

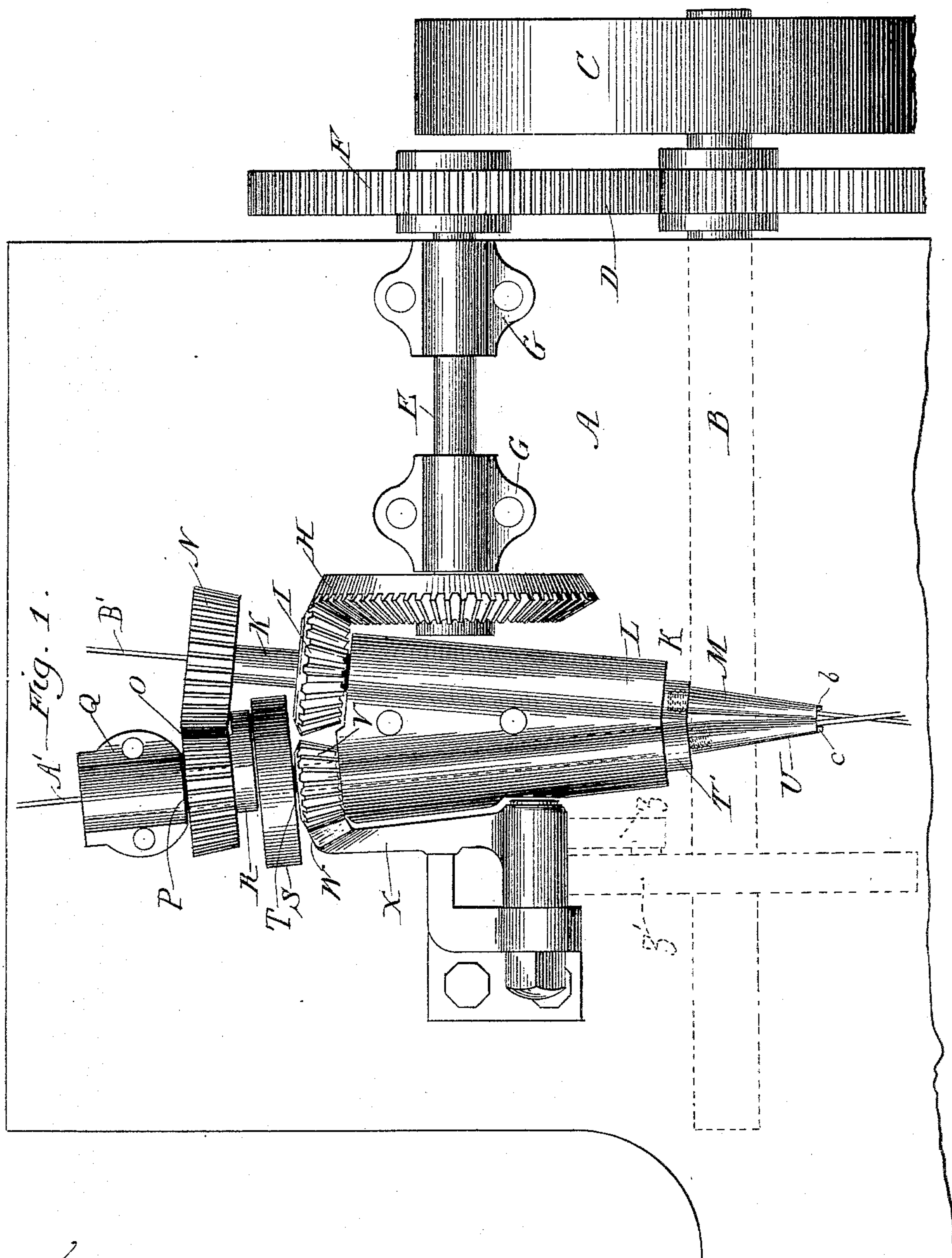
(No Model.)

2 Sheets—Sheet 1.

C. H. BAKER.
BARB WIRE MACHINE.

No. 323,490.

Patented Aug. 4, 1885.



Witnesses:
Frank J. Blanchard
Louis Nolting.

Inventor:
Charles H. Baker
By Wm H Lotz
Attorney

(No Model.)

2 Sheets—Sheet 2.

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BARB WIRE MACHINE.

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Fig. 2.

