

(No Model.)

2 Sheets—Sheet 1.

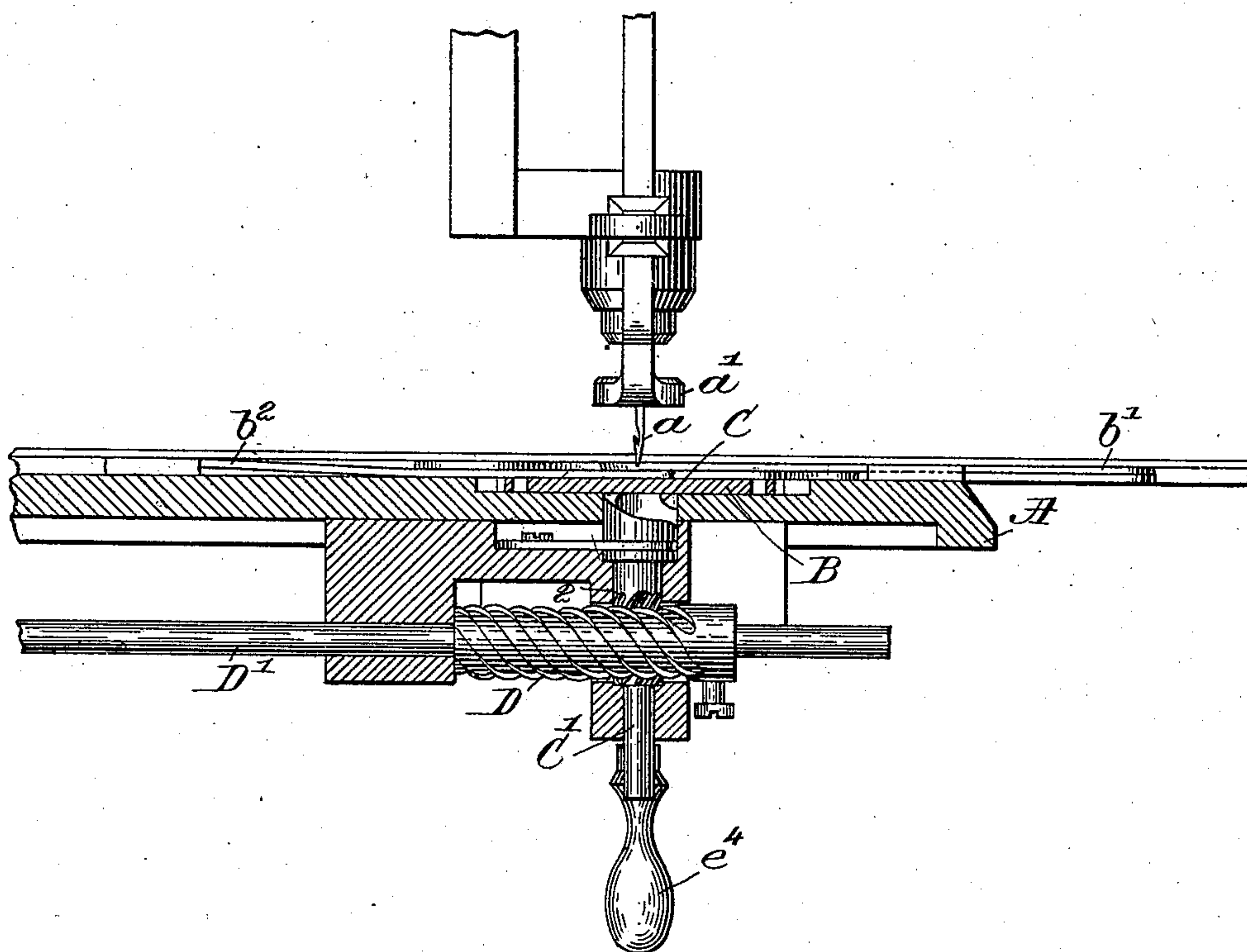
A. H. KINDER.

THREAD CUTTING MECHANISM FOR SEWING MACHINES.

No. 575,841.

Patented Jan. 26, 1897.

