

(No Model.)

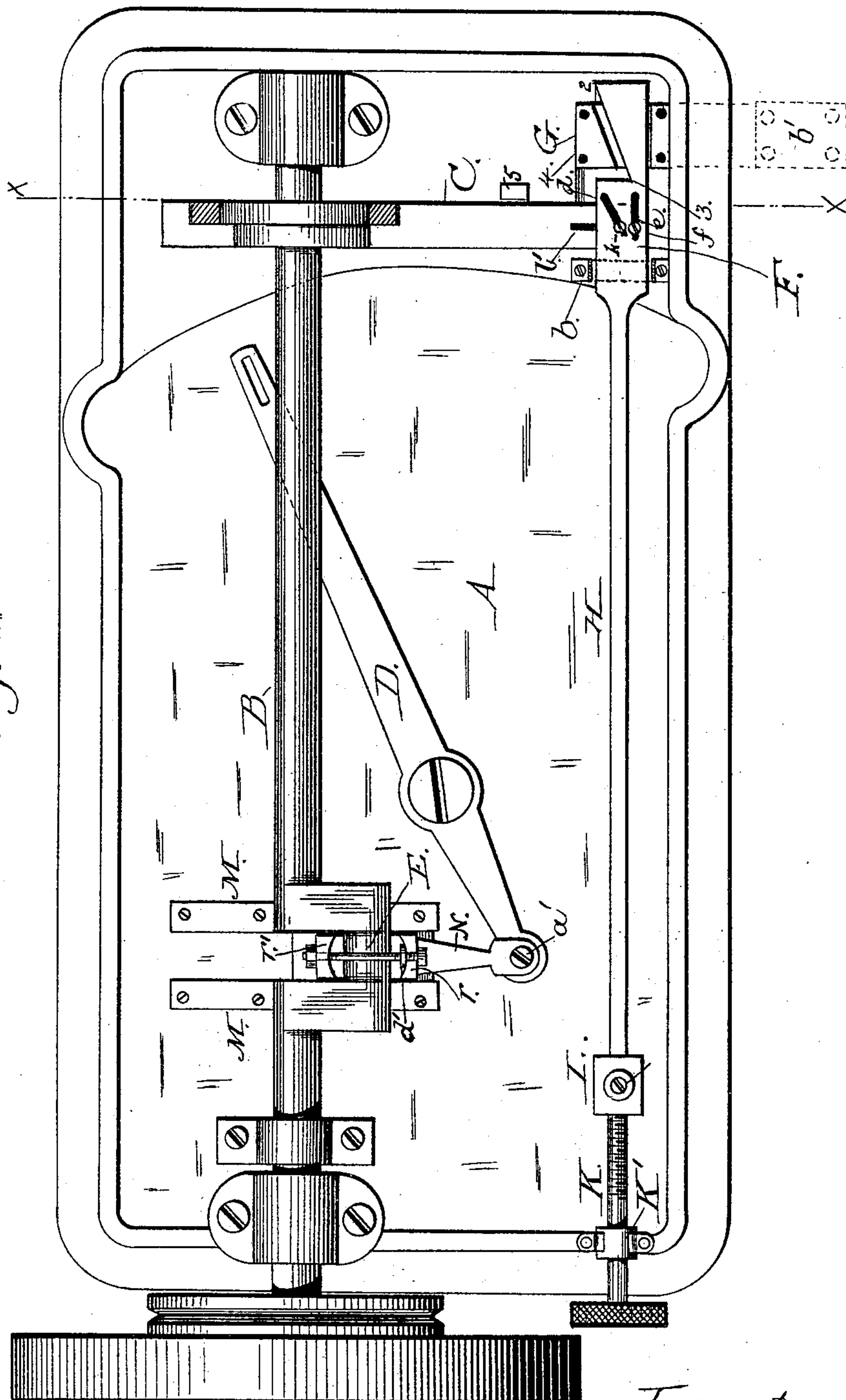
2 Sheets—Sheet 1.

C. E. TIBBLES.  
SEWING MACHINE.

No. 328,534.

Patented Oct. 20, 1885.

Fig. 1.



