

(No Model.)

J. C. HEARAN.

MACHINE FOR SHAPING COUNTERS FOR BOOTS AND SHOES.

No. 302,656.

Patented July 29, 1884.

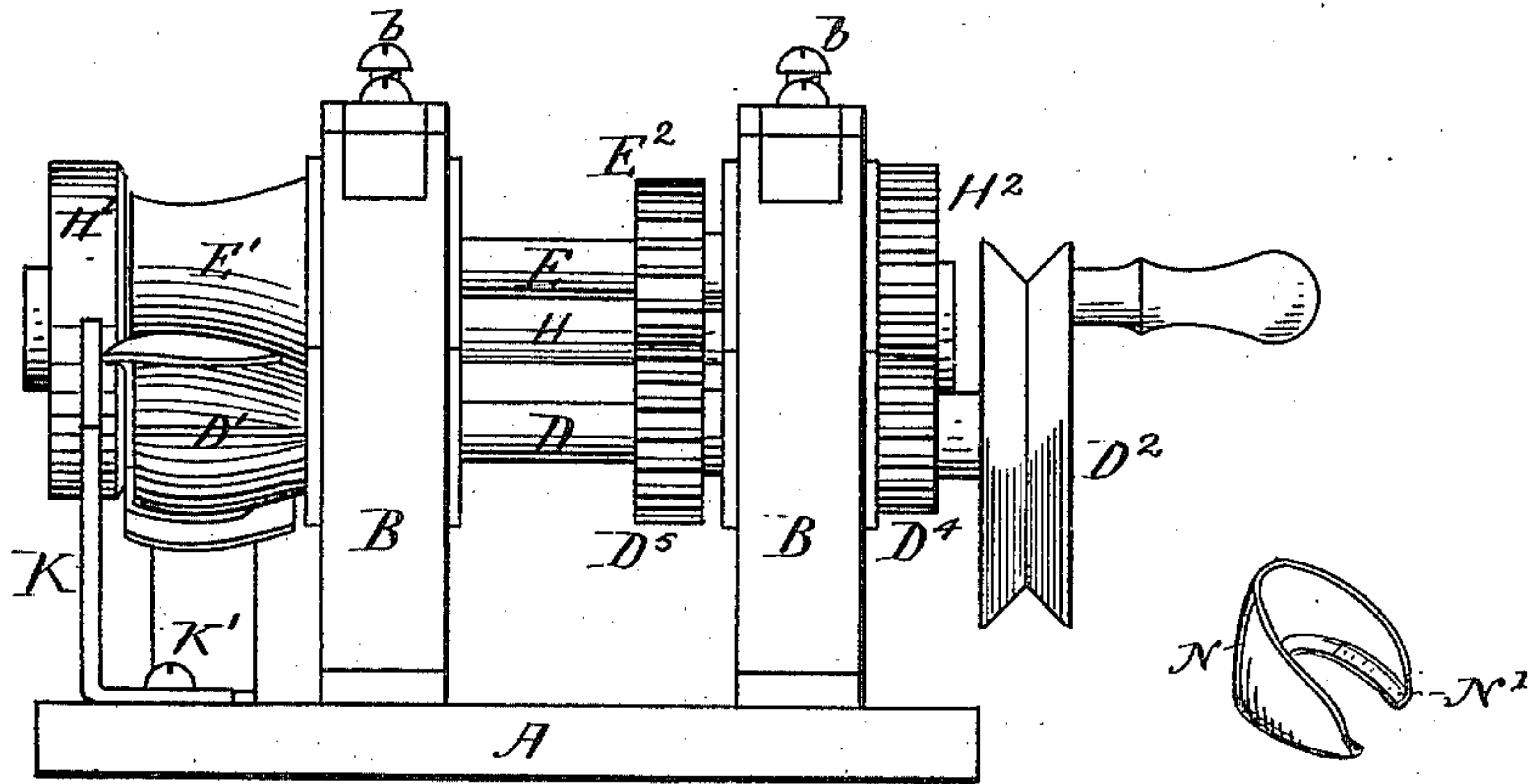


Fig. 1.