Fig:1.



Witnesses.

Fred S. Gurnea.

Thomas J. Drummond.

Inventor:

Arthur H. Kinder

by Wesley Gregory.
attys.

(No Model.)

2 Sheets—Sheet 2.

A. H. KINDER.

THREAD CUTTING MECHANISM FOR SEWING MACHINES.

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Fig. 2.

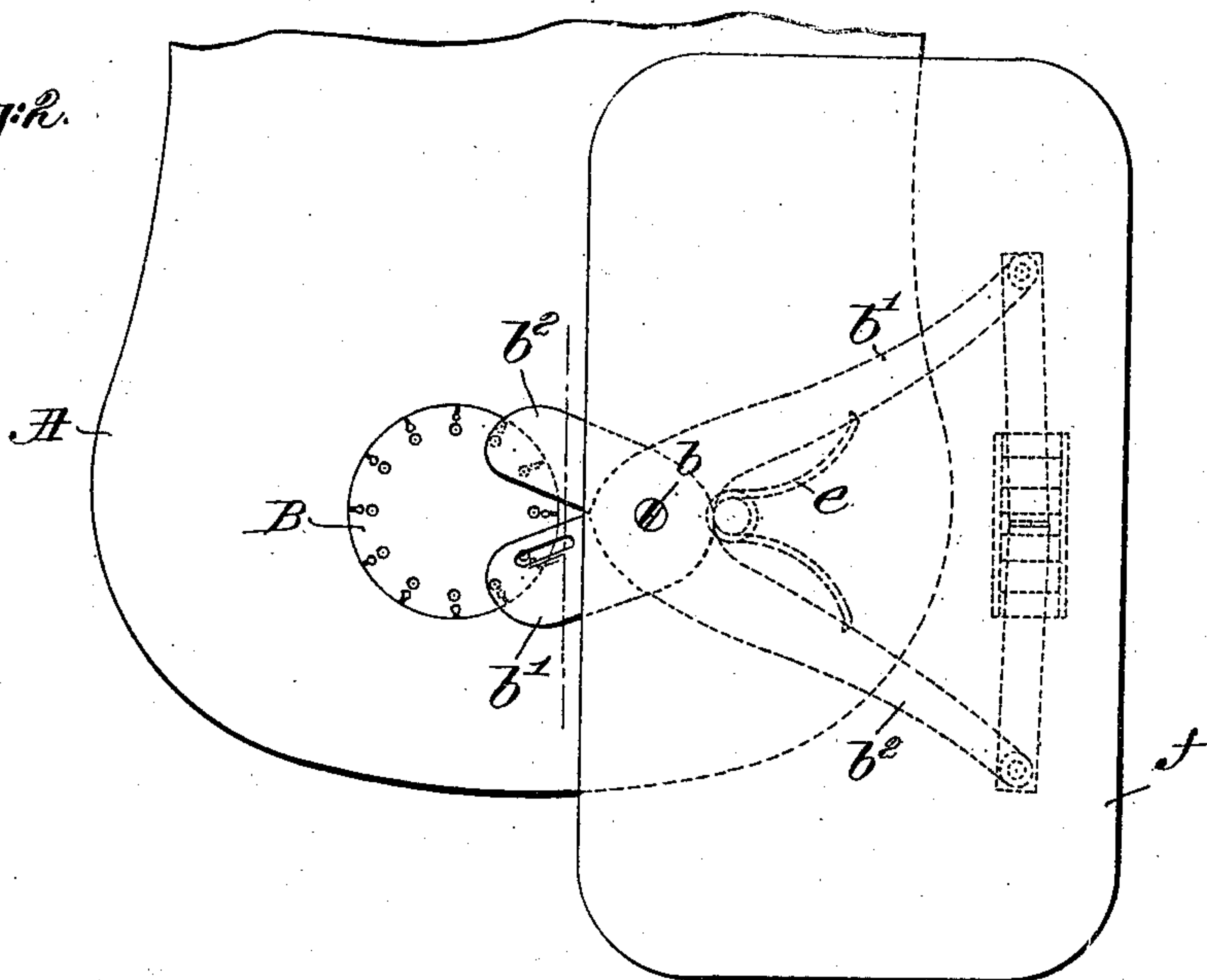


Fig. 3.