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Inventor;  
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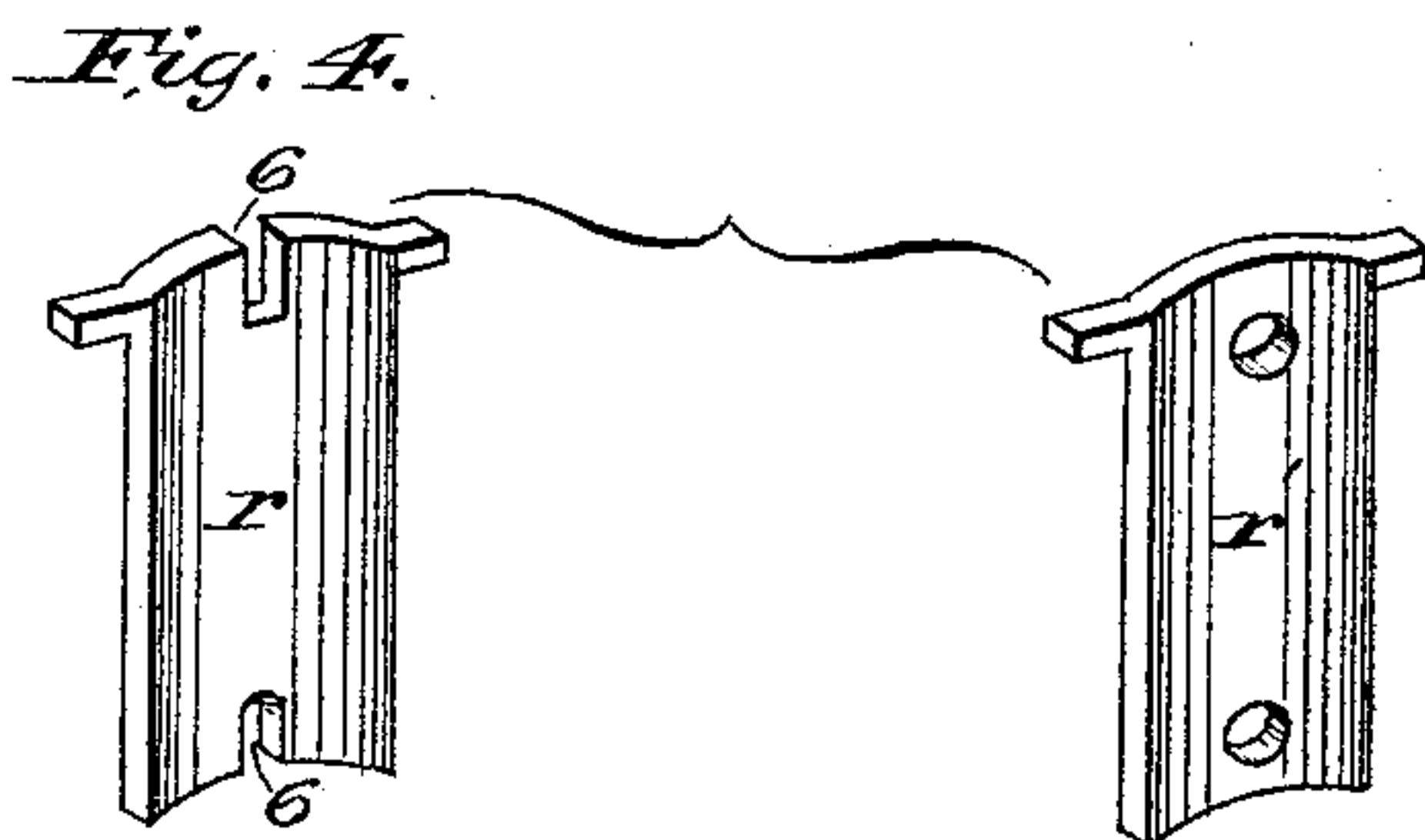
