

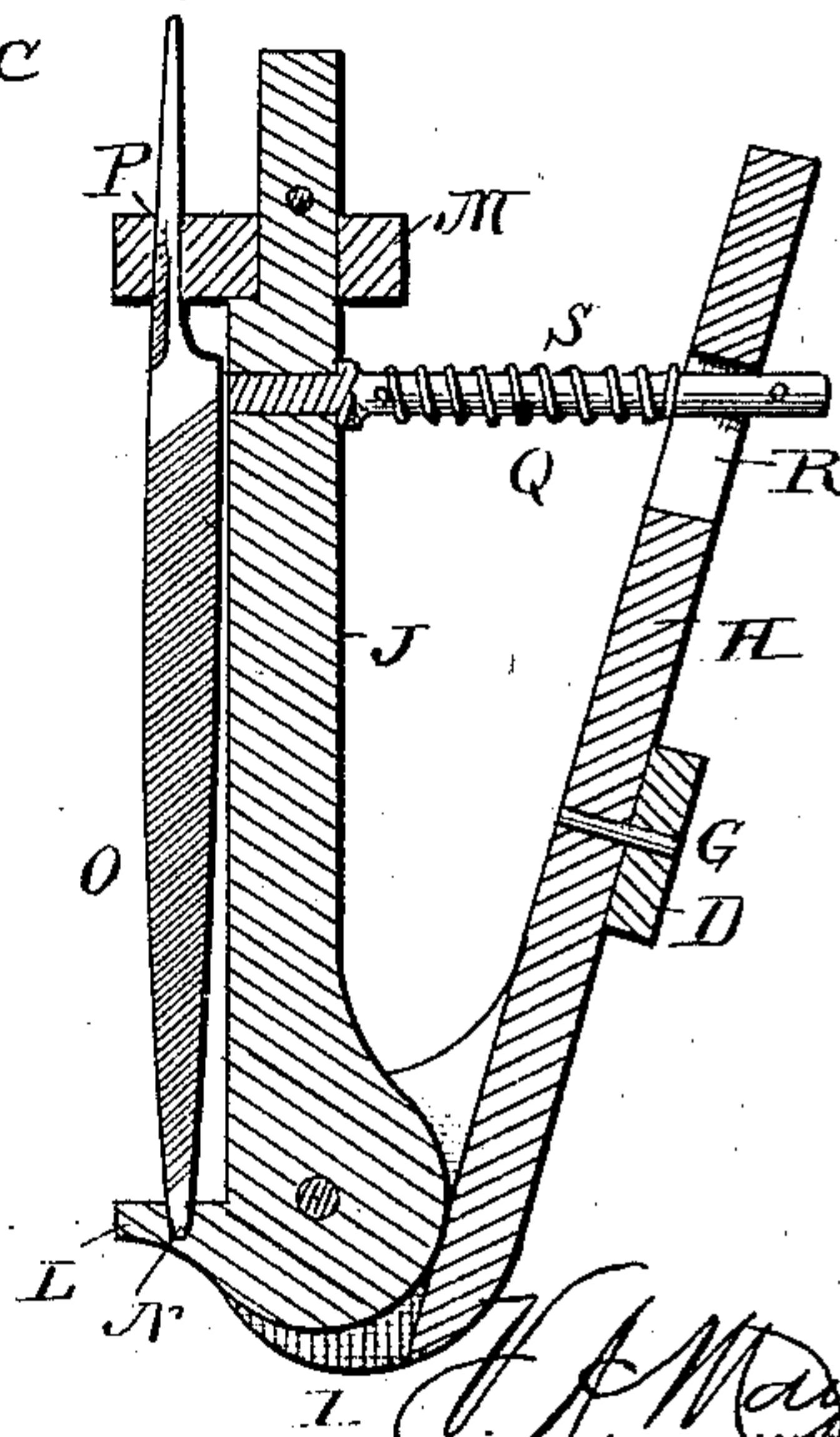