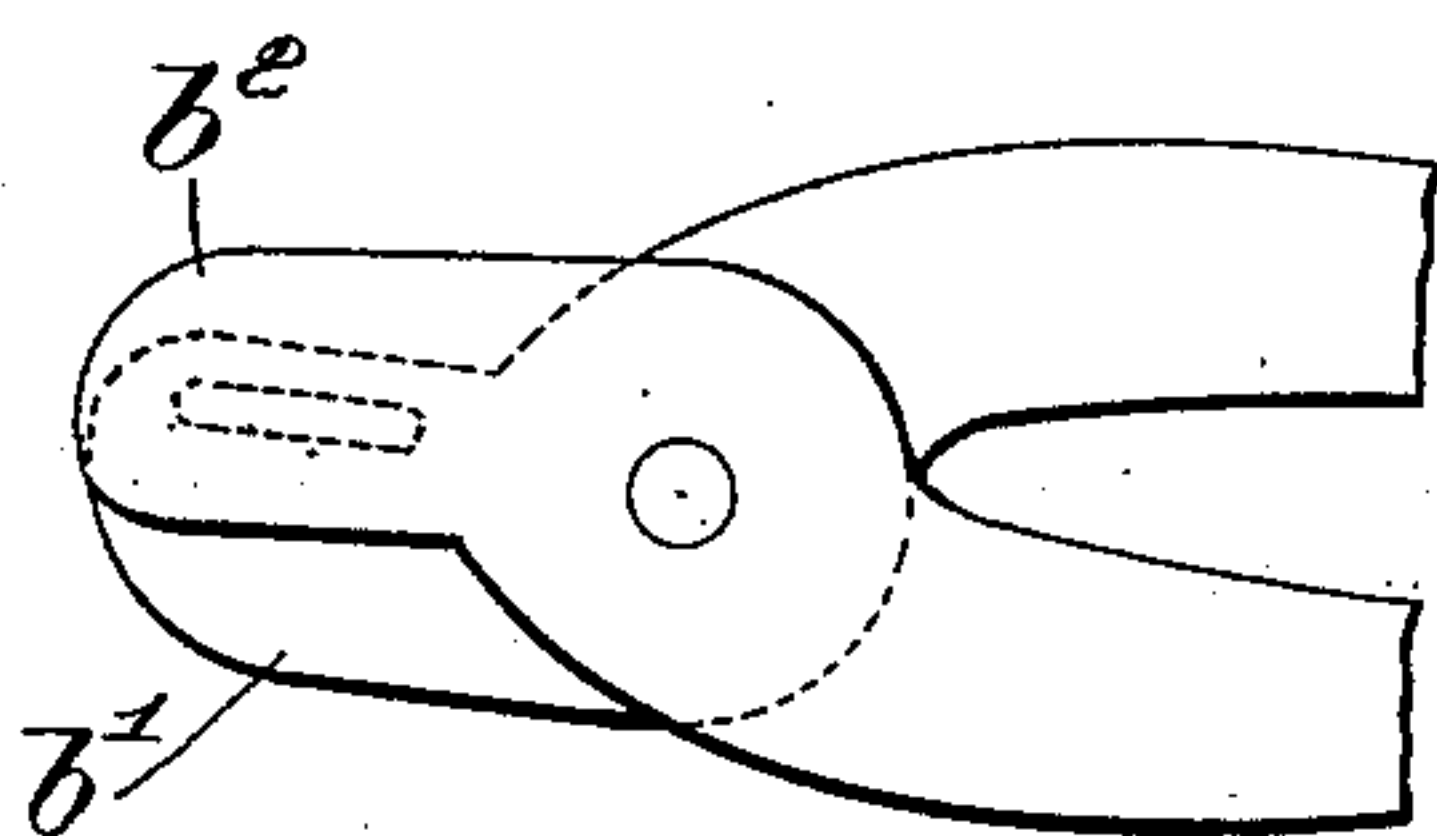


Fig. 5.