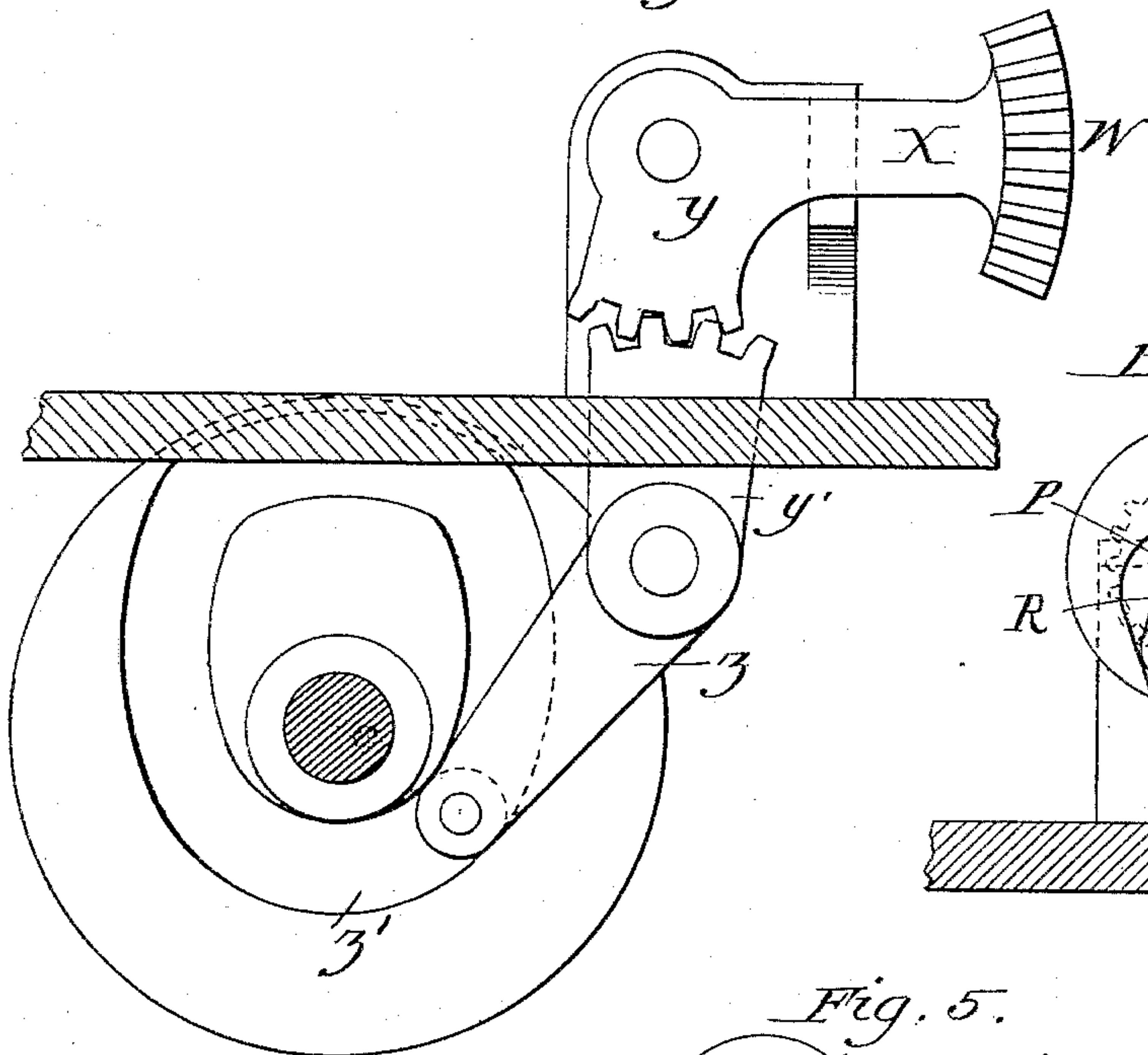


Fig. 3.

