

(No Model.)

D. W. GOODELL.
SEWING MACHINE.

No. 365,514.

Patented June 28, 1887.

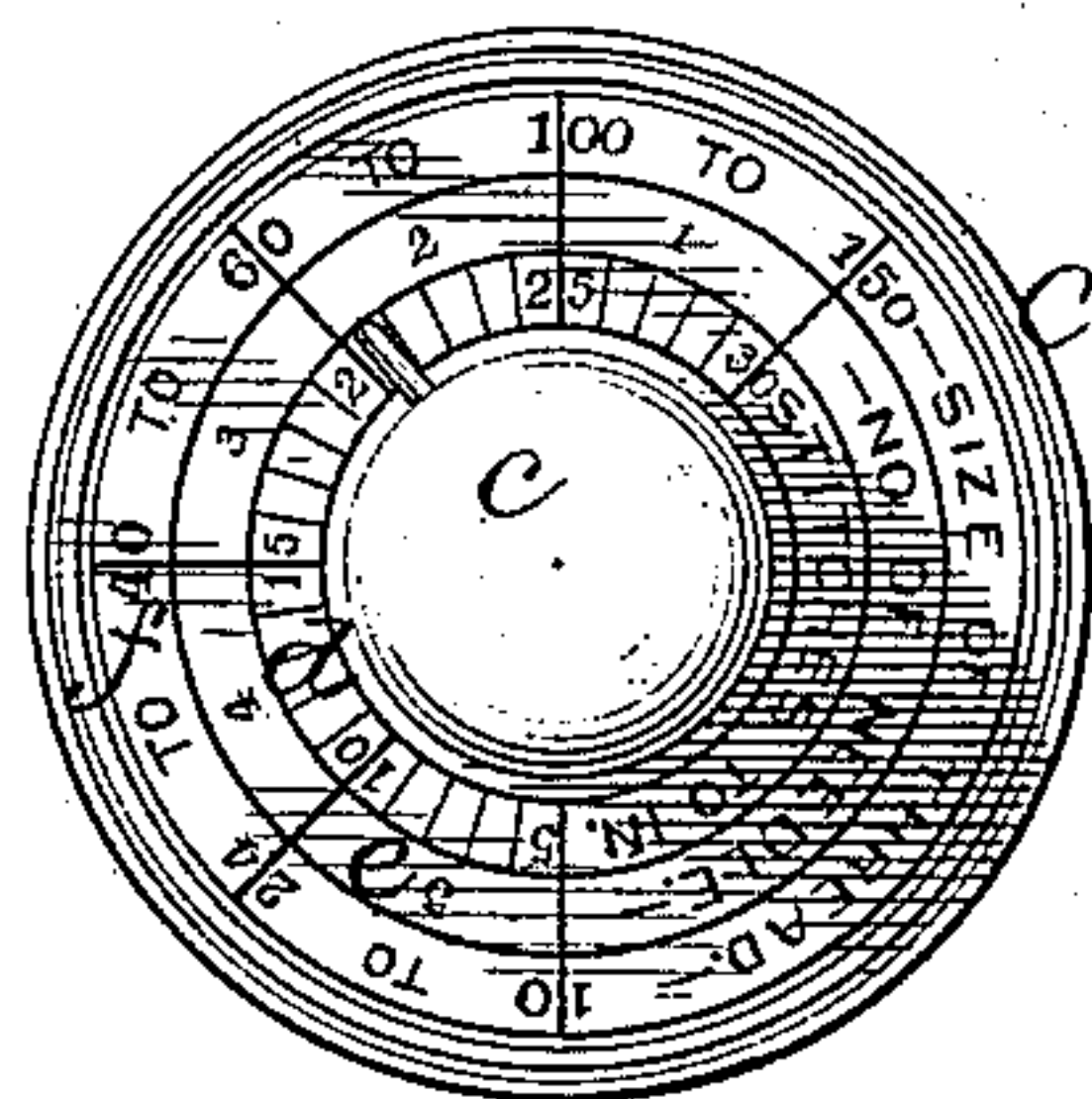