Fig. 4.

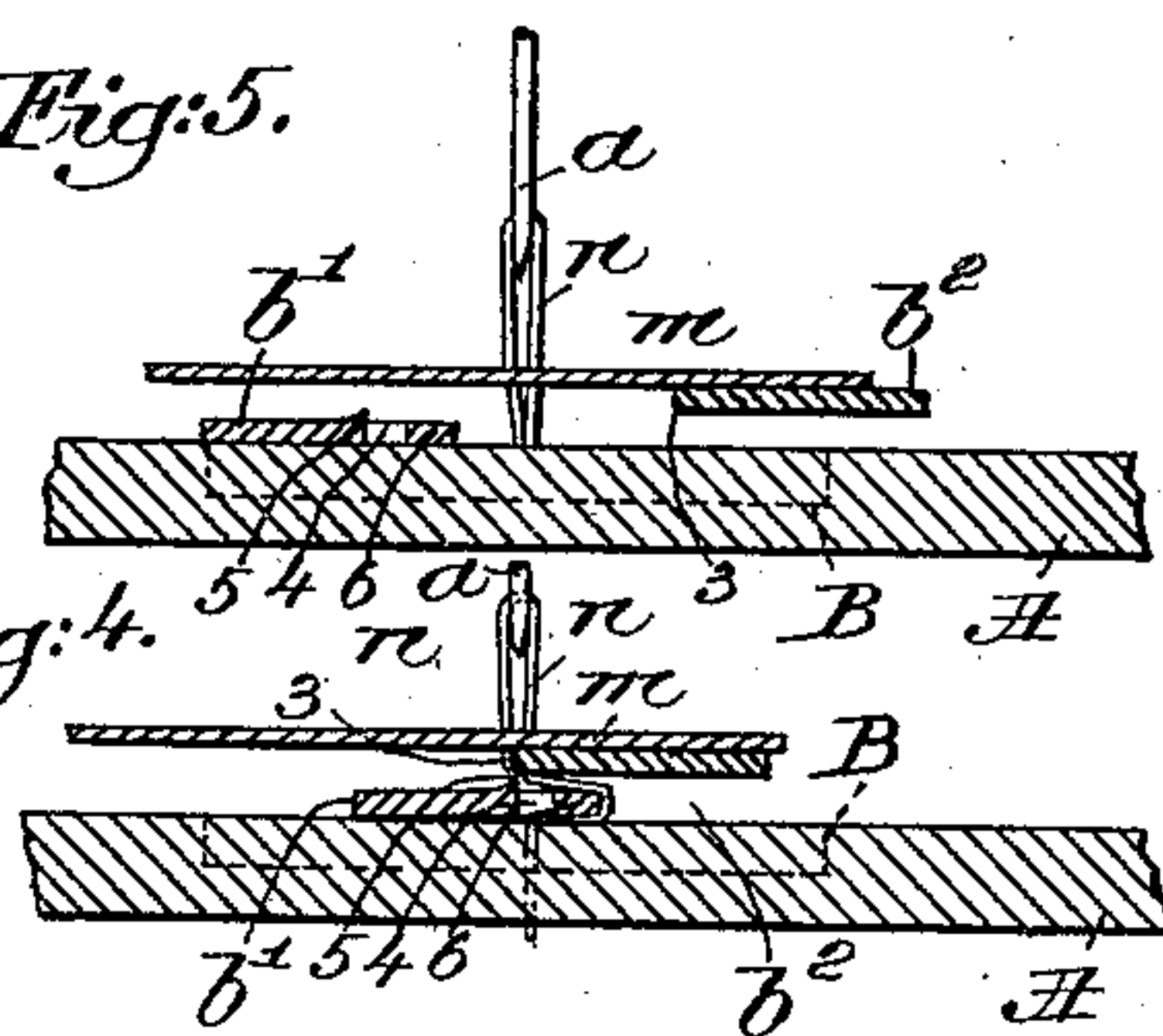