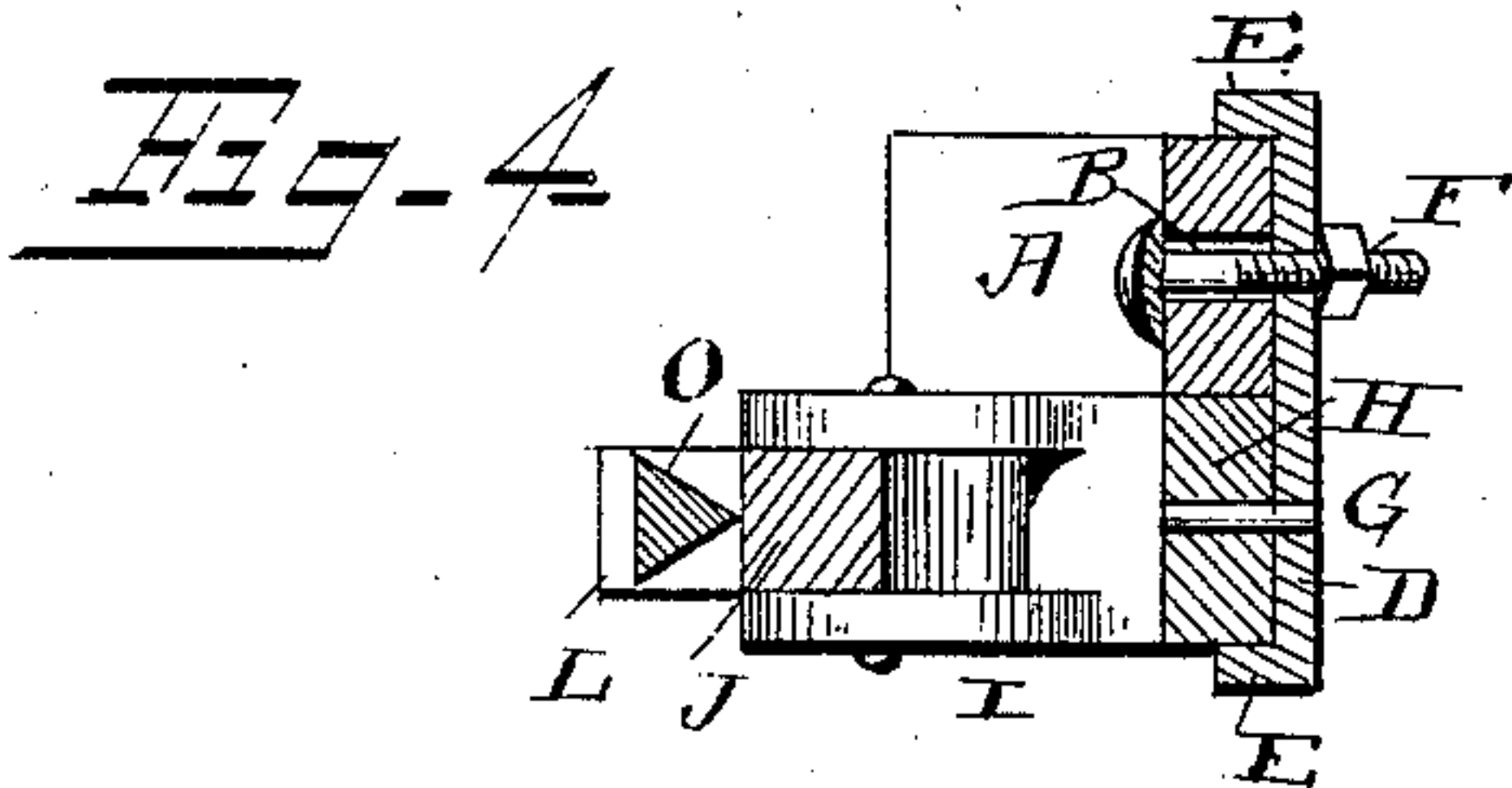