Fig. 5.

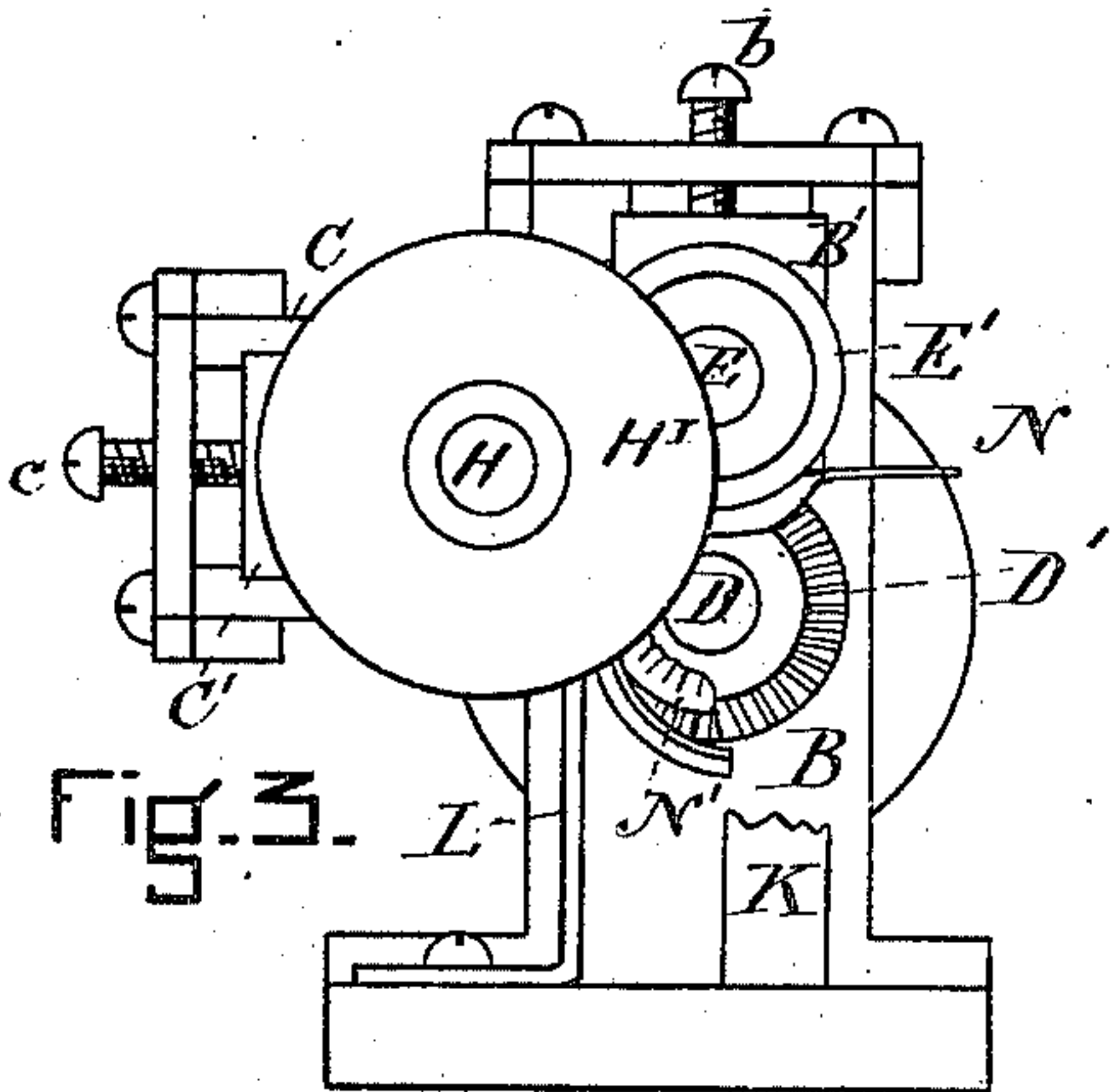


Fig. 3.