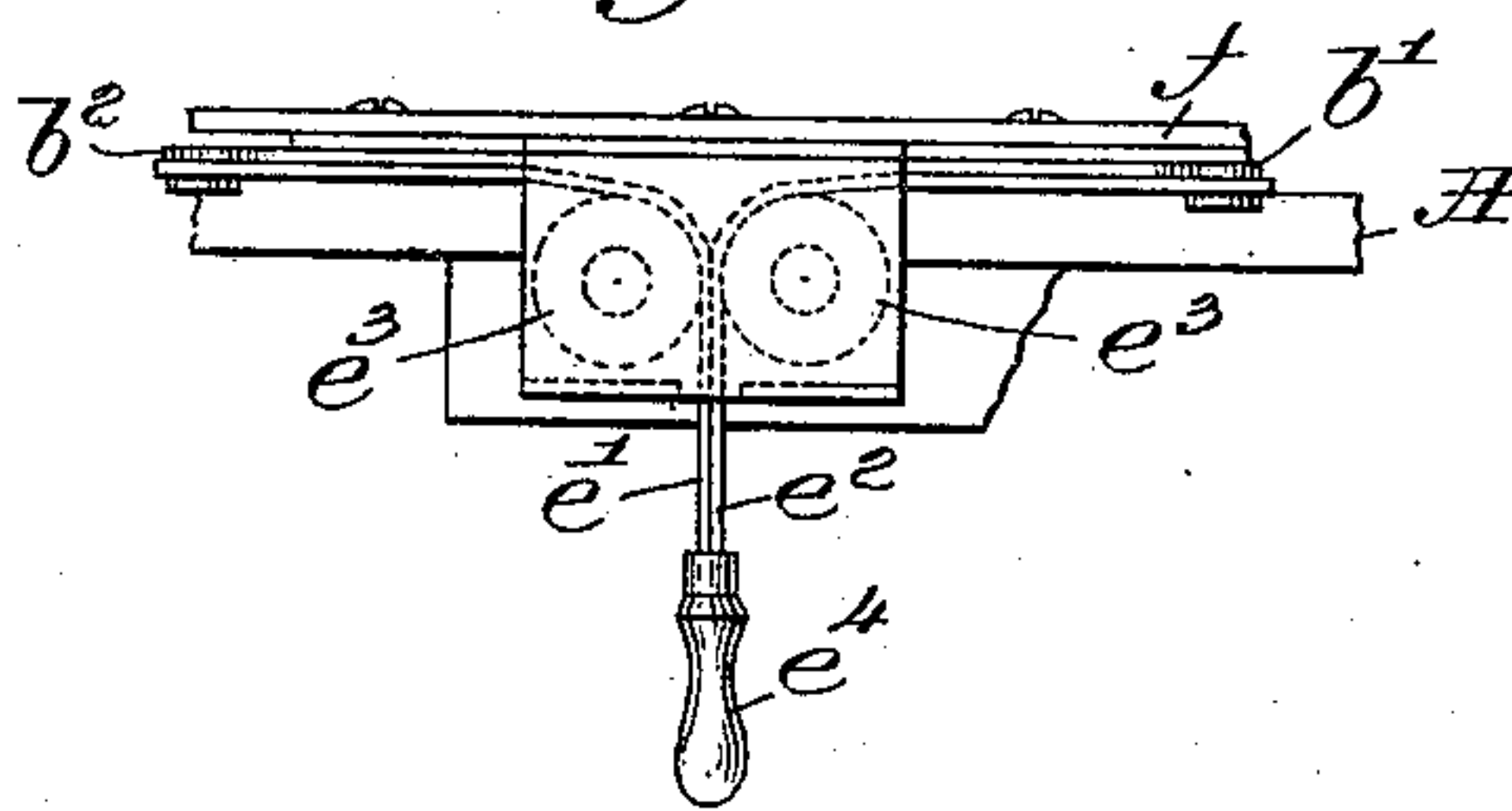


