

(No Model.)

W. P. BARKER.  
Sewing Machine Clutch.

No. 241,180.

Patented May 10, 1881.

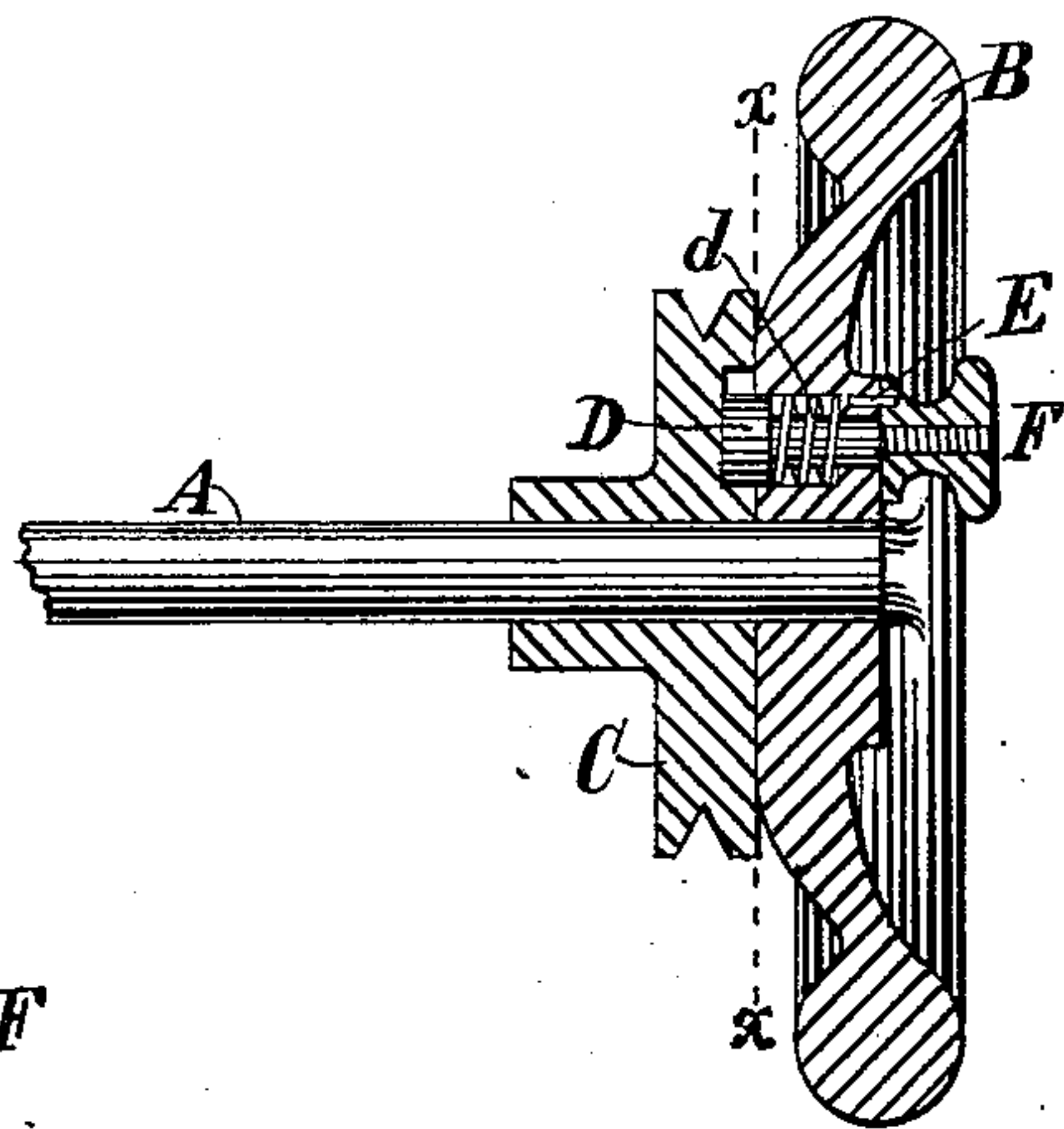


Fig. 1.