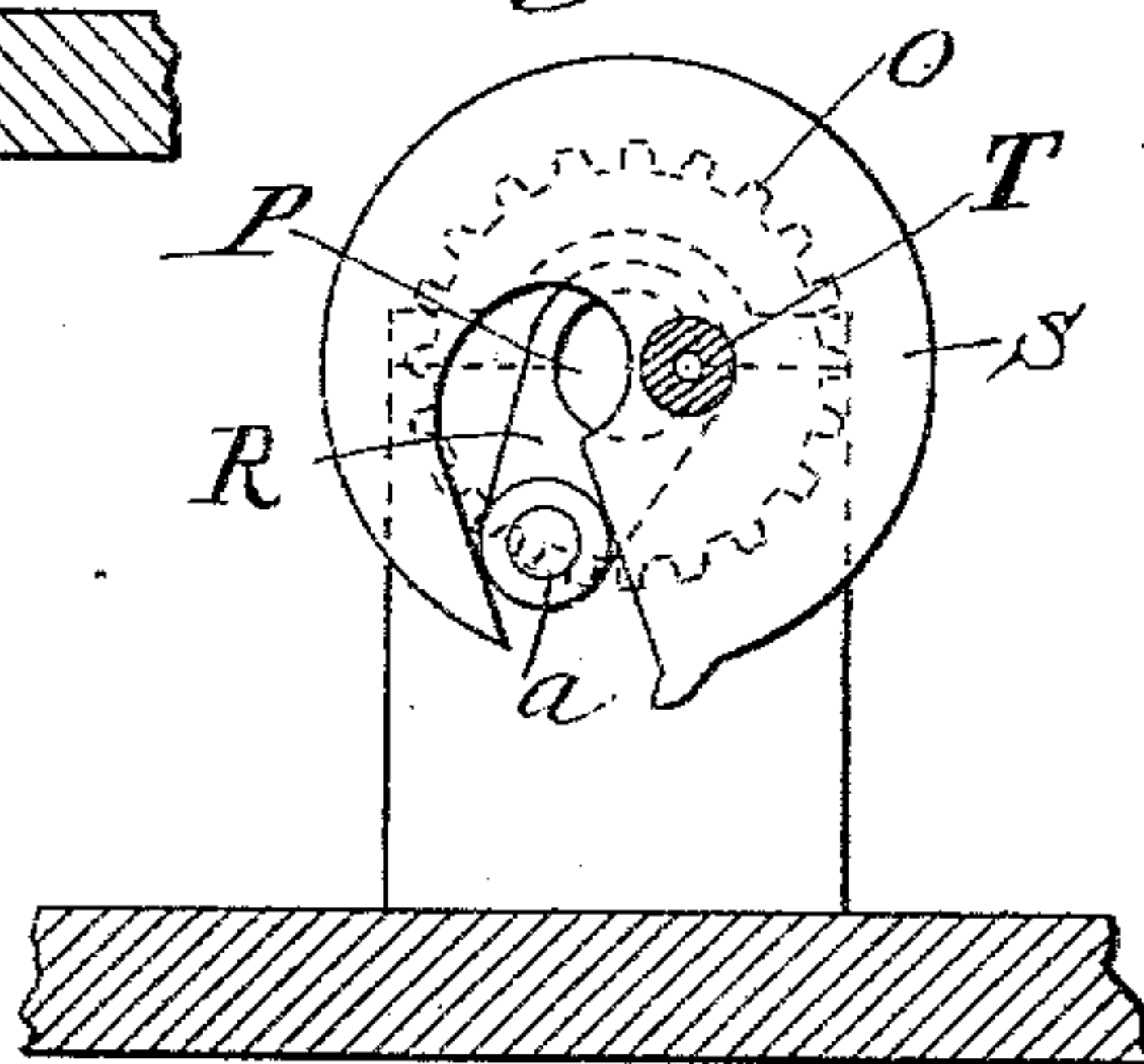


Fig. 4.