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

ARTHUR H. KINDER, OF BOSTON, MASSACHUSETTS.

THREAD-CUTTING MECHANISM FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 575,841, dated January 26, 1897.

Application filed August 8, 1896. Serial No. 602,169. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR H. KINDER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in
5 Thread-Cutting Mechanism for Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

10 This invention has for its object the production of an improved thread-cutting mechanism for use in sewing-machines, the same being so devised as to pull off and leave an end, my improved device being especially applicable for use in connection with a sewing-machine using a hooked or barbed needle and adapted to make a chain-stitch.

15 In my machine the cutter first acts to bend the thread aside, thereby measuring off a quantity of it, and then the thread is cut, leaving an end of sufficient length above the needle-plate, so that the said needle may always find thread when it descends through the material to again resume sewing.

20 Figure 1, in section and elevation, shows a sufficient portion of a sewing-machine of the Bonnaz type with my improvements added. Fig. 2 shows part of the work-support with my cutting mechanism mounted thereon with its jaws open. Fig. 3 shows the front end of the jaws closed on the thread. Fig. 4 shows the jaws in section in the line x , the needle-plate, and part of the needle, looking to the left in Fig. 3. Fig. 5 shows them open, with
35 the hooked needle holding a loop of thread to be cut off, and the needle-plate; and Fig. 6 is a detail showing the actuating means for the blades of the cutter.

40 The work-support A, the circular needle-plate B, the looper C on the upper end of the hollow shaft C', having worm-teeth 2 and engaged by the teeth of a worm-gear D on a shaft D', the hooked or barbed needle a , and the presser-foot a' are and may be all as common in United States Patent No. 83,910, dated November 10, 1868.

50 Upon the work-support A, at one side of the usual needle-plate B, I have pivoted at b two shear-blades b' b^2 , the acting end of the lower blade having its edge 6 thinned, rounded, or shaped to let the sharp corner 3 of the blade b^2 pass it and not cut the thread held

by the hook of the needle a , the said thread being connected to the cloth or material at the last stitch and being extended from the
55 needle through the hollow shaft C' to a suitable spool, the one used to supply the said needle with thread. The under blade b' also has, as shown, a slot 4 in from its edge, and back of said slot it has a sharp edge 5, which
60 as it is met by the edge or corner 3 referred to cuts the thread. It will be seen that the blade b' has thus a wiping edge 6 and a cutting edge 5 located behind it.

65 As the blades close on the loop of thread extended from the needle to the cloth the blades first bend the loop over the corner 6, carrying it doubled over the top of the blade b' and the slot therein until the corner 3 meets the edge 5, when the thread is severed.
70 Cutting the thread in this way leaves a sufficient portion of thread n above the needle-plate and between it and the under side of the cloth to always furnish to the descending
75 needle enough thread to be engaged unerringly at the first rise of the hooked needle to form a proper loop.

80 The blades shown are kept normally open by means of a suitable spring e , and to close the blades and sever the thread I have attached to them an actuator, (shown as two straps e' e^2 , extended over rolls e^3 and having an attached handpiece e^4 , which may be grasped by hand.)

85 To obviate the friction of the handles of the blades against the cloth, I have covered them with a supplemental work-support f . The actuator may, however, be variously modified without departing from my invention.
90

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

95 1. The combination with a hooked or barbed needle, and a work-support, having a needle-plate, of a thread-cutter composed of two blades, one of which has a wiping edge over which the thread is bent and a cutting edge behind it to cut the thread at a distance from the wiping edge, substantially as described.
100

2. The blade b^2 , having a cutting edge 3, combined with the blade b' having a wiping edge, and back of it a slot and a cutting edge to operate, substantially as described.

3. The combination with a hooked or barbed
needle, and a work-support, of a thread-cut-
ter composed of two blades, one of which has
a wiping edge over which the thread is bent,
5 and a cutting edge behind it to cut the thread
at a distance from the wiping edge, and a sup-
plemental work-support to shield part of said
thread-cutter, substantially as described.

In testimony whereof I have signed my
name to this specification in the presence of 10
two subscribing witnesses.

ARTHUR H. KINDER.

Witnesses:

GEO. W. GREGORY,
MARGARET A. DUNN.