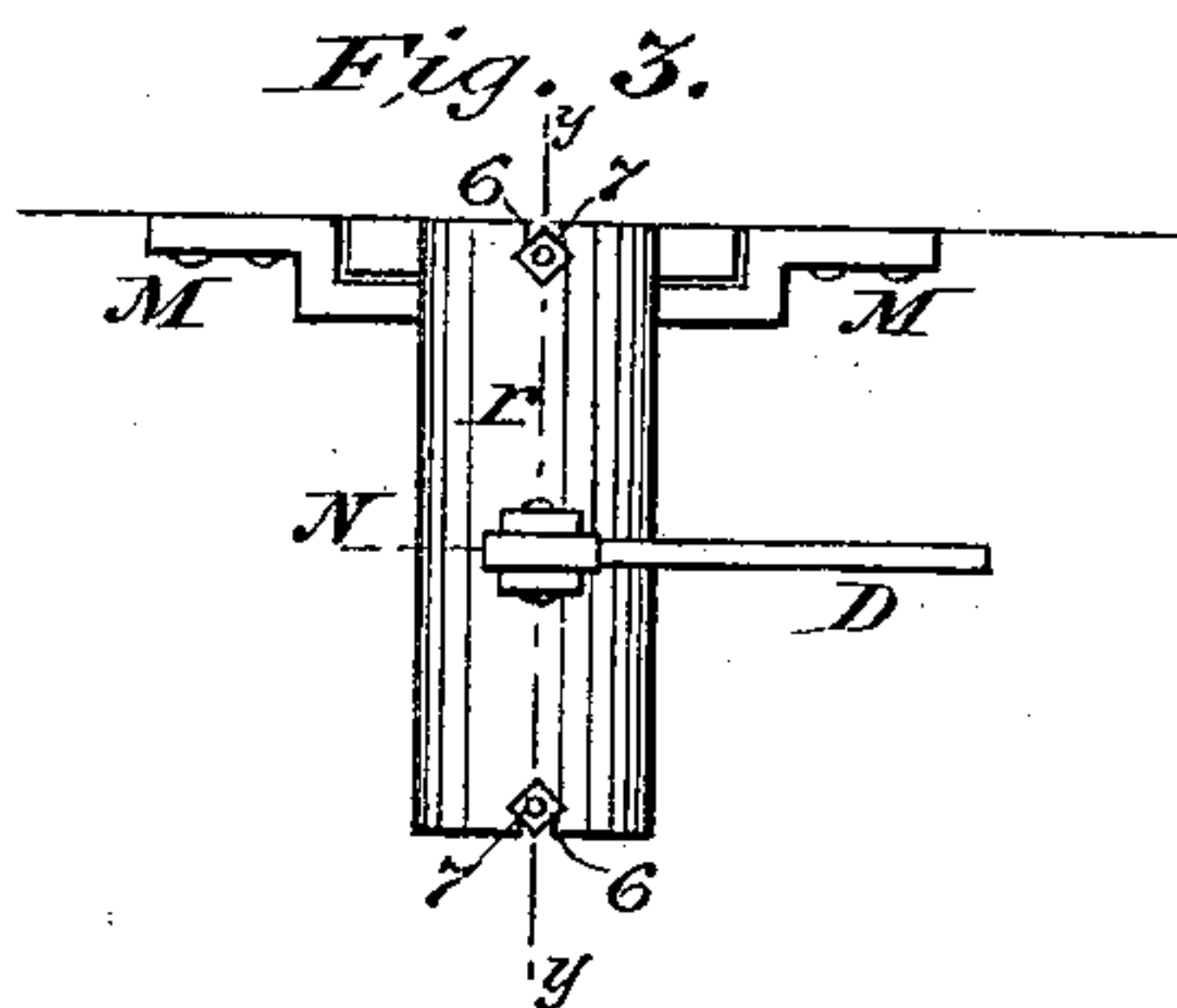
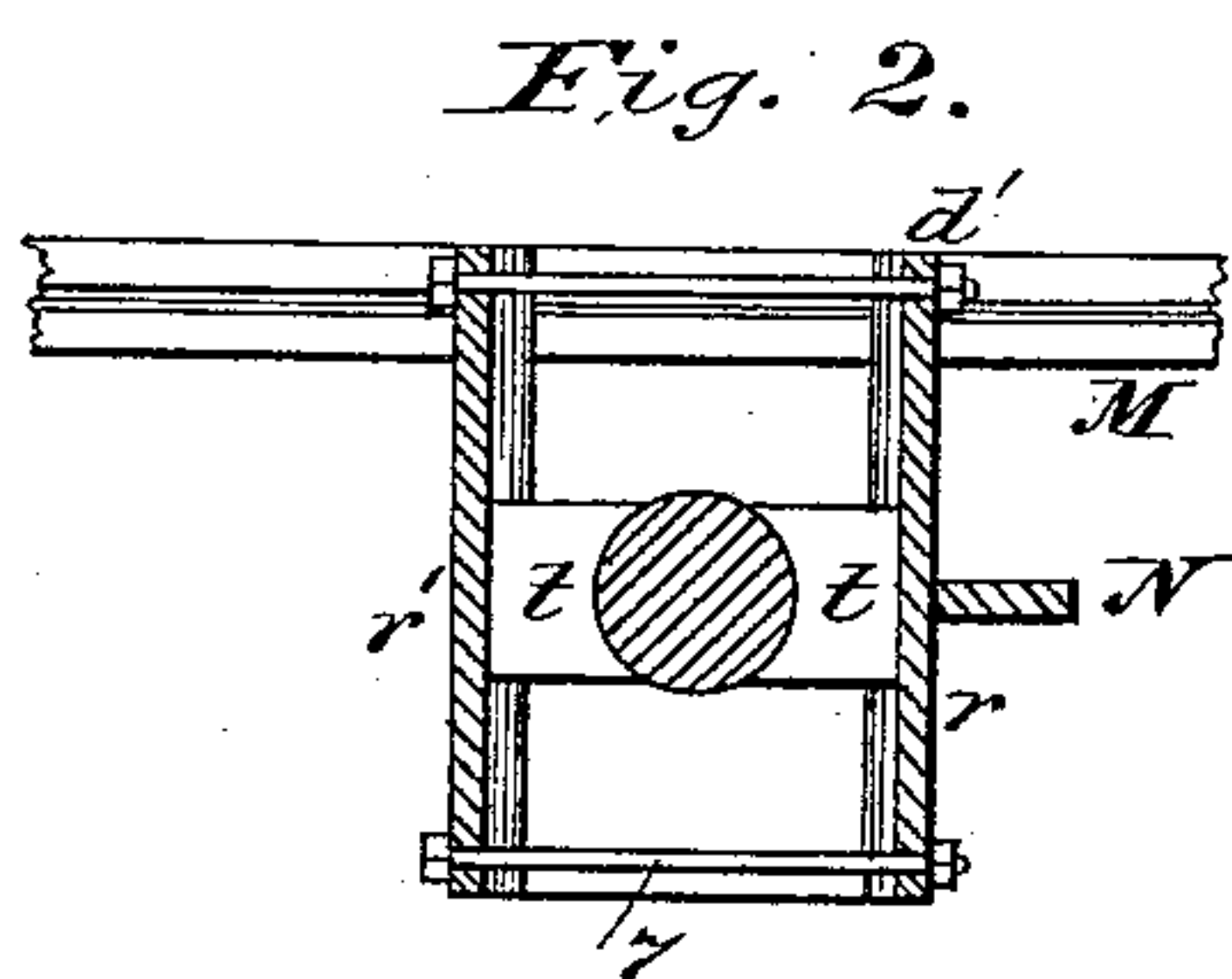
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2 Sheets—Sheet 2.