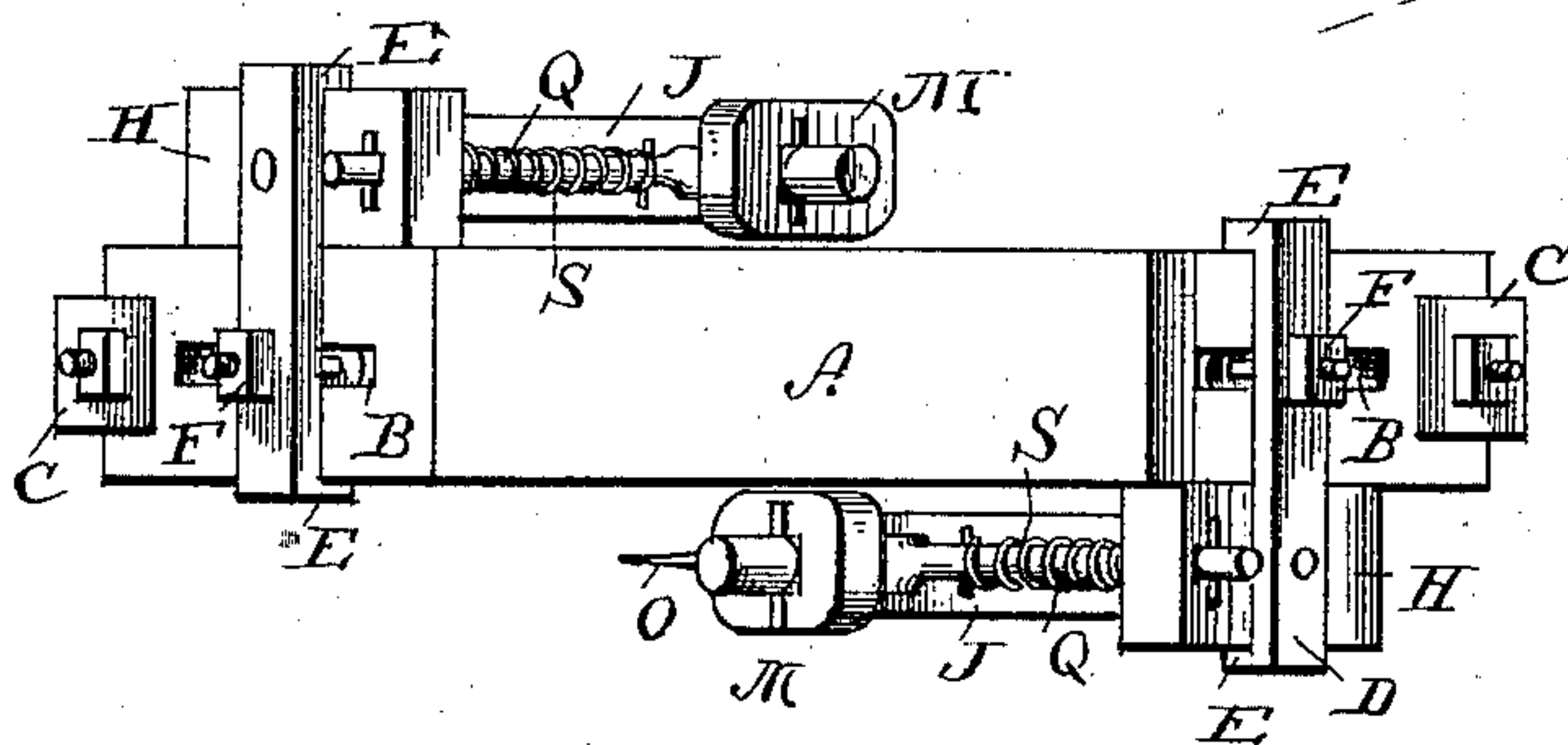