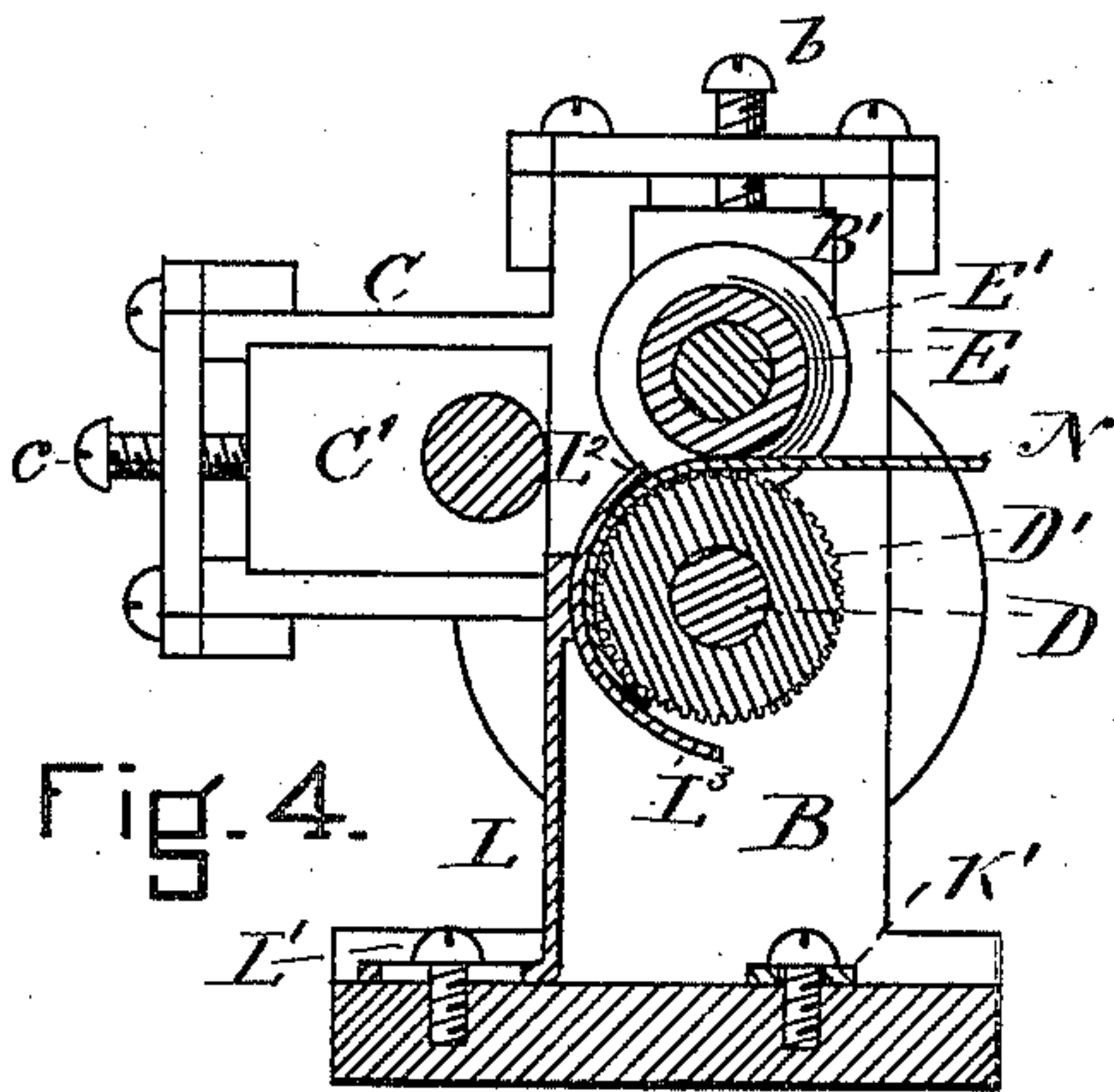


Fig. 4.