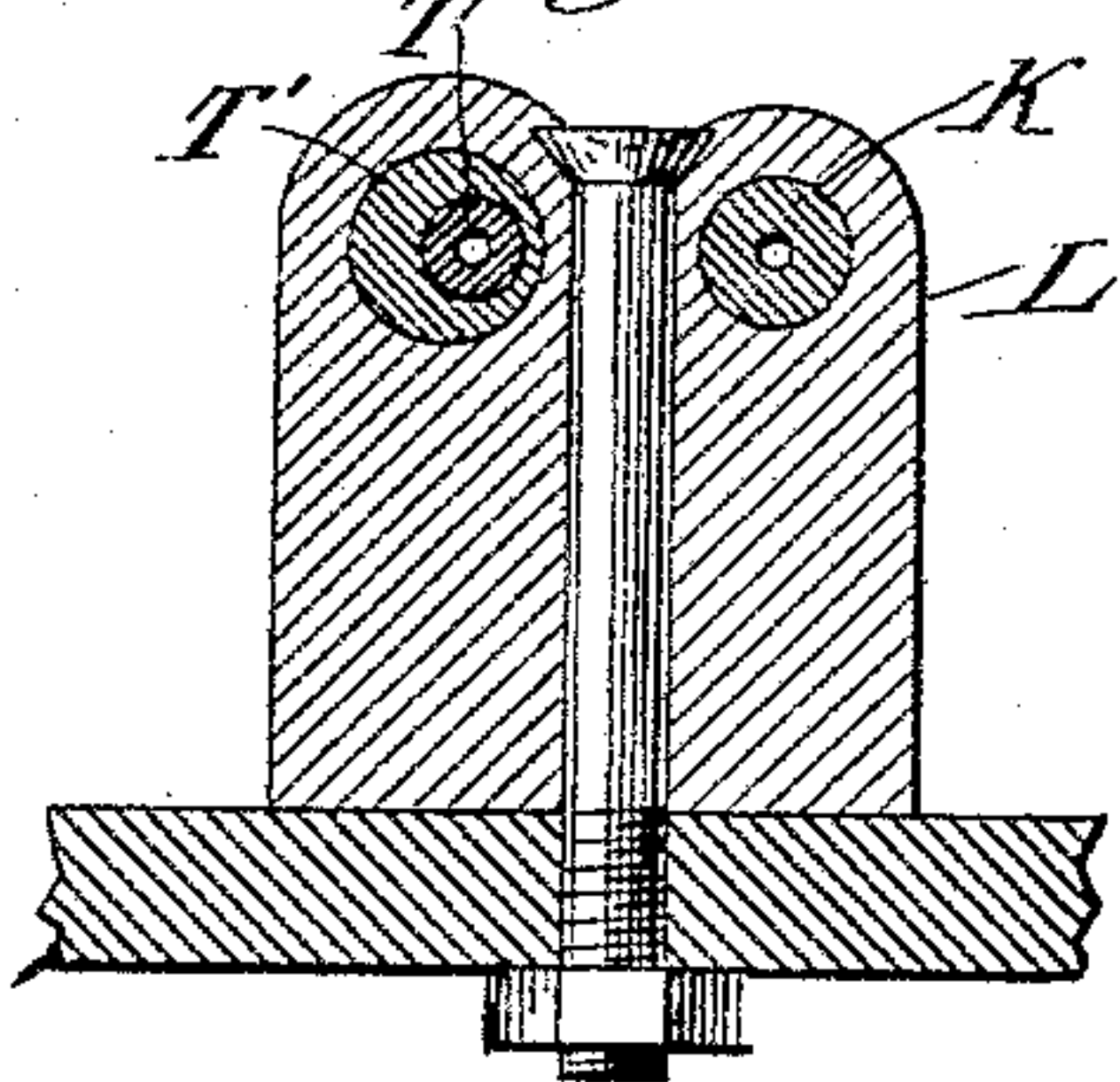


Fig. 5.

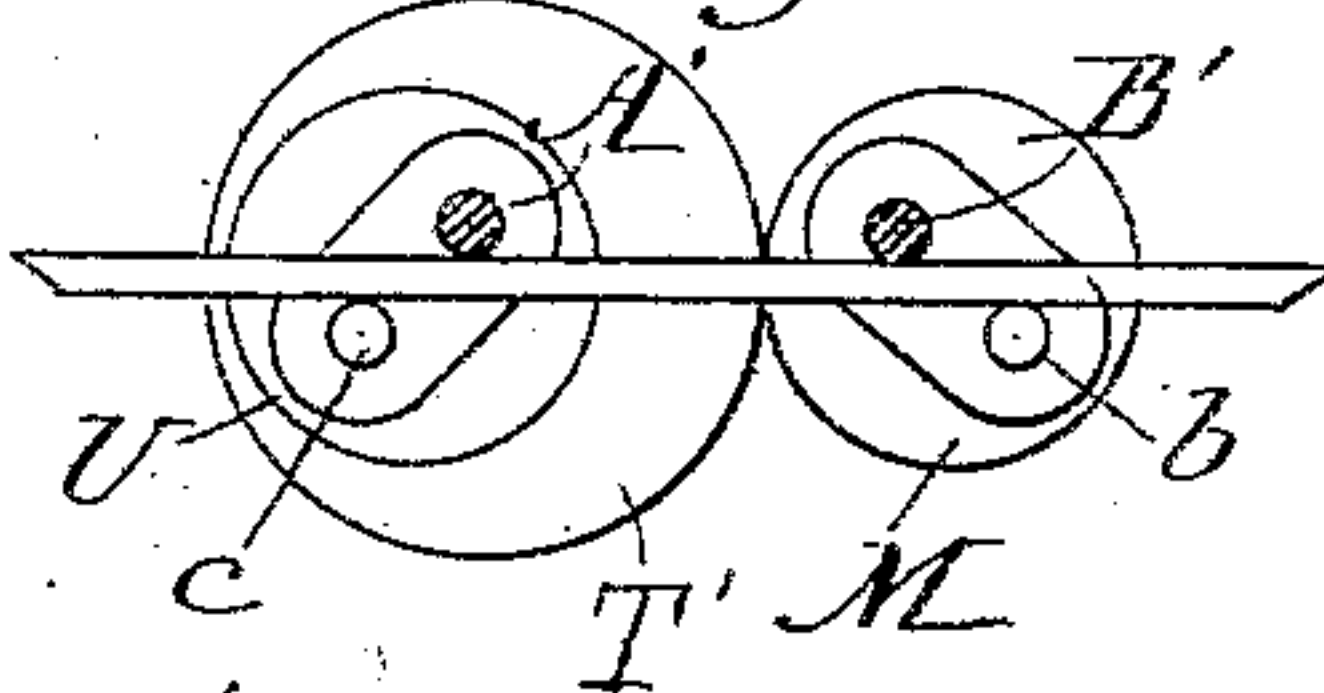


Fig. 6.

