

M. A. CULVER, W. A. JONES & M. C. BRIGGS.
Hoop-Lapping Machines.

No. 220,131.

Patented Sept. 30, 1879.

Fig: 1.

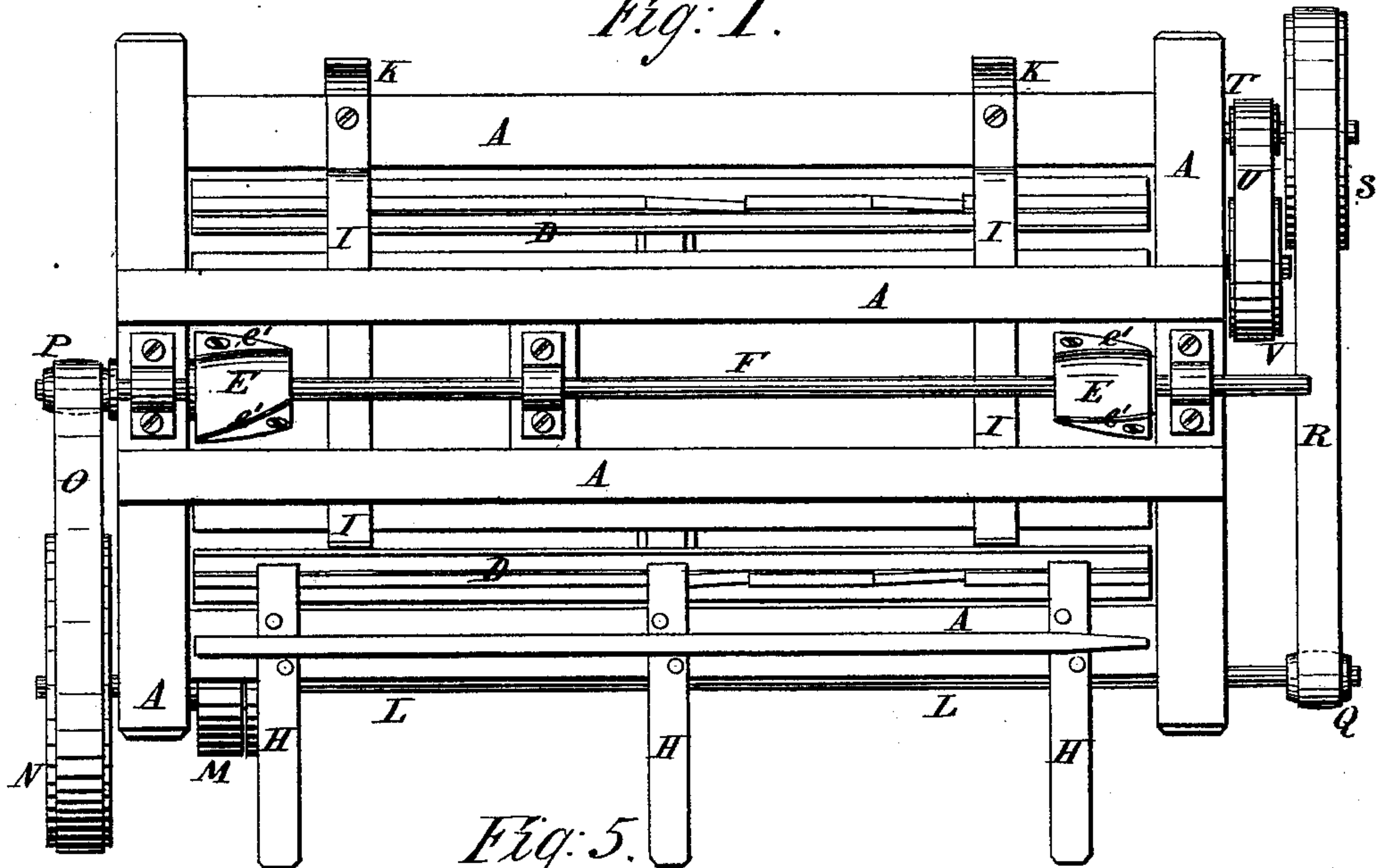


Fig: 5.



Fig: 2.