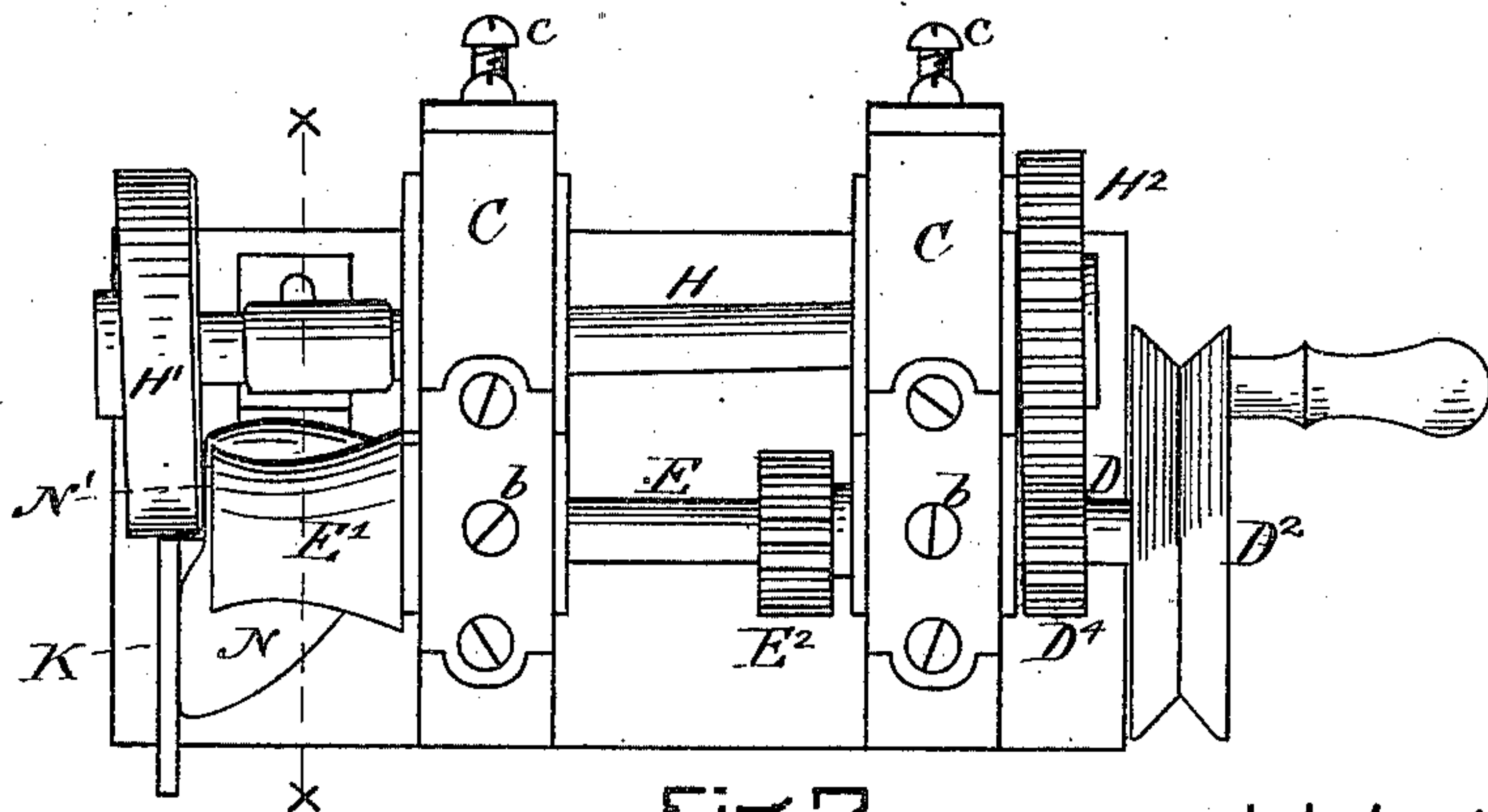


Fig. 2.