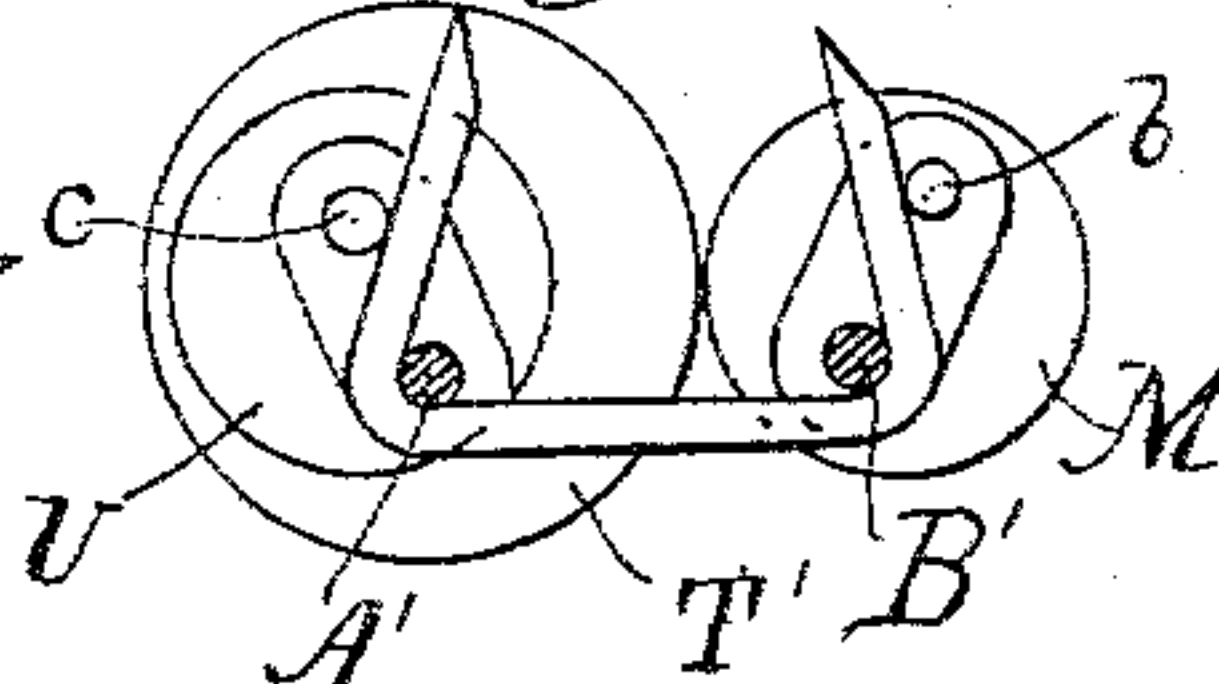


Fig. 7.