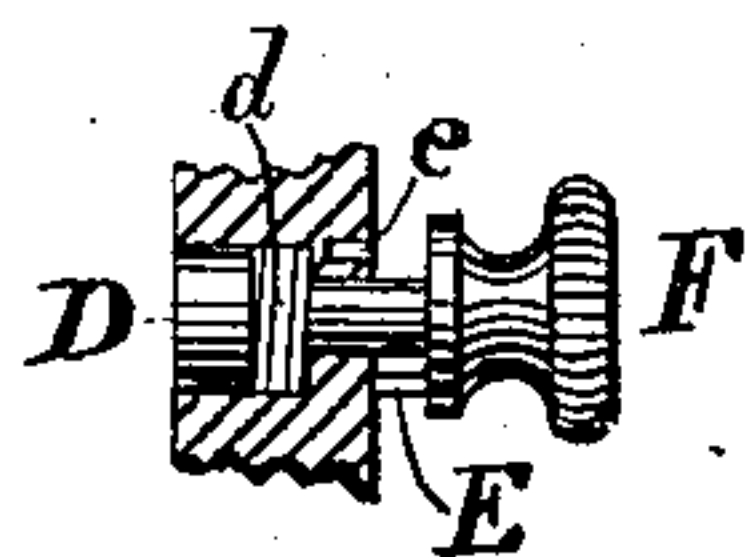


Fig. 4.

