

M. C. McGENNESS & J. TWEEDIE.

BREASTING ATTACHMENT FOR HEELING MACHINES.

No. 390,384.

Patented Oct. 2, 1888.

Fig: 1.

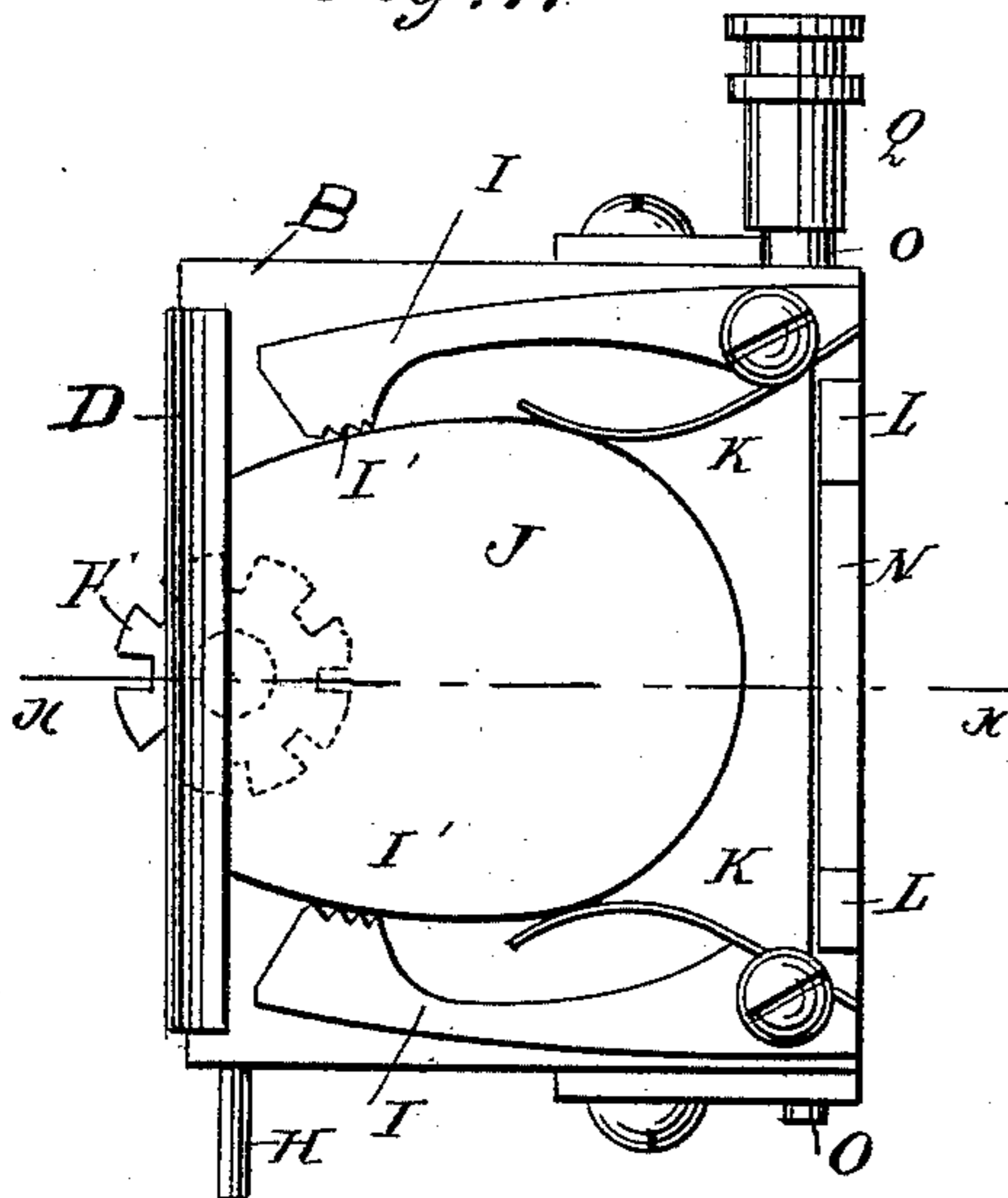


Fig: 3.