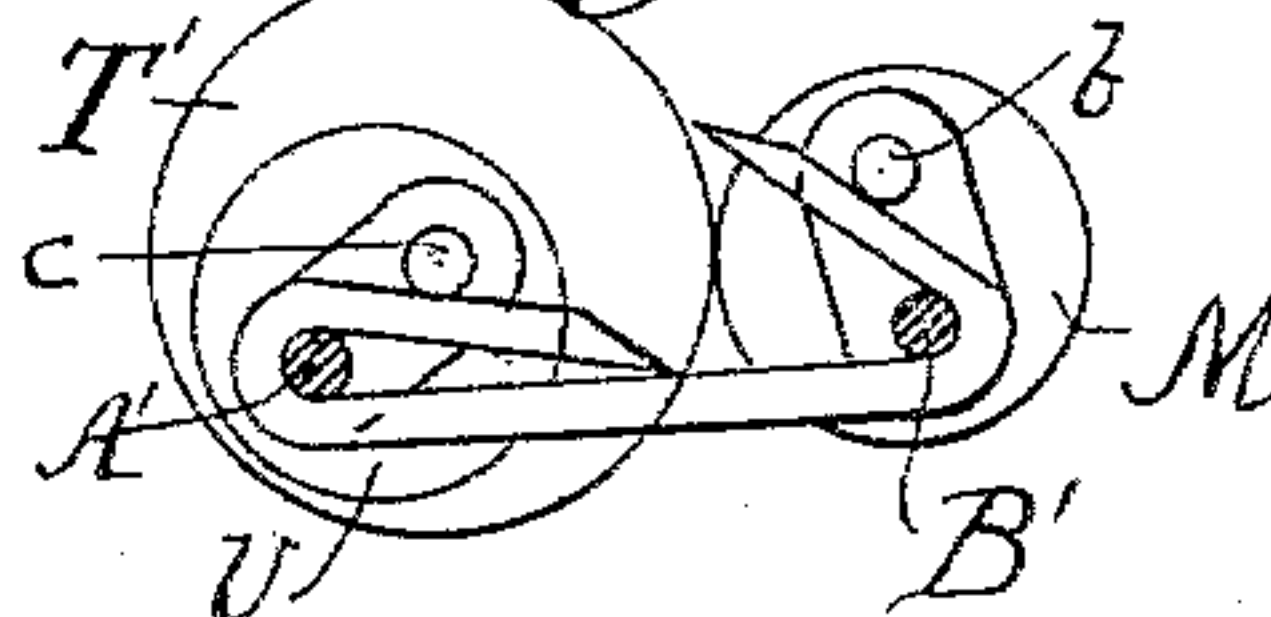
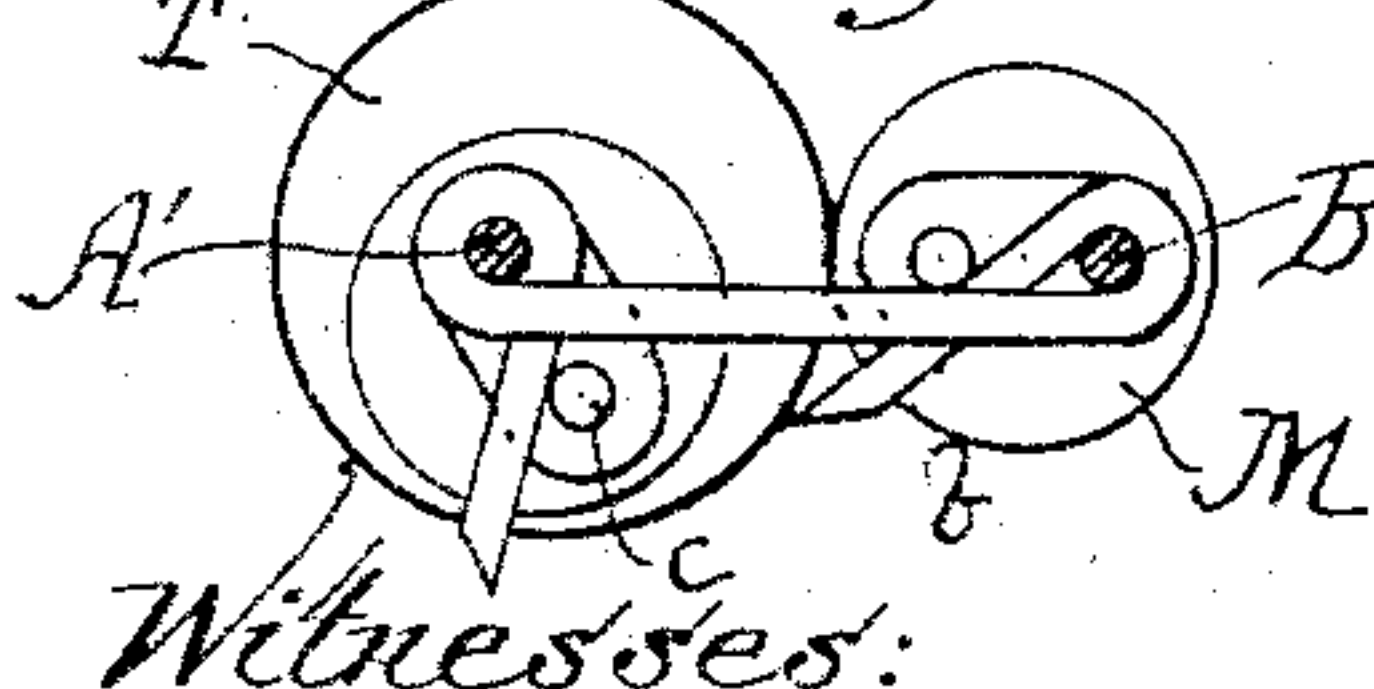


Fig. 8.



Witnesses:

Frank J. Blanchard
Louie Walting

Fig. 9.