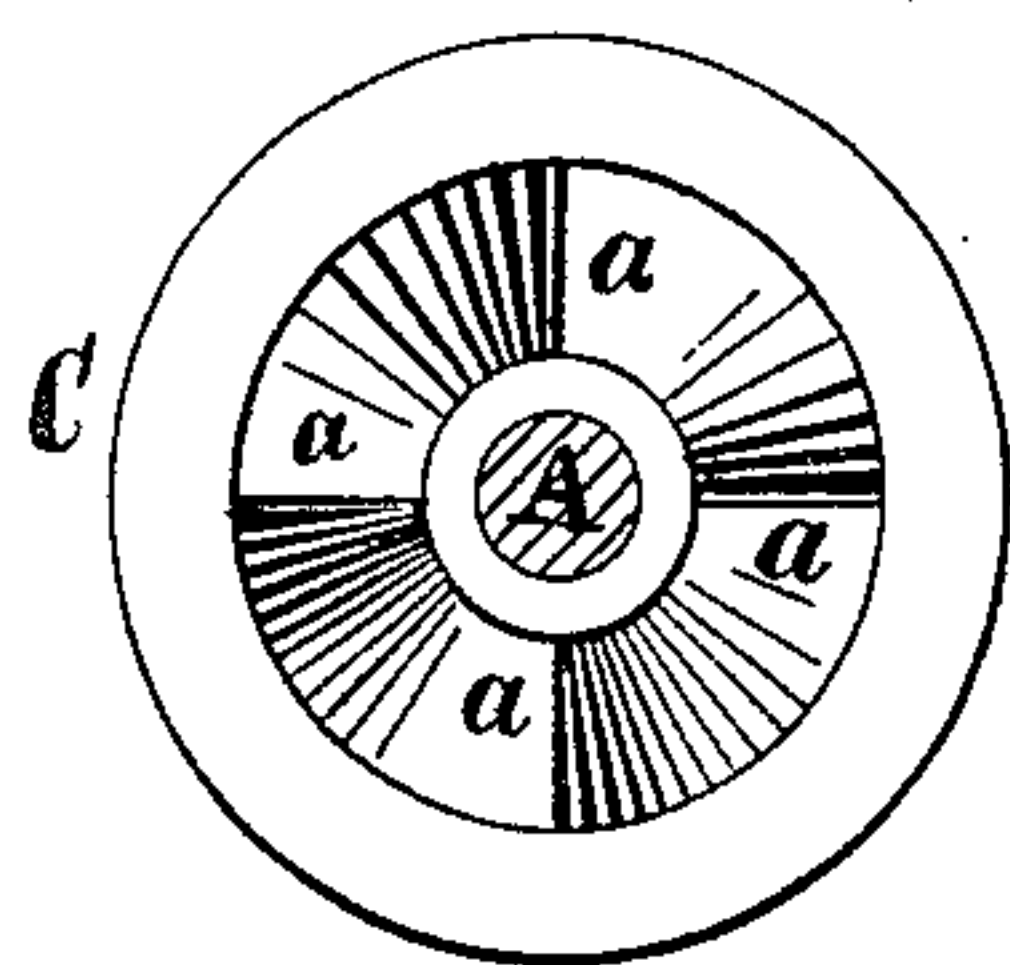


Fig. 3.