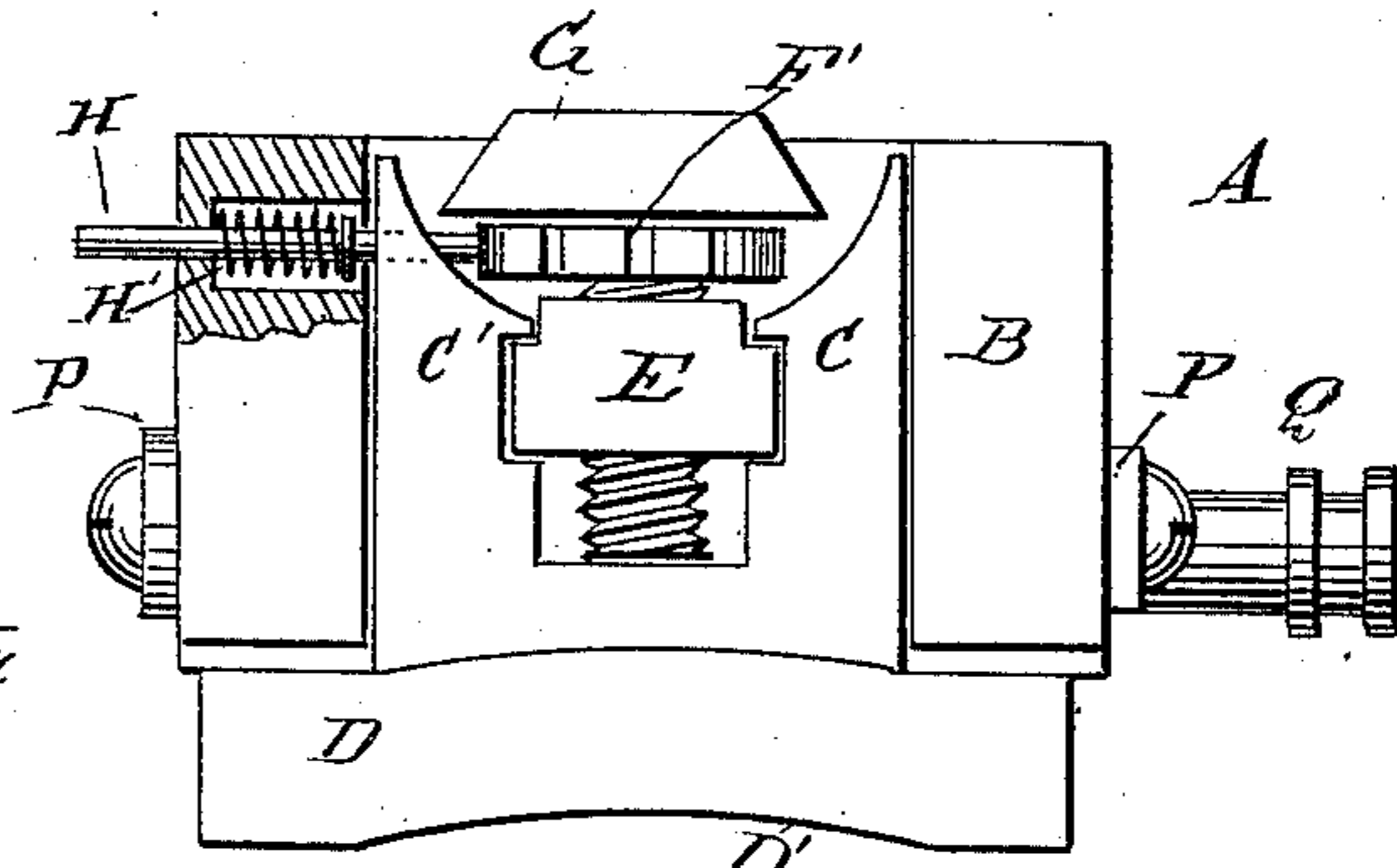


Fig: 2.