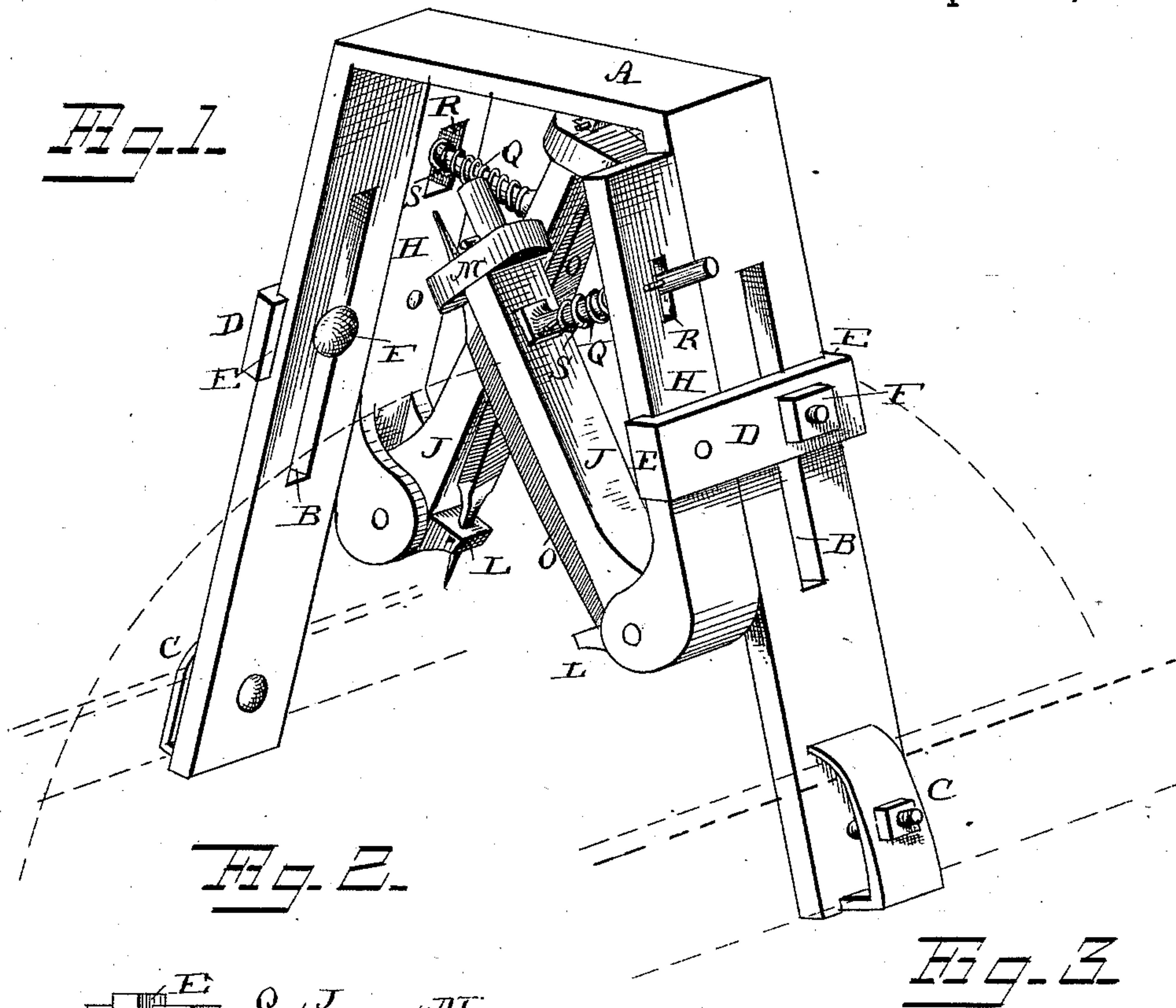
(No Model.)