C. E. TIBBLES.  
SEWING MACHINE.

No. 328,534.

Patented Oct. 20, 1885.



Witnesses:

J. C. Brecht,  
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Inventor:

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# UNITED STATES PATENT OFFICE.

CHARLES E. TIBBLES, OF BURLINGTON, IOWA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE TIBBLES MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 328,534, dated October 20, 1885.

Application filed August 31, 1883. Serial No. 105,255. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. TIBBLES, of Burlington, Des Moines county, State of Iowa, have invented a new and Improved Shuttle-Lever-Operating Mechanism for Sewing-Machines; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a bottom plan view of my improved shuttle-lever-operating mechanism. Fig. 2 is a cross-section through the wrist-pin. Figs. 3 and 4 are details.

My invention relates to mechanisms for operating sewing-machine shuttle-levers; and it consists of certain combinations of devices and details of construction, as will hereinafter be fully described, and specifically pointed out in the claim.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

The general character of the operating mechanism for the shuttle-lever is the same as shown in Letters Patent No. 274,057, but improved so that the independent gibs have no lateral movement on the crank-wrist.

In the said drawings, M M are two ways or rails on the lower surface of the bed-plate, in which slide the ends of two downwardly-projecting arms,  $r r'$ , secured together near their upper and lower ends by screws in a manner hereinafter set out, and having their exterior faces concave in cross-section.

Fitting around a portion of the circumference of the wrist of the crank are two independent gibs,  $t t$ , having their backs convex, to fit into and slide or reciprocate in the concave faces of arms  $r r'$ .

The crank-wrist may have collars (not

shown) at each end, against which the ends of the gibs  $t t$  bear. One of the arms,  $r$ , adjacent to the end of the shuttle-lever, is connected to it by means of a pitman, N, which is pivoted to the shuttle-lever at  $a'$ .

In order to take up the lost motion induced by the wear on the gibs  $t t$  and arms,  $r r'$ , I connect the arms  $r r'$  at their tops and bottoms by screws in the following manner: One arm,  $r$ , has cut in its upper and lower edges a slot or recess, 6, of a width to snugly fit the diameter of the body of the screw, and the other arm,  $r'$ , is bored and threaded at the top and bottom at points corresponding with recesses 6. The screws 7 7 are provided with rigid collars  $d' d'$  near their heads, the distance between the heads and collars being equal to the thickness of arm  $r$ , so that the body of the screw between the head and collar can be passed into slots or recesses 6 6, the collar resting against the inner side of arm  $r$  and the head against the outer surface. The tapped ends of the screws enter the screw-holes in arm  $r'$  and are secured by nuts and jam-nuts, the screws drawing the arms  $r r'$  together until they snugly draw the gibs against the crank-wrist.

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

The shuttle-lever D and pitman N, in combination with the independent arms  $r r'$ , secured together, substantially as described, guides on which said arms slide, the independent gibs  $t t$ , and the crank-wrist E, all constructed, arranged, and operated substantially as described.

CHARLES E. TIBBLES.

Witnesses:

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N. D. ADAMS,