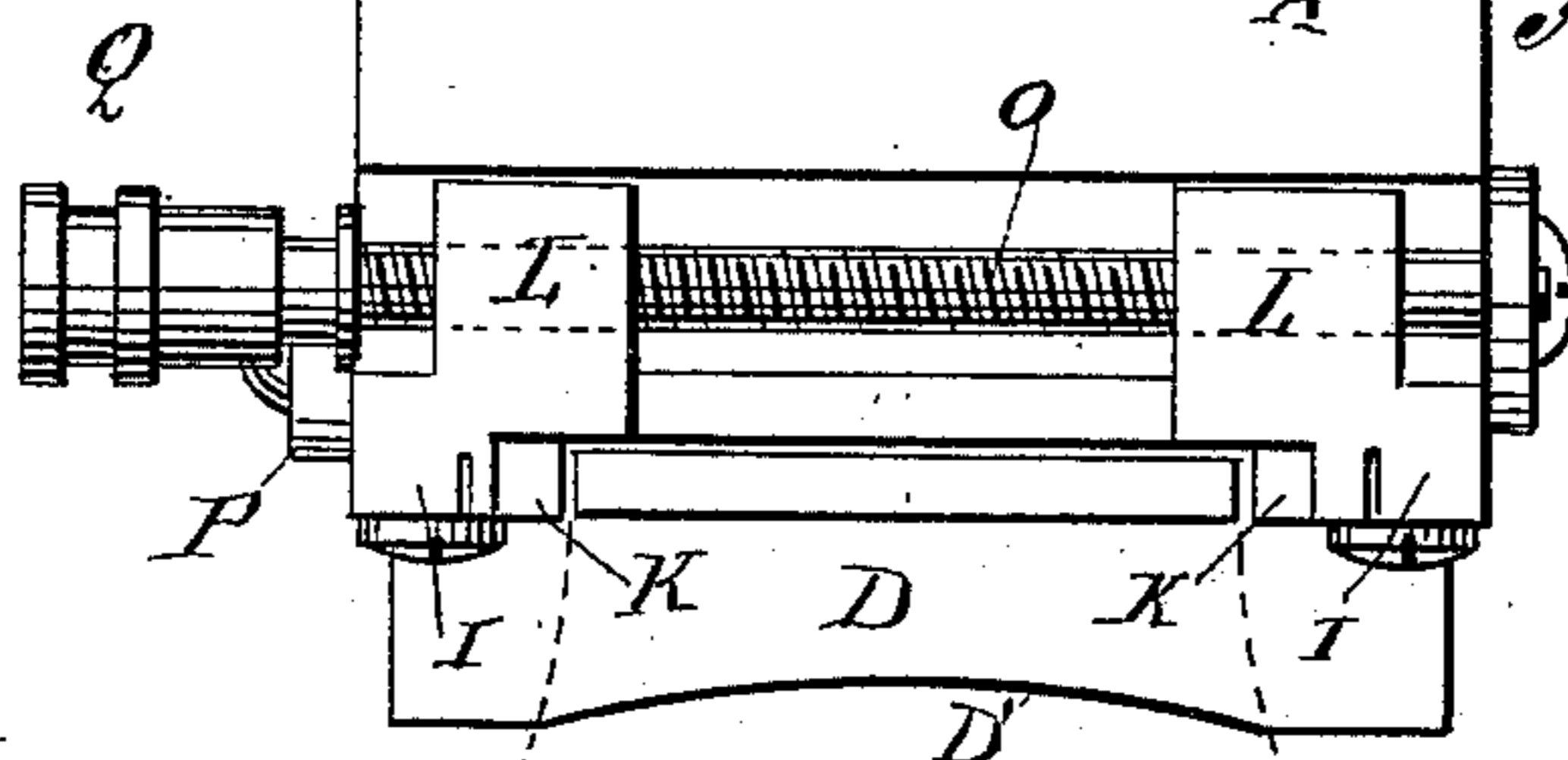
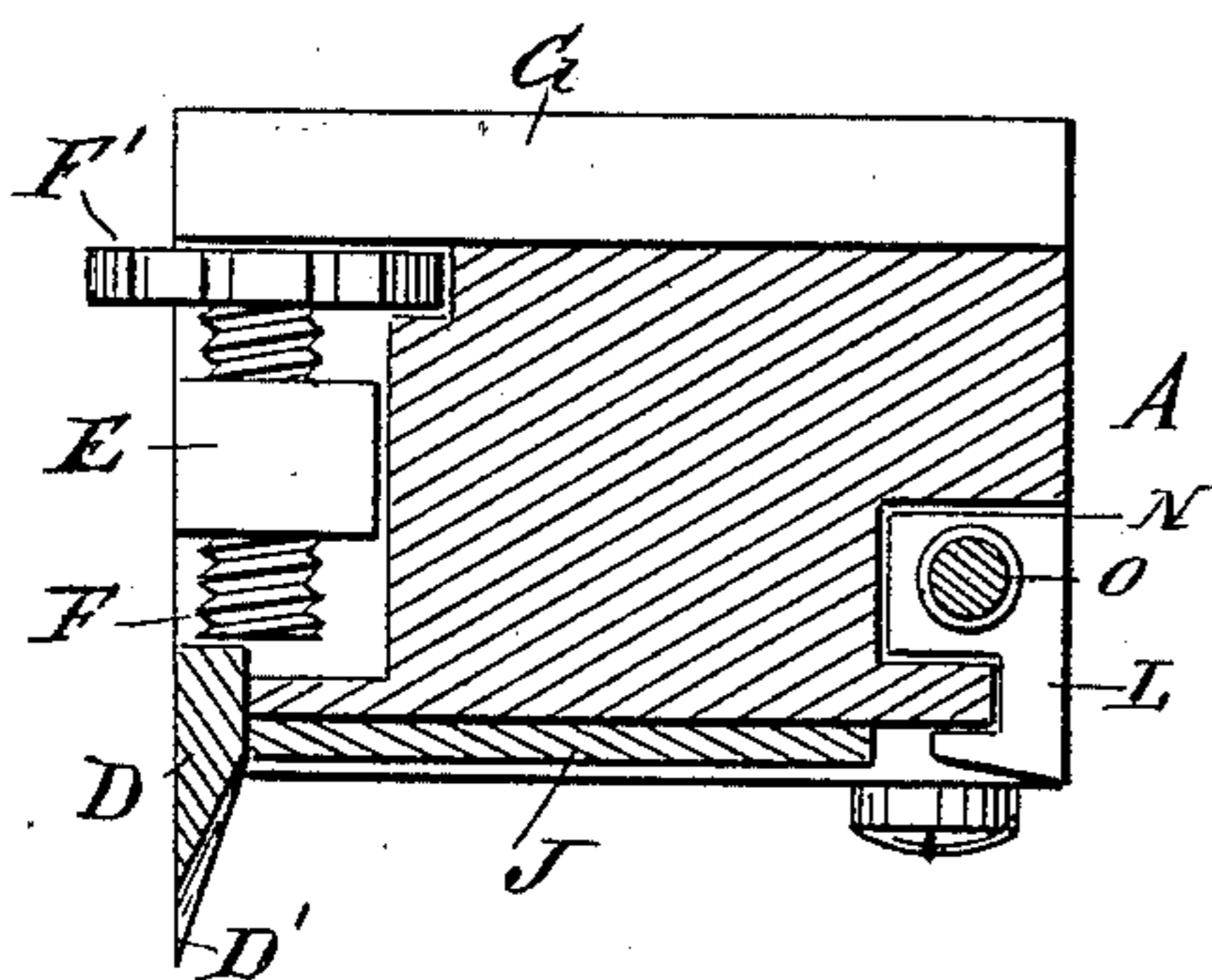