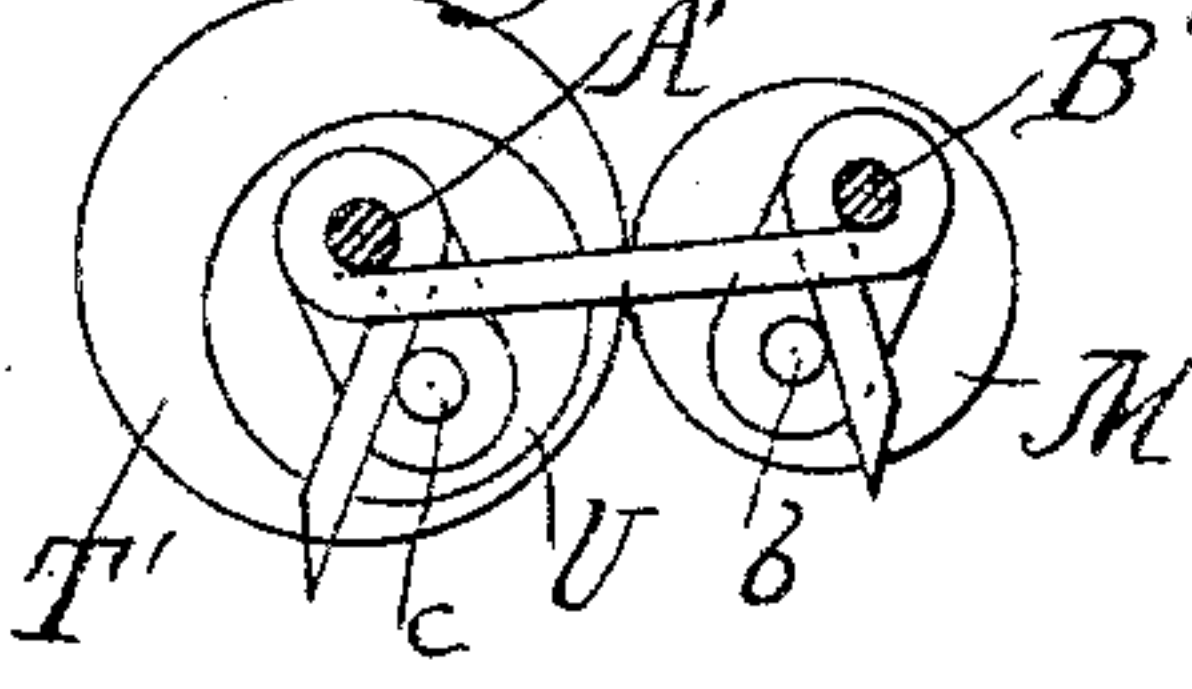
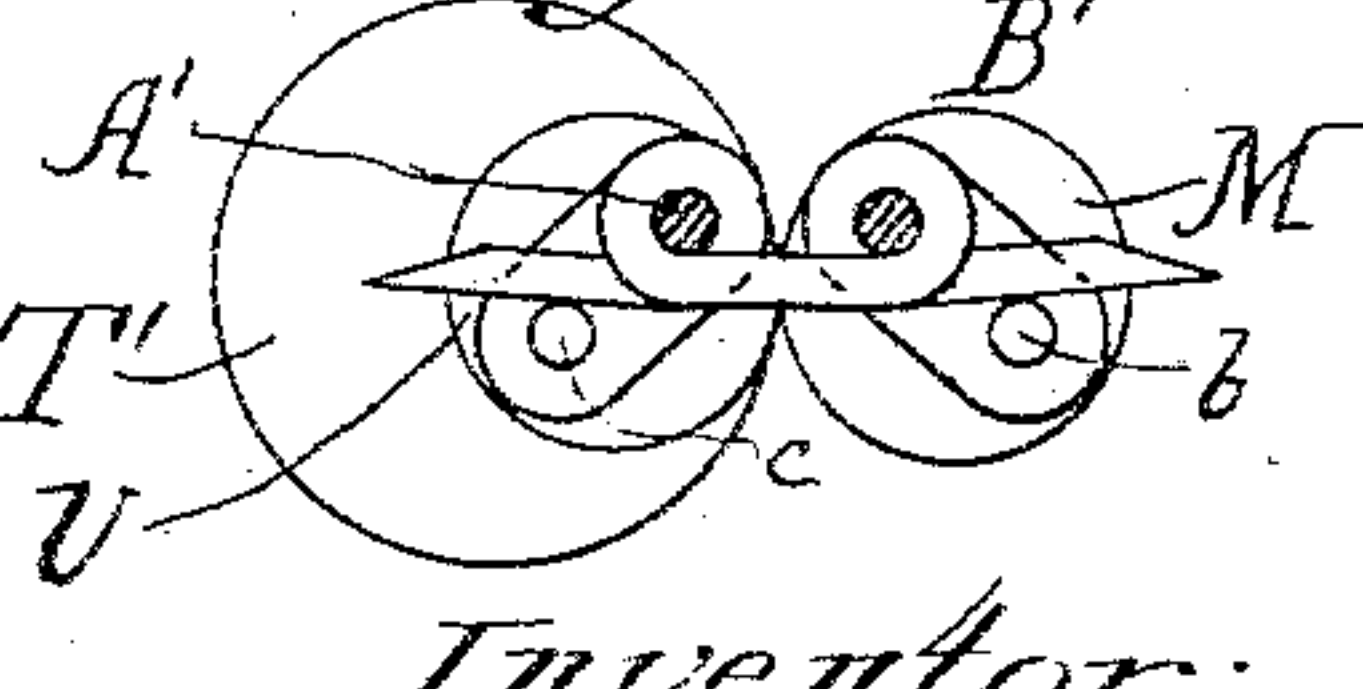


Fig. 10.



Inventor:

Charles H. Baker
By Win H. Lotz
Attorney

UNITED STATES PATENT OFFICE.

CHARLES H. BAKER, OF KNOXVILLE, IOWA, ASSIGNOR OF TWO-THIRDS TO FRANCIS L. BESTOR, OF SAME PLACE, AND THOMAS C. CUNNINGHAM, OF SIGOURNEY, IOWA.