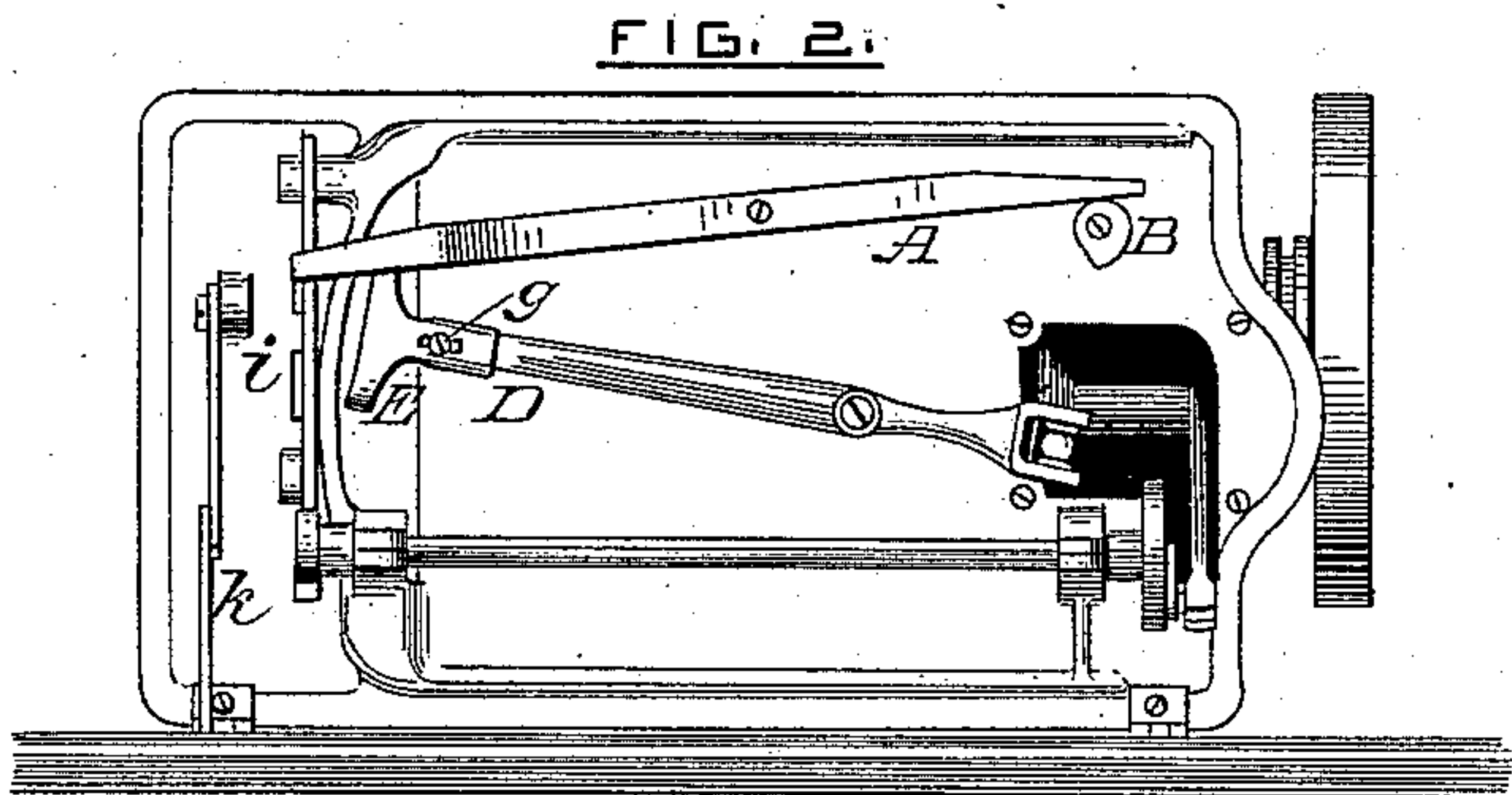
