  extend beneath said central cross-bar and connect the opposite sides of the carrier.

E is an adjusting-bolt, which engages with the central cross-bar,  $a^4$ . F is a clip, the ends of which rest upon the carrier B. By loosening the bolt E the tension upon the clip is lessened, and the treadle-frame may be adjusted forward or backward, as may be desired, to secure the proper degree of movement to either the heel or toe portion of the treadle. When the treadle has been adjusted properly, the bolt E being turned down, the ends of the clip are forced snugly against the carrier, and securely connect the same with the cross-bar of the frame of the treadle.

One corner of the treadle-frame is provided with an elongated slot, F, over which is placed an adjustable plate, G, having a bifurcated outer end, H, within which is pivoted the lower end of the pitman.

I is an adjusting-screw for securing the pitman-plate G at any desired distance from the treadle-shaft, and thus regulate the leverage of the treadle to suit the requirements of the operator.

The tread of the treadle is made up of wooden bars K, the opposite ends of which are seated in grooves  $k$ , formed in the end bars,  $a^2 a^3$ , of the treadle-frame, and their central portions are seated in grooves  $l$ , formed in the upper edge of the central cross-bar,  $a^4$ , of the frame. These wooden bars are inserted as follows: The end of the bar is inserted beneath one of the end bars of the treadle-frame, then raised above the central cross-bar, and driven toward the opposite end of the frame until the end of the bar is nearly in line therewith, when the bar is depressed, and the bar driven still farther, until the opposite ends thereof rest in grooves in the end bars of the frame, and the extreme ends abut against the downwardly-projecting flanges  $m$  of said end bars,  $a^2 a^3$ .

A treadle furnished with a wooden-surfaced tread, perfectly ventilated, and of yielding material, is a great improvement on the ordi-

nary construction of treadles, for the following reasons: The wooden bars will not wear smooth and slippery, like metal, and hence the wooden bars always afford a firm easy bearing for the feet. Again, the wooden bars are possessed of a certain degree of elasticity, whereby they are enabled to yield slightly to the pressure of the feet of the operator, and thus render the treadle less tiresome to the feet in their continuous operation. Again, by forming the treadle of open-work form, the soles of the feet are thoroughly ventilated, and thus the treadle is especially adapted for employment in hot weather. Again, the wooden bars do not chill the feet of the operator in cold weather, as is the case with metal treadles in common use. When the wooden bars become unduly worn, they may be easily taken out of the treadle-frame and readily replaced by new bars.

It is evident that the means for adjusting the treadle relative to the treadle-shaft may be varied in many particulars without departing from the spirit of my invention, and also the devices for varying the distance between the pitman-treadle connection; and the treadle-shaft of fulcrum may also be changed in details of construction and arrangement of parts without departing from the spirit of my invention.

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

1. The combination, with the treadle-shaft

provided with a carrier secured thereto, of a treadle-frame placed upon the top of the carrier, said treadle-frame provided with a cross-bar on its lower side, which enters a slot or guide-way in the carrier, and adjusting devices located beneath the treadle-frame, whereby the treadle-frame may be adjusted forward or backward with relation to the treadle-shaft, substantially as set forth.

2. The combination, with a treadle-frame, of removable wooden bars, substantially as set forth.

3. The combination, with a cast-metal treadle-frame, of removable wooden bars, substantially as set forth.

4. A treadle-frame having a central cross-bar cast solid therewith, in combination with a series of wooden bars, substantially as set forth.

5. A treadle the central and end bars of which are provided with a series of grooves, in combination with removable wooden bars, the ends of which are seated in grooves in the end bars, and the central portions in grooves in the central cross-bar, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of January, 1879.

OLIVER H. TAYLOR.

Witnesses:

ALFRED HODGES,  
J. C. BUSBY.