Fig: 4.

Fig: 6.

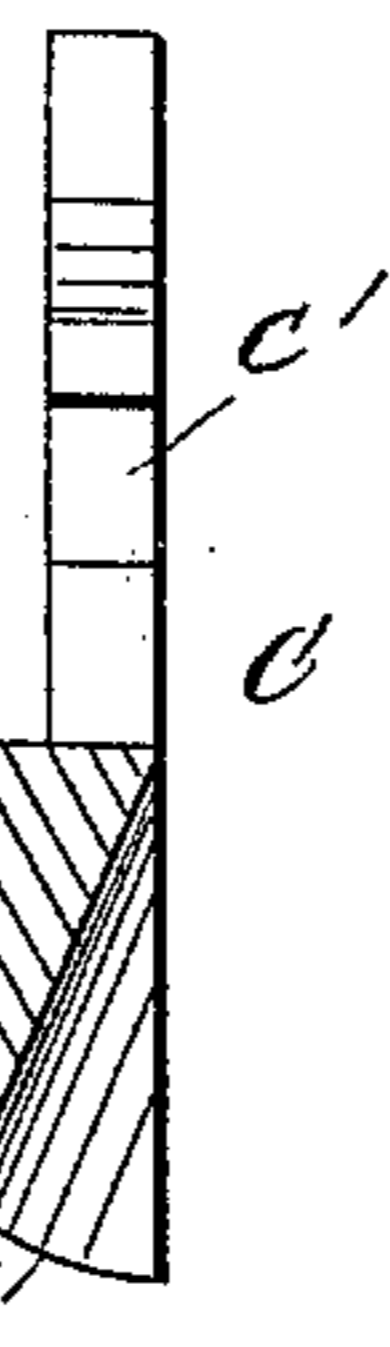


Fig: 5.