BARB-WIRE MACHINE.

SPECIFICATION forming part of Letters Patent No. 323,490, dated August 4, 1885.

Application filed May 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BAKER, a citizen of the United States of America, residing at Knoxville, in the county of Marion and State of Iowa, have invented certain new and useful Improvements in Barb-Wire Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved machine for attaching barbs to fence-wires, its object being to obtain a machine which will do its work with celerity and certainty.

To the accomplishment of the above, the invention consists of the novel devices and combinations of devices, as will be described and claimed.

Reference will be made to the accompanying drawings, in which Figure 1 is a plan view; Figs. 2, 3, and 4, details; and Figs. 5, 6, 7, 8, 9, and 10, views showing the different positions of the barb and fence wires during the operation.

Like letters refer to like parts in each view.

A represents the bed-plate of the machine, and B the main driving-shaft, which has suitable bearings in the frame-work thereof. A pulley, C, and cog-wheel D are keyed to shaft T, the pulley for imparting motion to said shaft and the cog, and the cog for imparting motion to a shaft, E, through the medium of a cog, F, keyed thereto, said shaft E being mounted in suitable bearings, G, and having keyed to its inner end a bevel, H, which in its revolution meshes with a bevel, I, keyed to a shaft, K. This shaft K is suitably mounted in a support, L, formed upon bed-plate A, and protrudes a short distance beyond its support at its front end, and to the front end of said shaft there is secured a nozzle, M, as shown in Fig. 1. To the rear end of shaft K there is keyed a cog, N, which in its revolution meshes with a cog, O, keyed to a short shaft, P, suitably mounted in bearing Q, and to the front end of which an eccentric wheel, R, is keyed. The pin *a* of eccentric R enters and moves in a cam-wheel, S, keyed to a shaft, T, which has bearings in a tube, T', mounted in support L, but which is so placed relatively to shaft K that the front end of the nozzle U,

which is secured to it, will occupy a position near to the nozzle of shaft K, so as to bring the wires close together, as will be described. Keyed to tube T', at the point shown in Fig. 1, is a bevel, V, with which a segmental gear, W, meshes. Gear W is formed upon one end of an arm, X, upon the opposite end of which a toothed cam, Y, is formed. Cam Y is driven through the medium of arms Y' and Z, and cam Z' from the main shaft and at suitable intervals partly revolves tube T', for the purpose hereinafter described. Upon the front end of nozzles M and U, respectively, there are formed pins *b c*, and each nozzle and the shaft to which it is secured is perforated its entire length for the passage therethrough of fence-wires A' B'.

The operation is as follows: The fence-wires are fed through shafts K and T, and the barb-wire fed below said wires and above wrapping-pins *b c*, as shown in Fig. 5. Motion is then imparted to the main driving-shaft, and through the connections described the shafts K and T are revolved. The revolution and speed of the two shafts are equal until the barb-wire is bent to the position shown in Fig. 6, when, because of the arrangement of cam S with the other parts, the shaft T begins to revolve at a greater speed and carries one point of the barb-wire farther around wire A' than does the pin of shaft K, as shown in Fig. 7. When this part of the barb-wire has been carried far enough to avoid all danger of the two ends contacting, the speed of shaft T is slackened and the shaft K gradually gains on it until the two ends of the barb-wire are wrapped around their respective wires equally, these stops being shown in Figs. 8 and 9. The revolution then continuing the barb is completely wrapped, as indicated in Fig. 10, and through the medium of segmental gear W and its connections with the main shaft and the tube T', in which shaft T is mounted, said tube is partly revolved and shaft T carried closer to shaft K to bring wires A' B' close together, as shown in Fig. 10.

What I claim is—

1. The combination of two tubes perforated longitudinally for the passage of fence-wires, means for revolving said tubes, wrapping-pins

formed thereon for wrapping the barb-wires, and mechanism constructed and arranged for varying the speed of one of said tubes, substantially as described and shown.

- 5 2. The combination of two tubes perforated longitudinally for the passage of fence-wires, wrapping-pins formed thereon for wrapping the barb-wires, mechanism for varying the speed of one of said tubes, and mechanism
10 for changing the position of said tube with respect to the remaining tubes, substantially as described and shown.

3. The combination, with shafts T K, having wrapping-pins *b* and *c*, and means for revolving them, shaft T being mounted eccentrically
15

in tube T', of bevel-gear V, mounted on said tube, segmental gear W, and means for operating said gear from the main shaft, substantially as described and shown.

4. The combination, with shaft T, having 20 wrapping-pin *c*, cam S, and eccentric R, of shaft K, having wrapping-pin *b*, and means for revolving the parts from the main shaft, as described and shown.

In testimony whereof I affix my signature 25 in presence of two witnesses.

CHARLES H. BAKER.

Witnesses:

H. J. BUDD,

S. P. AYRES.