WITNESSES

Frank M. Parker
Albert D. Grover.

INVENTOR

James C. Hearan

UNITED STATES PATENT OFFICE.

JAMES C. HEARAN, OF WOBURN, MASSACHUSETTS.

MACHINE FOR SHAPING COUNTERS FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 302,656, dated July 29, 1884.

Application filed April 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. HEARAN, a citizen of the United States, residing at Woburn, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improvement in Machines for Shaping Counters for Boots and Shoes, of which the following is a specification.

My invention has for its object the construction of a counter-shaping machine in which the part that forms the lower member of the counter shall be entirely independent of the parts that form the upper member, so that an entirely independent adjustment may be obtained. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my machine. Fig. 2 is a plan of the same. Fig. 3 is an elevation of the working end. Fig. 4 is a cross-section on line *xx*, Fig. 2. Fig. 5 is a perspective view of one of my counters.

In the drawings, A B B C C represent the base and frame of the machine. D is the principal shaft of the machine, D² being the driving-pulley. E is a shaft, which is driven by the gear D⁵ on the main shaft D, acting through the gear E² on the shaft E. D' and E', Figs. 1, 3, and 4, are a pair of rolls attached, respectively, to the shafts D and E. The lower one of these rolls, D', is made corrugated and convex, while the upper one, E', is made smooth and concave, as shown in Fig. 1. The shaft D of the lower roll, D', is placed in fixed housings, while the shaft E of the upper roll, E', is placed in adjustable housings, one of which is shown at B', Figs. 3 and 4. These housings are held in position by the screws *b*.

N represents a counter in the process of being shaped. N', Figs. 2 and 3, shows the lower member of the counter after being shaped.

K, Figs. 1 and 2, is a gage held in position by a screw, K', which passes through a slot in said gage, so that it (the gage) may be adjusted and fastened in position. The function of this gage K, (see Fig. 1,) is to determine the extent or width of that part of the piece N

that shall be turned down to form the lower member, N', of the counter. (See Figs. 2 and 3.)

L, Figs. 3 and 4, is a spring gage-piece, terminating in a curved shield-piece, L² L³, Fig. 4. This part L² L³ receives the counter-piece N as it passes between the rolls E' D', and guides it in its motion, the part L being slightly elastic, so as to yield to different thicknesses of stock. L', Fig. 4, is a screw, which passes through the lower part of L and holds it in position.

I will now proceed to describe that part of my machine which forms the lower member of the counter. H represents a shaft, having upon its rear end a gear-wheel, H², which is driven by the gear-wheel D⁴ on the driving-shaft D. Upon the front end of this shaft H, I place a disk-wheel, H', located in relation to the ends of the rolls E' D', as shown in Figs. 1, 2, and 3, so that in action it will draw down that portion of the stock N that is between the roller D' and the gage K, and thus form the lower member, N', of the counter. As the shaft H is mounted in adjustable housings, one of which is shown at C', Fig. 4, its position, as well as that of the disk-wheel H', may be adjusted to suit the work. *c* represents one of the adjusting-screws. The wheel D' is not made corrugated for the purpose of corrugating the leather, but simply to add to its feeding-in motion. The flange-forming wheel H' turns down and compresses the moist leather, so as to form the second member, N', of the counter in a comparatively smooth flange.

I claim as my invention—

In a machine for shaping counters for boots and shoes, the combination of the rollers E' D' and the guide-piece L² L³ with the disk-wheel H', attached to an independent adjustable shaft, H, all operating together substantially as described, and for the purpose set forth.

JAMES C. HEARAN.

Witnesses:

FRANK G. PARKER,
ALBERT D. GROVER.