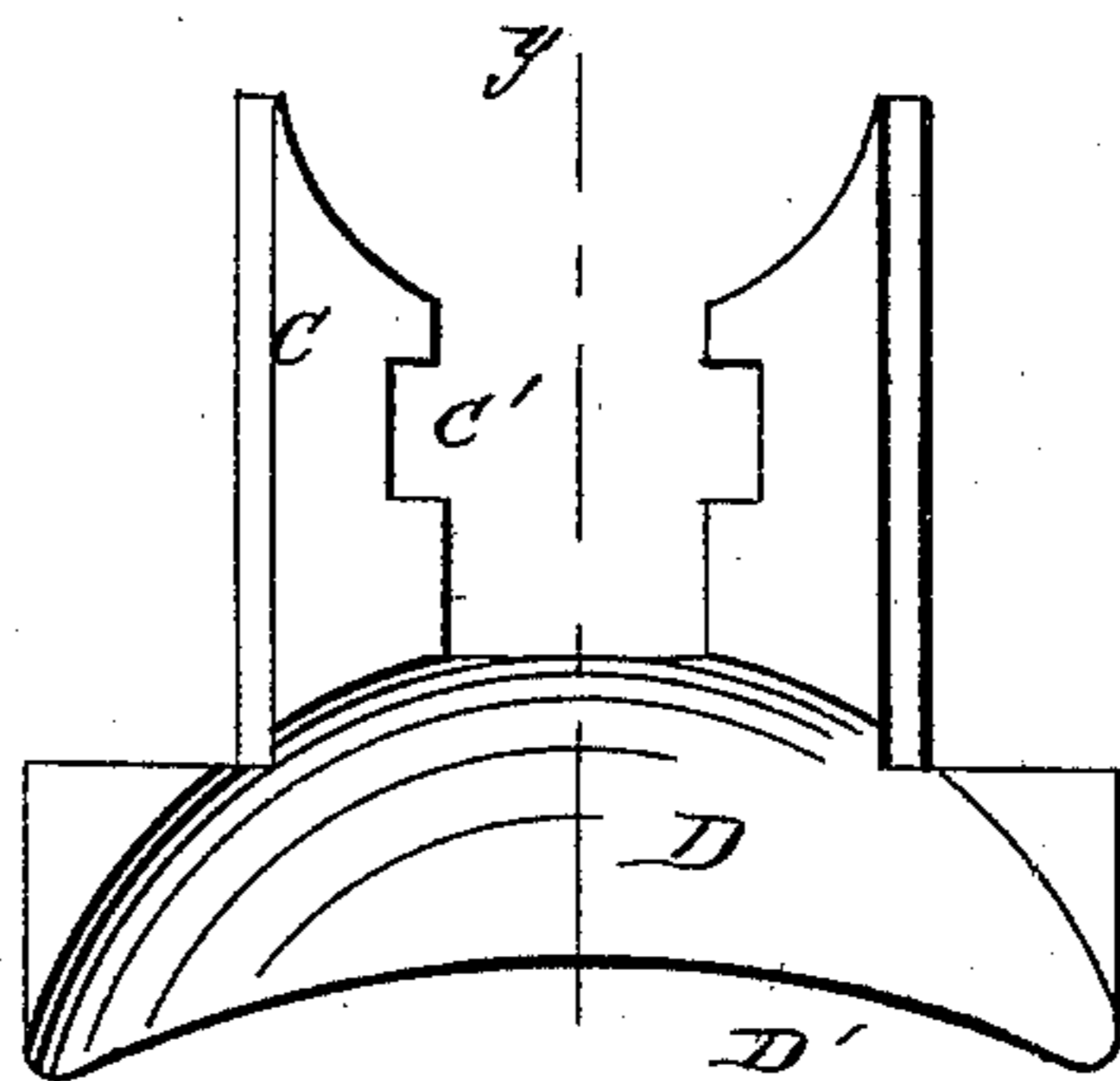


Fig: 8.

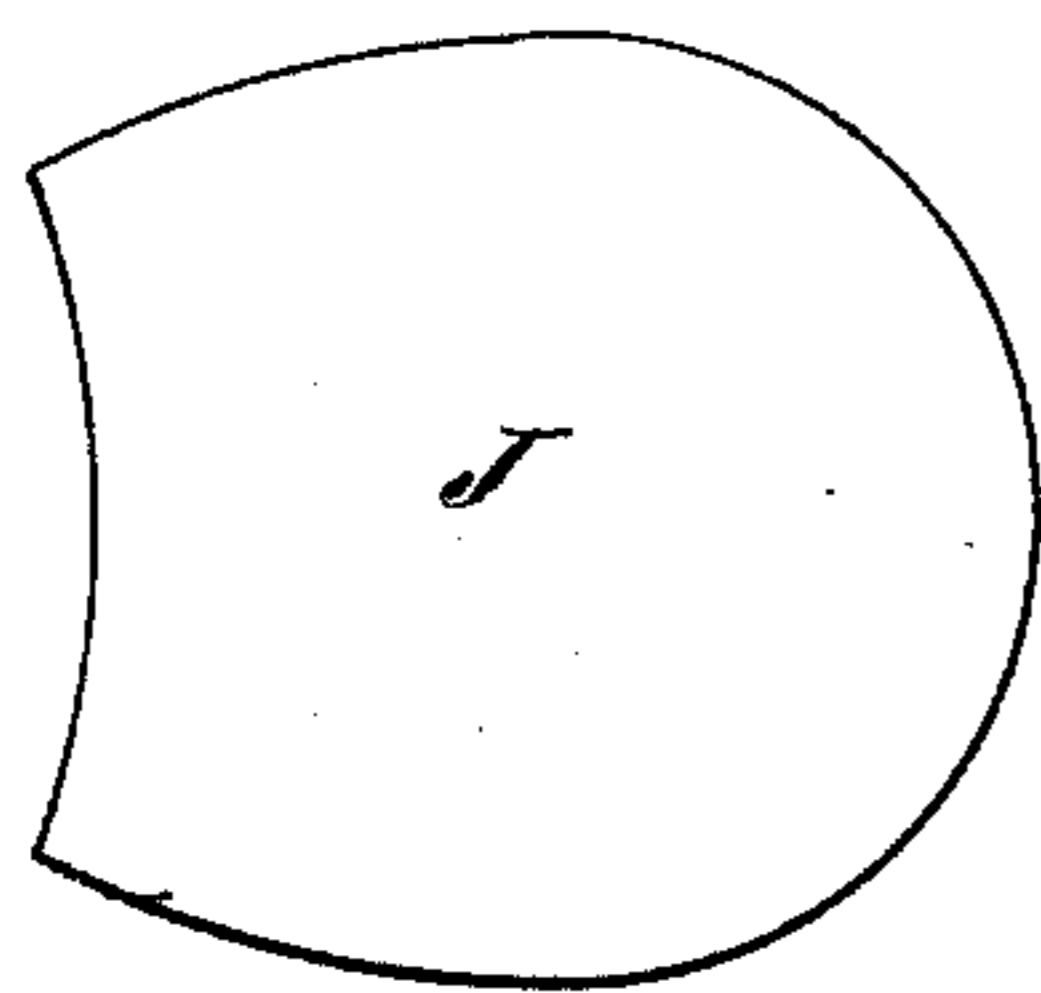
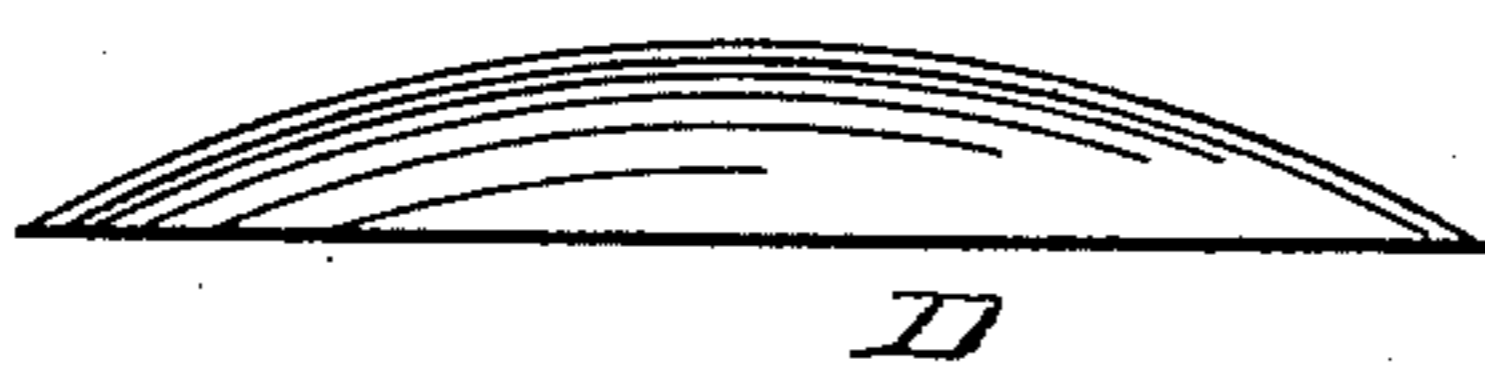