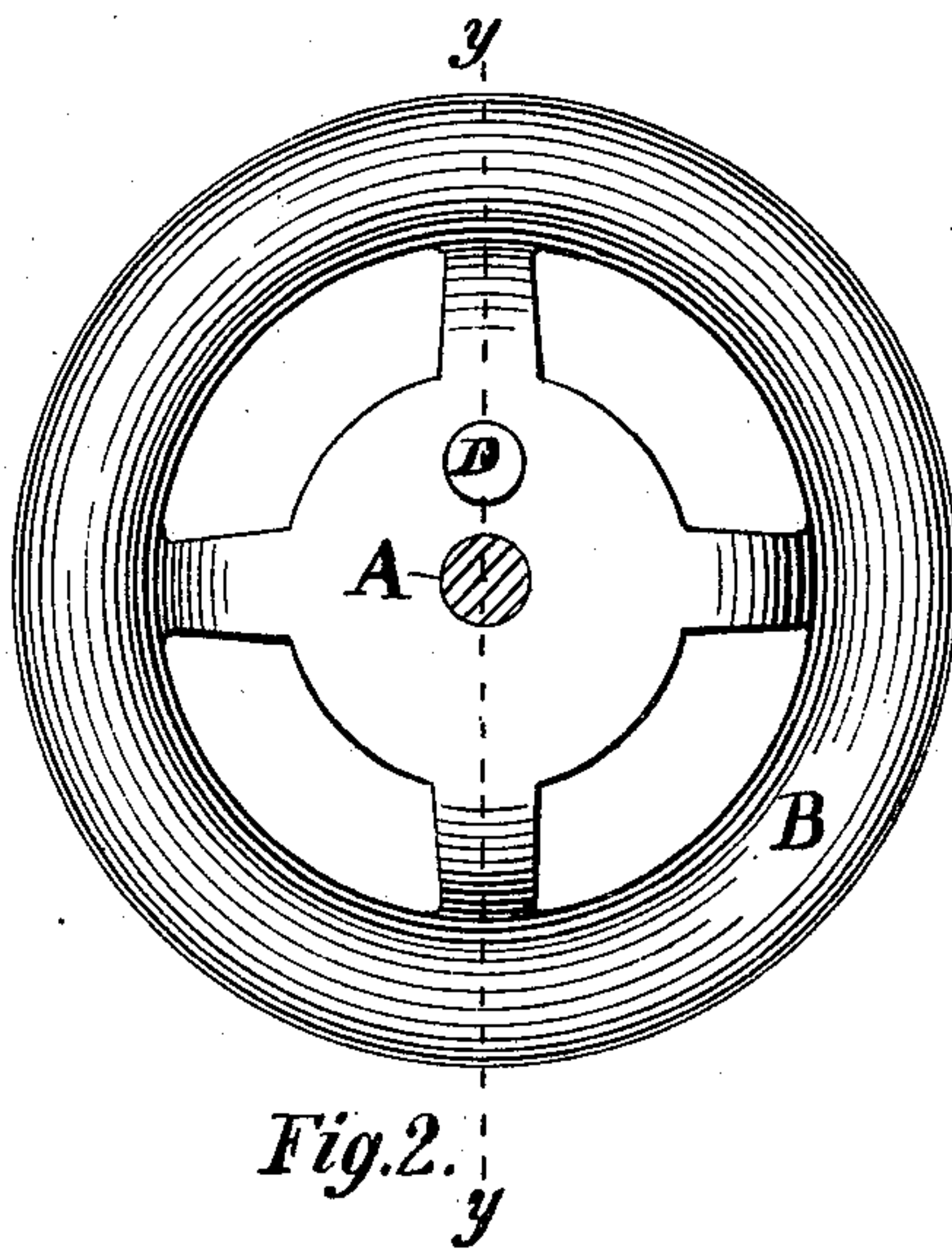


Fig. 2.

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## SEWING-MACHINE CLUTCH.

SPECIFICATION forming part of Letters Patent No. 241,180, dated May 10, 1881.

Application filed March 7, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WM. P. BARKER, a citizen of the United States, residing at Orange, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machine Clutches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, letters of reference being the same for the same parts in different views.

Figure 1 shows a vertical cross-section of the entire device as applied to the driven shaft of a sewing-machine. Fig. 2 shows the inner side of hand-wheel; Fig. 3, the side of driven pulley, having upon its side the radial ratchet. Fig. 4 shows the clutch-pin drawn out.

My invention relates to that class of devices designed to prevent the accidental backward motion of a sewing-machine, and also to permit of winding bobbins without running machine.

I have observed that devices for this purpose as at present employed are faulty, from the fact that in some cases the hand-wheel being loose upon the shaft, the operator has no means of moving the machine backward for a part of a revolution, as is sometimes very desirable. In other cases a special movement is necessary to detach the clutch-pulley, thus losing the advantage of an automatic clutch.

To obviate these objections I have constructed a device which consists of a hand-wheel rigidly attached to the shaft at all times, and a belt (or driving) pulley is so connected that its forward motion will be imparted to the hand-wheel and shaft, while if accidentally started backward it will move freely upon the shaft without moving machine.

In describing my invention, I refer to the drawings making a part of this specification.

In Fig. 1 A is the shaft and B a hand-wheel permanently attached to the same. This hand-wheel has bored into its convex side a cylindrical aperture just large enough to admit freely the enlarged end of pin D. The smaller

part of said pin passes through the hand-wheel and terminates in the knob F. At the back of said knob is a small projection, E, which, when the clutch is in use, fits into the hole shown at *e*, Fig. 4, in which position the pin D projects beyond the face of hand-wheel and engages with the radial ratchet-teeth *a a a a*, against which it is held by the spring *d*, thus causing the forward motion of belt-pulley *c* to be communicated to hand-wheel; but should the belt-pulley be accidentally started backward, the spring *d* will admit of the pin D passing over the inclined teeth *a a a a*, thus preventing the hand-wheel from receiving any part of such backward motion; and should it be desirable for the purpose of winding bobbins to entirely disengage the two parts, the knob F may be drawn back until the pin E shall come outside the surface of hand-wheel hub, when a partial revolution of the said knob will cause the pin E to rest upon the surface of the wheel, thus preventing the contact of pin D with the ratchet.

I am aware that devices for this purpose have been made having a loosely-revolving wheel; but

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the driven shaft of a sewing-machine having permanently affixed thereto a solid hand-wheel, of a separate and distinct belt-pulley, so arranged as to revolve loosely upon the said shaft in one direction, and to become automatically engaged with the said hand-wheel when revolved in the opposite direction, substantially as shown and described.

2. The combination of shaft A, wheel B, pulley C, having the inclined radial teeth *a a a a*, pin D, and spring *d*, all arranged substantially as shown.

3. The spring-bolt D, in combination with the knob F, having the projection E, as and for the purpose described.

WM. P. BARKER.

Witnesses:

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