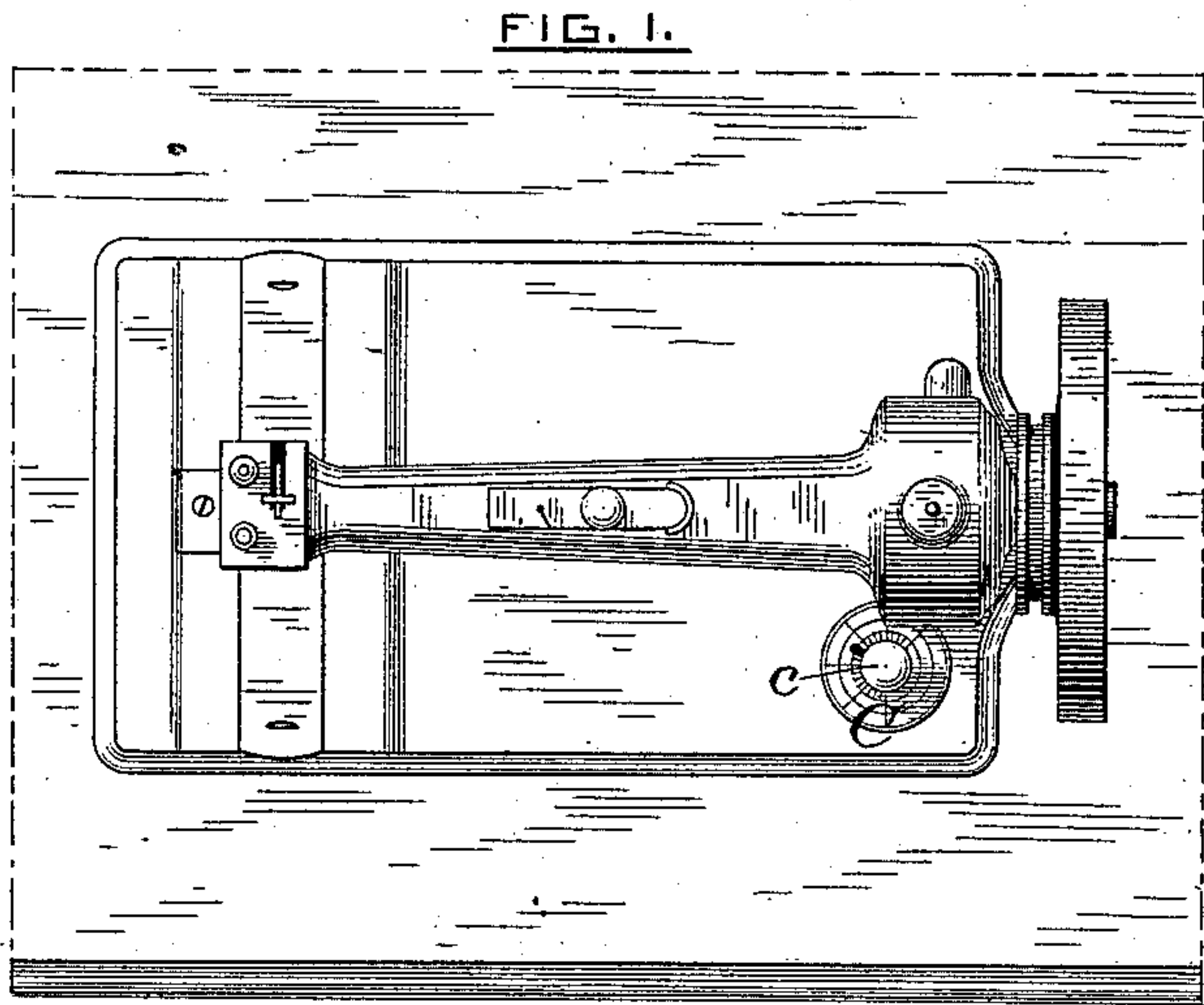
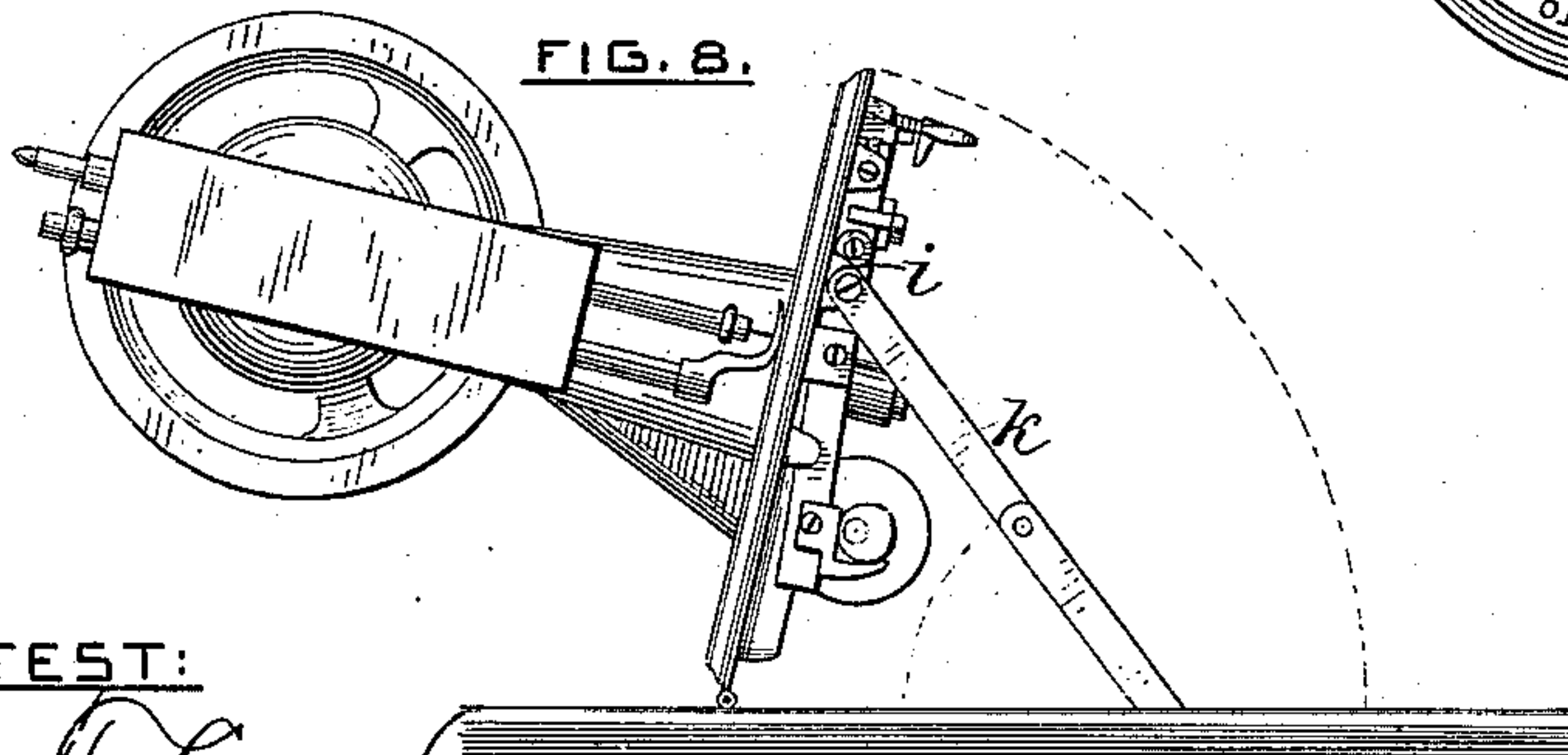