Fig: 7.



WITNESSES:

Chas. Nida  
C. Sedgwick

INVENTOR

M. C. McGenness

BY

J. Tweedie  
Munn & Co

ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

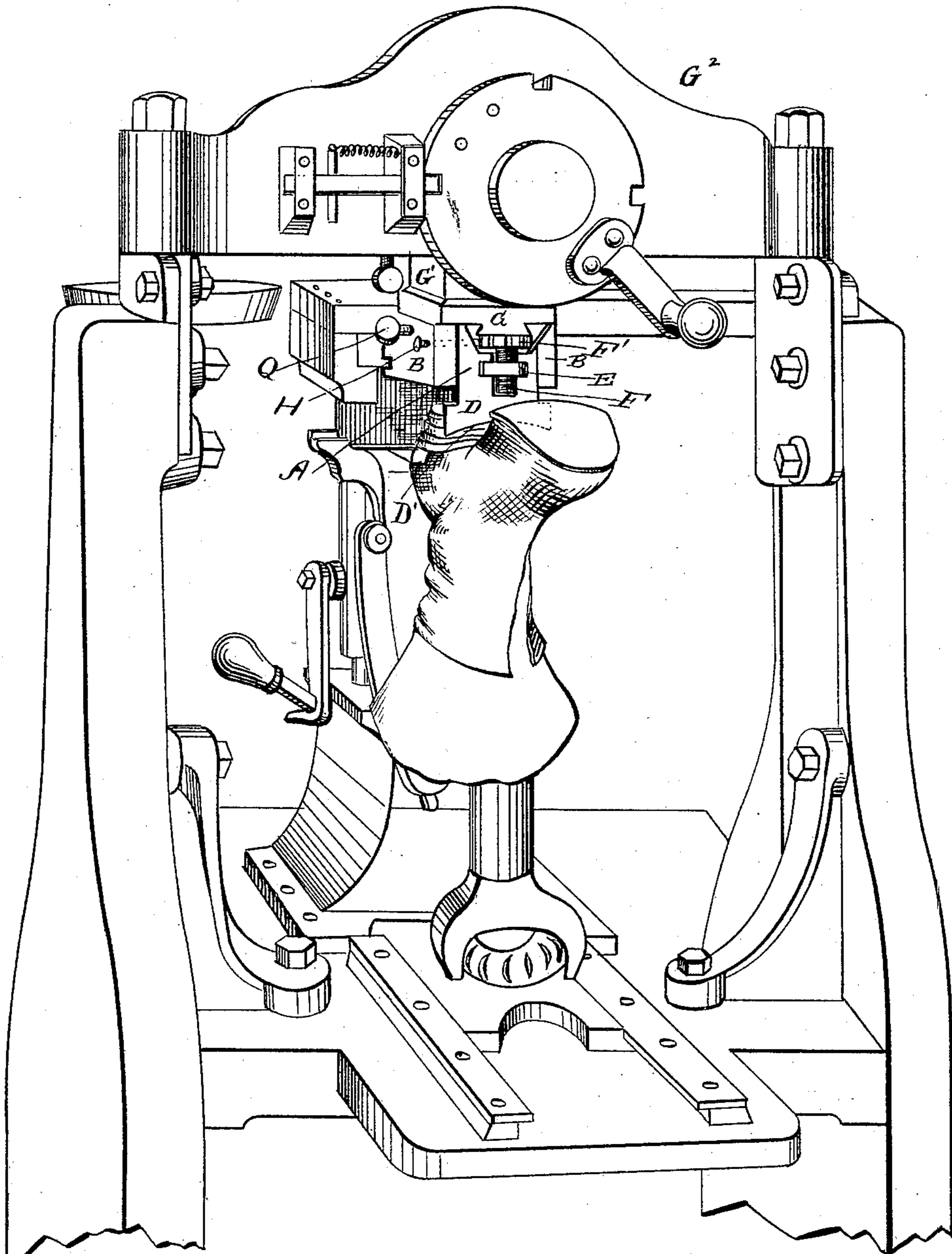
M. C. McGENNESS & J. TWEEDIE.