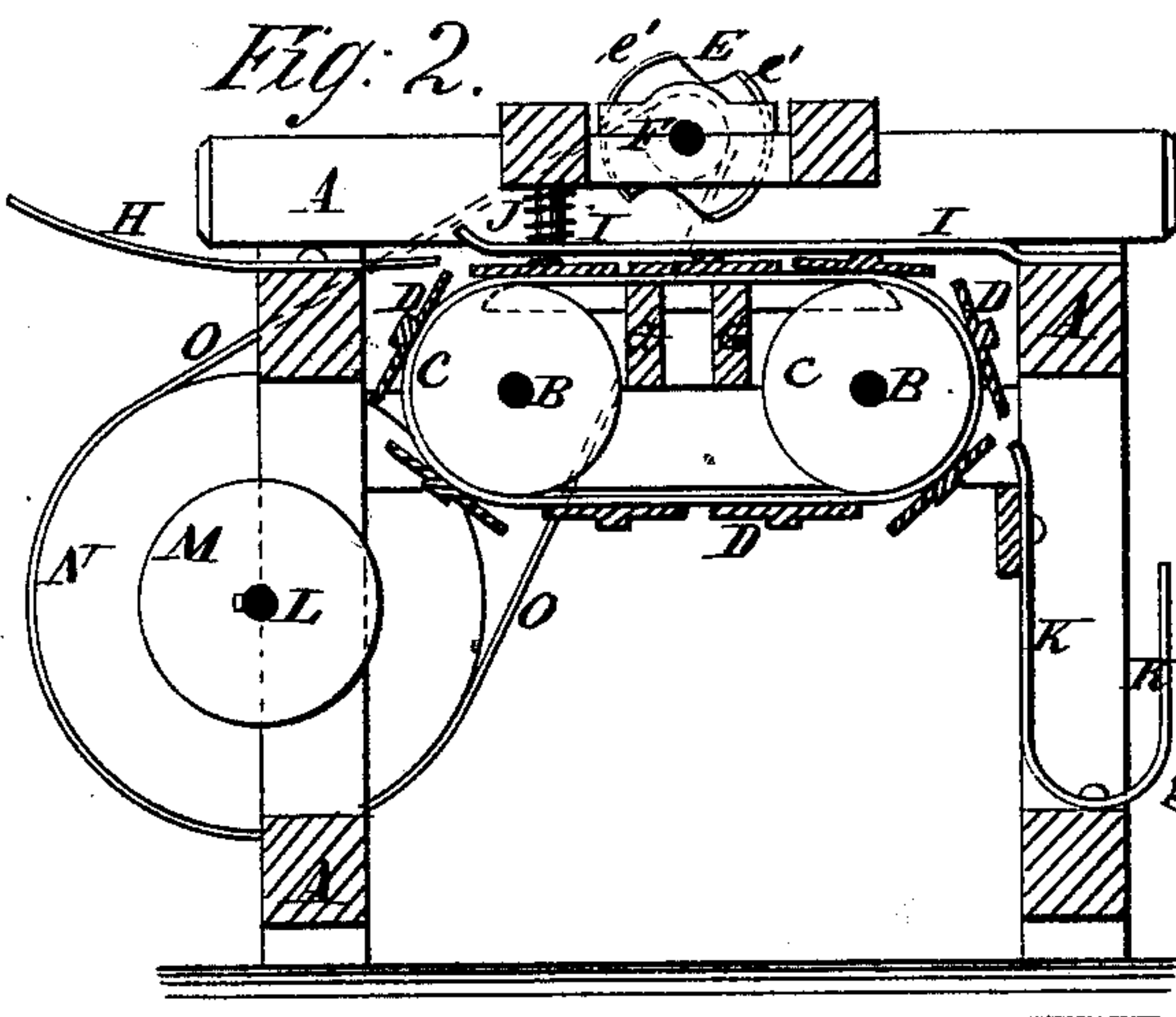


Fig: 3.