V. A. MAYBERRY.

DEVICE FOR SHARPENING PLOW COLTERS.

No. 285,287.

Patented Sept. 18, 1883.



WITNESSES
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UNITED STATES PATENT OFFICE.

VICTOR A. MAYBERRY, OF LA GRANGE, MISSOURI.

DEVICE FOR SHARPENING PLOW-COLTERS.

SPECIFICATION forming part of Letters Patent No. 285,287, dated September 18, 1883.

Application filed June 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, VICTOR A. MAYBERRY, a citizen of the United States, residing at La Grange, in the county of Lewis and State of Missouri, have invented a new and useful Device for Sharpening Plow-Colters, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to devices for sharpening rotary plow-colters; and its object is to provide a simple, inexpensive, durable, and efficient device that is adapted to be attached to the frame of the colter, so that it will be automatically sharpened as the plow is driven.

In the drawings, Figure 1 is a perspective view, showing my device secured in position for operation. Fig. 2 is a top view of the same. Fig. 3 is a vertical sectional view taken through the wings of the sharpening device. Fig. 4 is a horizontal sectional view taken through the piece that connects the wings to the main frame.

Referring to the drawings, A designates an arch-piece, that forms the main portion of the frame of my device, and is provided with longitudinal slots B B in its side pieces and with suitable clamps, C C, at its lower ends, by which it can be readily clamped in position on the frame of the colter, so that it will straddle the latter.

D D designate connecting-blocks, that have end flanges or shoulders, E E, and are secured—one to each side of frame A—by means of bolts F F, passing through slots B B, and by adjusting these bolts in the slots the said pieces can be adjusted vertically on frame A to change the incline of the sharpening-files that are secured to the wings, the latter being bolted, as at G, or otherwise secured to the front ends of the blocks D D. These wings each comprise a main arm, H, to the bottom end of which is pivoted, as at I, a swinging arm, J, having an inwardly-projecting flange, L, at its bottom, and having a plate, M, secured over its top end. In this flange L is provided a socket, N, for the lower end of the file O, while the other end of the latter passes through a corresponding perforation, P, in the projecting removable plate M, as shown. The file is preferably a three-edged one, and the sockets N and P are therefore of triangular shape, so that the file can be turned, to use all of its sides. The files are also adapted to be reversed vertically, so that their entire surface can be utilized.

From the top ends of arms J extend outwardly projecting rods Q, that are preferably bowed, and pass through a slot, R, in the main fixed arm H. A coiled spring, S, is arranged around the rod Q, which will be compressed against the arm H when the arm J is forced outward by any bend or imperfection in the periphery of the colter, and will serve to return the arm J to its normal position when the bend has passed.

The operation and advantages of my invention will be readily understood. The files will be continually in contact with the edge of the colter, and will sharpen the same as it revolves, and, when desired, the sharpening device can be removed by simply operating its securing-clamps.

I claim as my invention—

1. The combination, with the frame carrying the rotary colter, of a device secured to the frame and engaging the edge of the colter to sharpen it as the plow is driven, substantially as and for the purpose set forth.

2. The combination, with the frame of the sharpener, adapted to be secured to the frame of the colter, of wings secured to this frame and carrying files arranged to engage the edge of the colter as it revolves, substantially as and for the purpose set forth.

3. In a device for sharpening plow-colters, the combination of a frame by which it may be secured in position, pivoted inclined arms carrying files adapted to engage the edge of the colter, and spring mechanism for forcing these arms into engagement with the colter, substantially as and for the purpose set forth.

4. The combination of the arched main frame having the longitudinal side slots, the securing-blocks having bolts working in the said slots, the wings secured to these blocks and comprising a fixed arm and an arm pivoted to the lower end of the fixed arm and carrying a file adapted to engage the edge of the colter, a bar projecting from the pivoted arm and working through the fixed arm, and a spring arranged on the bar, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

VICTOR A. MAYBERRY.

Witnesses:

WINTHROP H. SUDDUTH,
LEWIS W. HARDMAN.