BREASTING ATTACHMENT FOR HEELING MACHINES.

No. 390,384.

Patented Oct. 2, 1888.

*Fig. 9.*



WITNESSES:

*Chas. Nida*  
*C. Sedgwick*

INVENTOR

*M. C. McGinness*  
*J. Tweedie*  
*Munn & Co*

BY

ATTORNEY

# UNITED STATES PATENT OFFICE.

MARTIN CHARLES McGENNESS AND JOHN TWEEDIE, OF JEFFERSON CITY, MISSOURI; SAID McGENNESS ASSIGNOR TO AUGUST PRIESMEYER, OF SAME PLACE.

## BREASTING ATTACHMENT FOR HEELING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 390,384, dated October 2, 1888.

Application filed February 8, 1888. Serial No. 263,326. (No model.)

*To all whom it may concern:*

Be it known that we, MARTIN CHARLES McGENNESS and JOHN TWEEDIE, of Jefferson City, in the county of Cole and State of Missouri, have invented a new and Improved Breasting Attachment for Boot and Shoe Heeling Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved breasting attachment for boot and shoe heeling machines, by which the boot and shoe heels are breasted and the top piece of the heel is put in place at the same time without danger of cutting the sole.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an inverted plan view of the improvement. Fig. 2 is a sectional side elevation of the same on the line *xx* of Fig. 1. Fig. 3 is an elevation of one end of the improvement with parts in section. Fig. 4 is a like view of the other end. Fig. 5 is a face view of a modified form of the knife. Fig. 6 is a sectional elevation of the same on the line *yy* of Fig. 5. Fig. 7 is a plan view of the same. Fig. 8 is a plan view of the top plate of the heel, and Fig. 9 is a perspective view of the improvement as in use upon a heel-machine.

The improvement is provided with a block, A, secured to the follower of a heeling-machine of any approved construction. At the inner end of the block A is formed a dovetailed groove, B, in which is held to slide vertically a dovetailed plate, C, carrying at its lower end a knife, D, for trimming the inner edge of the shoe or boot heel. The knife D may be straight across the face, as shown in Figs. 1, 2, 3, and 4, or it may be curved for trimming the inner edge of the heel round, as illustrated in Figs. 5, 6, 7, and 8. The cutting-edge D' of the knife D is slightly curved, so as to conform to the shape of the curved sole of the boot or shoe.

In the plate C, carrying the knife D, is

formed a recess, C', in which is held a nut, E, in which is entered a screw-rod, F, provided at its upper end with a notched disk, F'. The top of the block A is provided with a dovetail groove, A', and is fitted to slide upon a dovetail projection, G, formed on the body portion G' of the heel-machine G<sup>2</sup>, as shown in Fig. 9. The notches in the disk F' are engaged by a rod, H, having its bearings in one side of the block A and extending to the outside, so as to enable the operator to take hold of the said rod H and pull it in and out of contact with the notches of the said disk F. The spring H' is coiled on the rod H, and serves to press the rod H inward into contact with one of the notches of the disk F' whenever the operator releases his hold on the said rod H. The latter serves to lock the disk F' and the screw-rod F in position after the knife D is adjusted to a desirable height or depth.