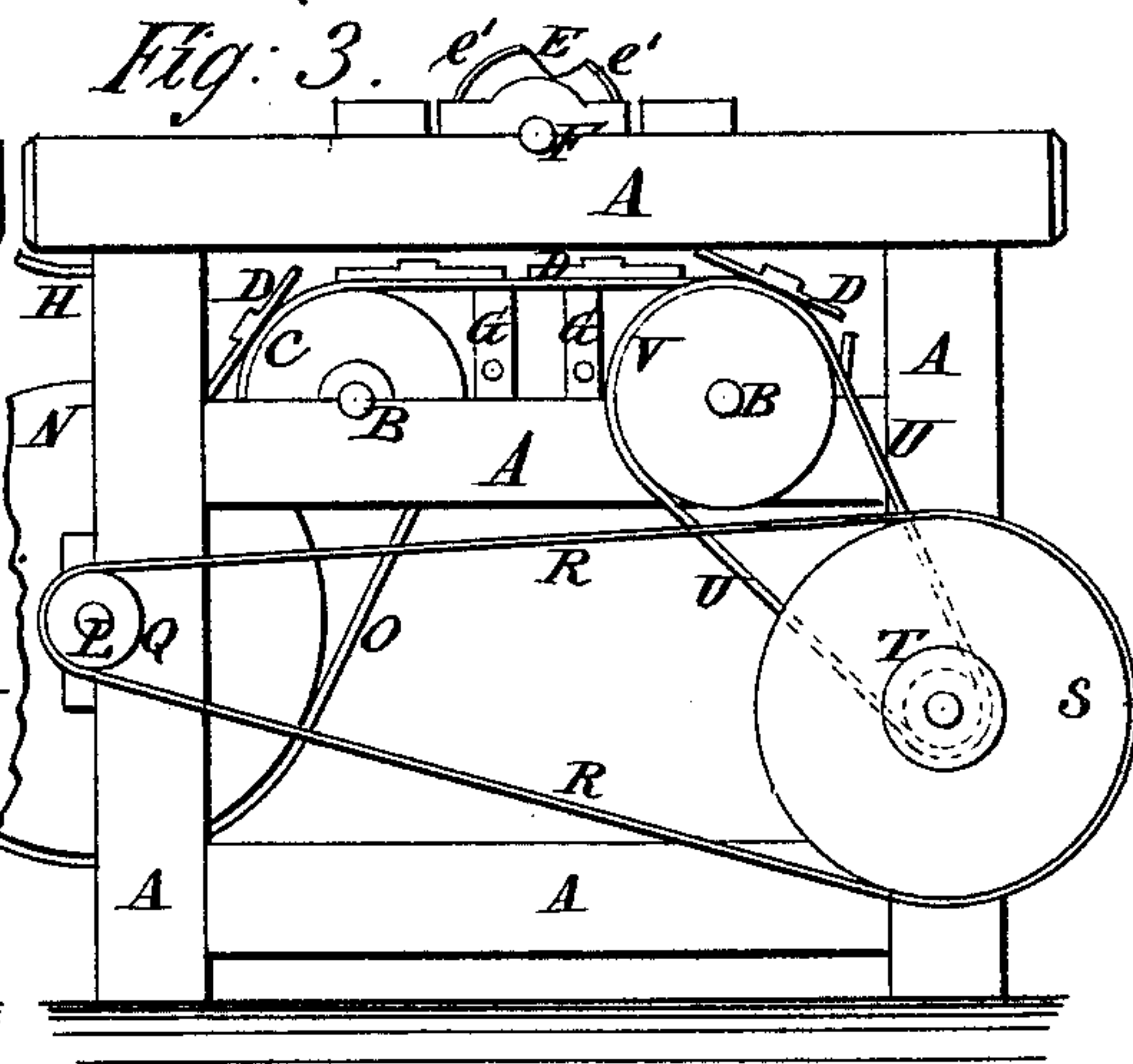
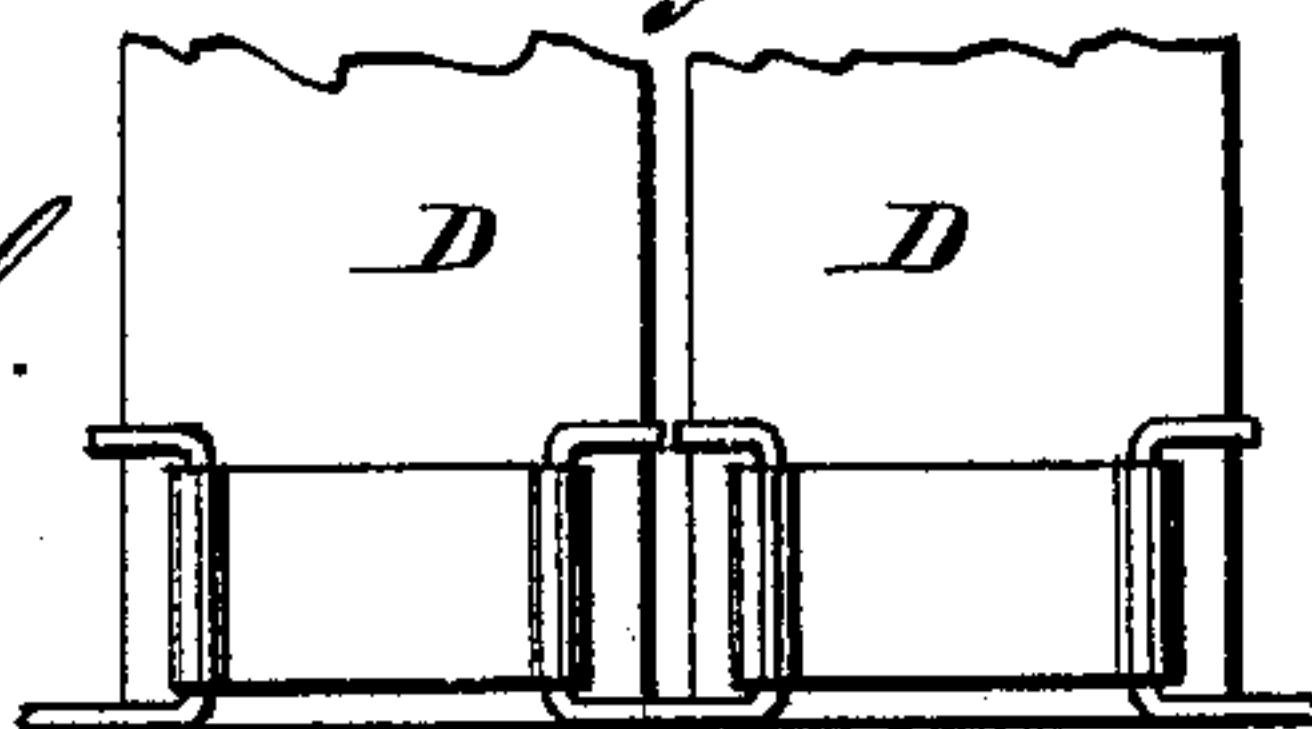