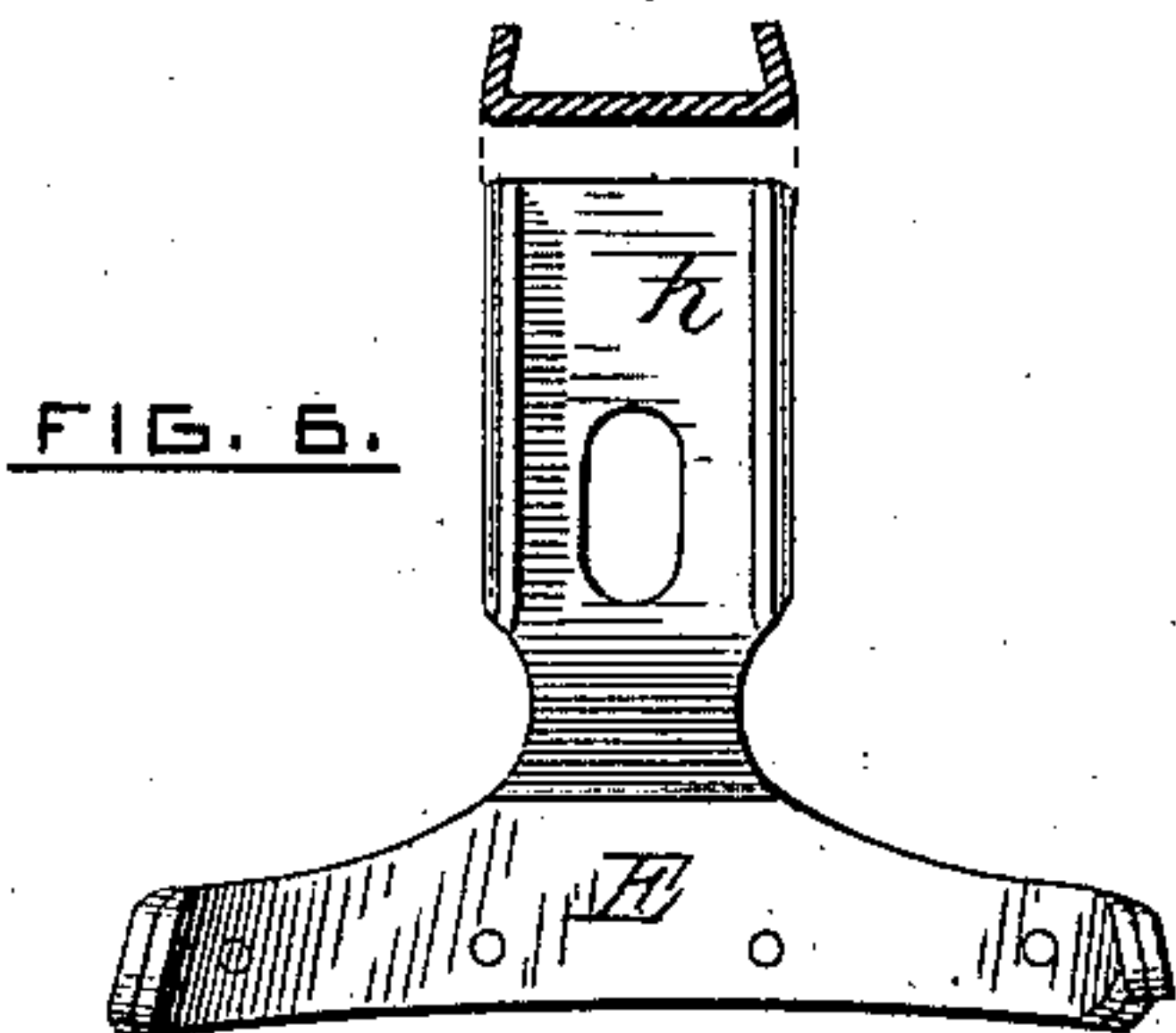
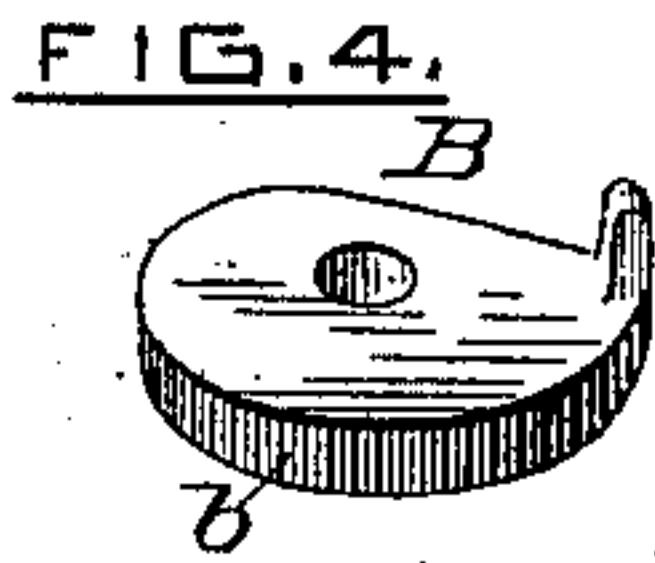