On the bottom of the block A are held the gripping-fingers I I, placed opposite each other, as illustrated in Fig. 1, and each being provided at its inner end with a serrated edge, I', adapted to engage the rim of the top plate, J, to be secured to the heel of the boot or shoe. To the gripping-fingers I are secured the springs K, which also rest against the rim of the said top plate, J. The inner end of the latter rests against the back of the knife D, as shown in Fig. 1. On the outer end of each gripping-finger I is secured an upwardly-extending lug, L, adapted to slide transversely in a suitable slot, N, formed in the block A.

One of the lugs L is provided with a left-hand screw-threaded aperture, and the other lug is provided with a right-hand screw-threaded aperture. Through the said two apertures of the lugs L L passes a right and left handed screw-rod, O, adapted to turn in suitable bearings, P, fastened to the sides of the block A. On one outer end of the screw-rod O is secured a milled head, Q, for turning the said screw-rod O.

The operation is as follows: The knife D is adjusted vertically by disengaging the rod H from the notched disk F', after which the operator turns the said notched disk F', whereby the screw-rod F, engaging the nut E, raises or lowers the plate C, carrying the knife D, until

the latter attains such a position that the height from the cutting-edge D' to the bottom of the block A is equal to the height of the boot or shoe heel to be cut or trimmed. The operator then places the top plate, J, of the boot or shoe heel to be formed on the top of the block A, so that it rests between the gripping-fingers I I, after which the operator turns the milled head Q of the screw-rod O, so that the latter moves the lugs L L' inward simultaneously, whereby the serrated ends I' of the gripping-fingers I come in contact with the rim of the top plate, J, thus holding the latter firmly in place in the middle of the block A. The springs K K also press against the outer part of the rim of the top plate, J, as shown in Fig. 1. The heeling-machine is now set in motion in the usual manner, whereby the cutting-edge D' of the knife D trims the inner edge of the heel, at the same time pressing the top plate, J, on the top of that part of the heel already secured to the boot or shoe by the heeling-machine.

It will be seen that the top plate, J, gradually guides the heel of the boot or shoe so that the cutting-edge of the knife D trims the inner edge of the heel very accurately, and at the same time the knife D is prevented from cutting into the sole, as the cutting of the knife D is limited in its inward movement by the bottom of the block A and the corresponding height to which the knife D has been adjusted in relation to the said bottom of the block A.

The knife D can be easily changed to any of the various forms by removing the nut E and the screw-rod F and then pulling the knife D upward so that its dovetailed plate disengages the correspondingly-shaped recess E of the block A. Another knife can then be inserted with its plate C in a dovetailed groove, B, after which the nut E and the screw-rod F are again put in position.

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

1. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held to slide vertically in one end of the said block, a nut held on the said knife, and a screw-rod engaging the said nut and adapted for raising and lowering the said knife, substantially as shown and described.

2. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife having a dovetailed plate held to slide in one end of the said block, a nut secured in a recess of the said plate, a screw-rod screwing on the said nut, and a disk formed on the said screw-rod and resting on a support formed on the said block, substantially as shown and described.

3. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife provided with a plate held to slide vertically at one end of the said block, a nut held in the said plate, a screw-rod screwing in the said nut, a notched disk formed at one end of the said screw-rod and resting on a support of the said block, and a spring-pin adapted to engage the notches of the said disk, substantially as shown and described.

4. In a breasting attachment for heeling-machines, the combination herein described, with a block, A, and top plate, J, of gripping-fingers held to slide on the bottom of the said block, substantially as shown and described.

5. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held vertically adjustable at one end of the said block and gripping-fingers held to slide on the bottom of the said block, substantially as shown and described.

6. In a breasting attachment for heeling-machines, the combination herein described, with a block, of gripping-fingers held to slide on the bottom of the said block and adapted to engage the bottom plate of the heel, lugs formed on the said gripping-fingers and held to slide transversely on the said block, and a right and left handed screw engaging the lugs on the gripping-fingers, substantially as shown and described.

7. In a breasting attachment for heeling-machines, the combination herein described, with a block, of gripping-fingers held to slide on the bottom of the said block and adapted to engage the bottom plate of the heel, lugs formed on the said gripping-fingers and held to slide transversely on the said block, a right and left handed screw engaging the said lugs on the gripping-fingers, and springs secured to the said gripping-fingers and adapted to engage the rim of the bottom plate of the heel, substantially as shown and described.

8. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held to slide vertically at one end of the said block, a screw-rod engaging a nut on the said knife for adjusting the latter vertically, gripping-fingers held on top of the said block and provided with threaded lugs, and a right and left handed screw-rod screwing in the said lugs, for adjusting the said gripping-fingers, substantially as shown and described.

MARTIN CHARLES MCGENNESS.

JOHN TWEEDIE.

Witnesses:

JOHN F. FULKERSON,  
A. B. KELLY.