Fig: 4.

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UNITED STATES PATENT OFFICE.

MYRON A. CULVER, WILLIAM A. JONES, AND MYRON C. BRIGGS, OF
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IMPROVEMENT IN HOOP-LAPPING MACHINES.

Specification forming part of Letters Patent No. **220,131**, dated September 30, 1879; application filed
March 7, 1879.

To all whom it may concern:

Be it known that we, MYRON A. CULVER, WILLIAM A. JONES, and MYRON C. BRIGGS, of Bairdstown, in the county of Wood and State of Ohio, have invented a new and useful Improvement in Hoop-Lapping Machine, of which the following is a specification.

Figure 1 is a top view of our improved machine. Fig. 2 is a vertical cross-section of the same. Fig. 3 is an end view of the same. Fig. 4 is a detail view of a part of the endless-chain table. Fig. 5 is a detail side and edge view of one of the hoops.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for lapping "patent hoops" which will form the laps rapidly, evenly, and without danger of splitting the hoops, which may be adjusted to operate upon hoops of different lengths, and which shall be simple in construction and inexpensive in manufacture.

The invention consists in the combination of the feed-arms, the spring holding-bars, and the receiving-rack with the endless-chain-table plates, the cutters and cutter-heads, and with the frame of the machine, as hereinafter fully described.

A is the frame of the machine, in bearings in the upper part of which revolve two parallel shafts, B, to which are attached drums or rag-wheels C, around which pass the chains of the endless-chain table D. The plates of the endless-chain table D have longitudinal ribs upon their outer side for the hoops to rest against while passing through the machine, and while being operated upon by the cutters *e'*, attached to the cutter-heads E. The ribs of the table-plates are beveled at their ends and at different points in their length, so that the machine may be used for lapping hoops of different lengths.

The cutters *e'* are spiral, and are so arranged as to cut toward the ends of the hoops, so that there will be no danger of splitting the said hoops.

One or both the cutter-heads E are ad-

justable upon the shaft F, and are secured to the said shaft F by set-screws, so that they may be readily adjusted as the length of the hoops to be operated upon may require. The shaft F revolves in bearings attached to the frame A, and to the said frame A, directly below the said shaft, are attached two bars, G, with their upper edges upon a level with the tops of the drums or rag-wheels C, so as to support the endless-chain table in a horizontal position against the action of the cutters.

The hoops to be operated upon are fed one at a time to the endless-chain table D from bars or arms H, attached to the front top bar of the machine. The hoops while upon the endless-chain table D are held in place by the spring-bars I, the rear ends of which are attached to the rear top bar of the frame A, and their forward ends are held down by spiral springs J, interposed between them and the middle top bar of the frame A. The forward ends of the bars I are slightly curved upward, so that the hoops may pass beneath them readily.

As the hoops reach the rear side of the machine they drop into the receiving-rack *k*, and are ready for the pointer. In bearings in the lower forward part of the frame A revolves the counter-shaft L, to which are attached the pulleys M, that receive the driving-belt. To one end of the counter-shaft L is attached a large pulley, N, around which passes the band O. The band O also passes around a small pulley, P, attached to the end of the cutter-shaft F, so that the cutters may be driven with the requisite velocity. To the other end of the counter-shaft L is attached a small pulley, Q, around which passes a band, R. The band R also passes around a large pulley, S, pivoted to the lower rear part of the end of the frame A, and with which is rigidly connected a small pulley, T. Around the pulley T passes a band, U, which also passes around a pulley, V, attached to the end of one of the carrier-shafts B. By this arrangement the endless-chain table will be driven with the

requisite slowness to feed the hoops to the cutters.

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

The combination of the feed-arms H, the spring holding-bars I J, and the receiving-rack K with the endless-chain-table plates D, the cutters and cutter-heads *e'* E, and with the

frame A, substantially as herein shown and described.

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Witnesses:

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