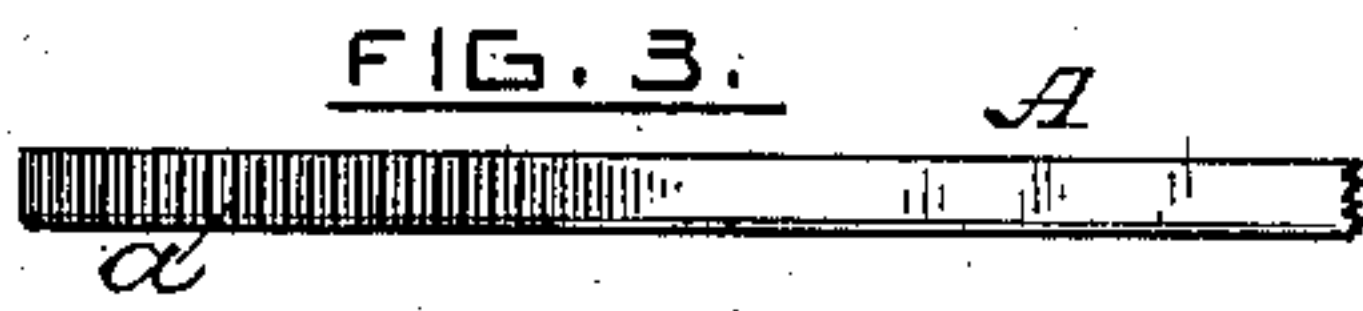


FIG. 7.

ATTEST:

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UNITED STATES PATENT OFFICE.

DEXTER W. GOODELL, OF FLORENCE, MASSACHUSETTS, ASSIGNOR TO THE
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SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 365,514, dated June 28, 1887.

Application filed March 20, 1882. Serial No. 55,811. (No model.)

To all whom it may concern:

Be it known that I, DEXTER W. GOODELL, of Florence, in the town of Northampton, county of Hampshire, and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a clear, true, and complete description of the several features of my invention.

One portion of my improvements relates to such feed-graduating mechanism as embodies a controlling-lever and a rotative cam for setting said lever, and has for its object the prevention of the accidental rotation of said cam during the regular operation of the feed-bar.

Another portion of my invention relates to a gage-plate connected with the feed-graduating cam for indicating not only, as heretofore, the character of stitch resulting from any particular adjustment of said cam, but also for indicating at the same time the numbers of the needle and thread best suited for use in such adjustment.

After a detailed description of a machine embodying all of my improvements, the features deemed novel will be specified in the several claims hereunto annexed.

Referring to the drawings, Figure 1 is a top view of a machine embodying my improvements. Fig. 2 is a side view of the same with the bed-plate of the machine turned upward on edge. Fig. 3 is an edge view of the rear end of the feed-graduating lever detached. Fig. 4 is a perspective view of the feed-graduating cam detached. Fig. 5 is a top and sectional view of the front end of the shuttle-driving lever detached. Fig. 6 is a top and sectional view of the shuttle-carrier detached. Fig. 7 is an enlarged top view of the thumb-piece which rotates the feed-graduating cam and my improved gage-plate. Fig. 8 is an end view of the machine turned on edge, as in Fig. 2.

The feed-graduating lever A is novel only in that its edge at its rear end is vertically serrated, as at *a*, Fig. 3. The cam B, for varying the position of said lever, is novel only in that the edge thereof which bears against the

lever is also serrated, as shown at *b*, Fig. 4. Heretofore these coincident or bearing edges of lever and cam have been smooth, and therefore the intermitting pressure against the lever by the feed-bar during the reciprocating movements of the latter have rendered the cam liable to more or less accidental rotation and a consequent departure from the desired adjustment, resulting in stitches of varied length. With the serrated faces described the cam cannot be rotated except designedly by means of the usual thumb-piece, *c*, and therefore the length of stitch is never varied except intentionally.

Heretofore feed-graduating thumb-pieces in some form or another have been provided with gage-scales of various kinds, indicating the proper position of the thumb-piece for securing any desired length of stitch. In some cases said gage-scales have been accompanied by separate plates inscribed with numbers indicating the various sizes of needles and the proper number of thread to be used with each in making various lengths of stitch. My feed gage-plate C has, as heretofore, an annular series of gage-marks surrounding the base of the thumb-piece, as at *d*, for indicating the number of stitches to the inch; but as a novel feature it has also an outlying annular series of marks, *e*, indicating the proper number of needle to be used in working under the varied adjustments, and still another annular series of marks, *f*, for indicating the number of the thread best suited in each case, thus enabling the unskilled operative at a glance to equip the machine in its best form for any particular service. The pointer on the thumb-piece projects so as to overlie the gage-plate, and enables a prompt, convenient, and accurate adjustment, and also points toward the proper needle and thread to be employed. The shuttle-driving lever D is coupled to the shuttle-carrier E by means of a clamp-screw, *g*, and the socketed shank *h*. The machine is hinged to the table-top, and the bed-plate is provided with a lug, *i*, which is coupled by a hinged link, *k*, to the table-top.

I am aware that props and spring-catches have heretofore been employed for maintaining the bed-plates of sewing-machines in a

tilted position; but the weight of the sewing-machine head and its mechanism is so great that a prop beneath the bed-plate will not admit of much elevation of the front edge of the plate, because the weight of the head must be counterpoised if the bed-plate be so far tilted as to afford convenient accessibility to the underlying mechanism, and a spring-catch involves manipulation for releasing it, which is obviated by the use of the hinged links, as shown, which so counterpoise the weight of the machine-head that the bed-plate is inclined slightly forward for presenting the underlying mechanism in the most convenient and accessible position.

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

1. The combination, with the serrated feed-

graduating lever, of the rotative cam provided with a serrated edge for contact with the serrated edge of said lever, substantially as described.

2. The combination, with the thumb-piece and the rotative feed-regulating cam, of a pointer on the thumb-piece and a gage-scale surrounding the thumb-piece, and having a series of concentric annular marks indicating the number of stitches to the inch and the number of needles and of thread suitable for use with each variation in the feed adjustment, substantially as described.

DEXTER W. GOODELL.

Witnesses:

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SIDNEY L. CLARK.