

(No Model.)

2 Sheets—Sheet 1.

H. W. GEORGIA.

COMBINED JOINTER AND SIDE DRESSER FOR SAWS.

No. 366,215.

Patented July 12, 1887.

Fig. 1.

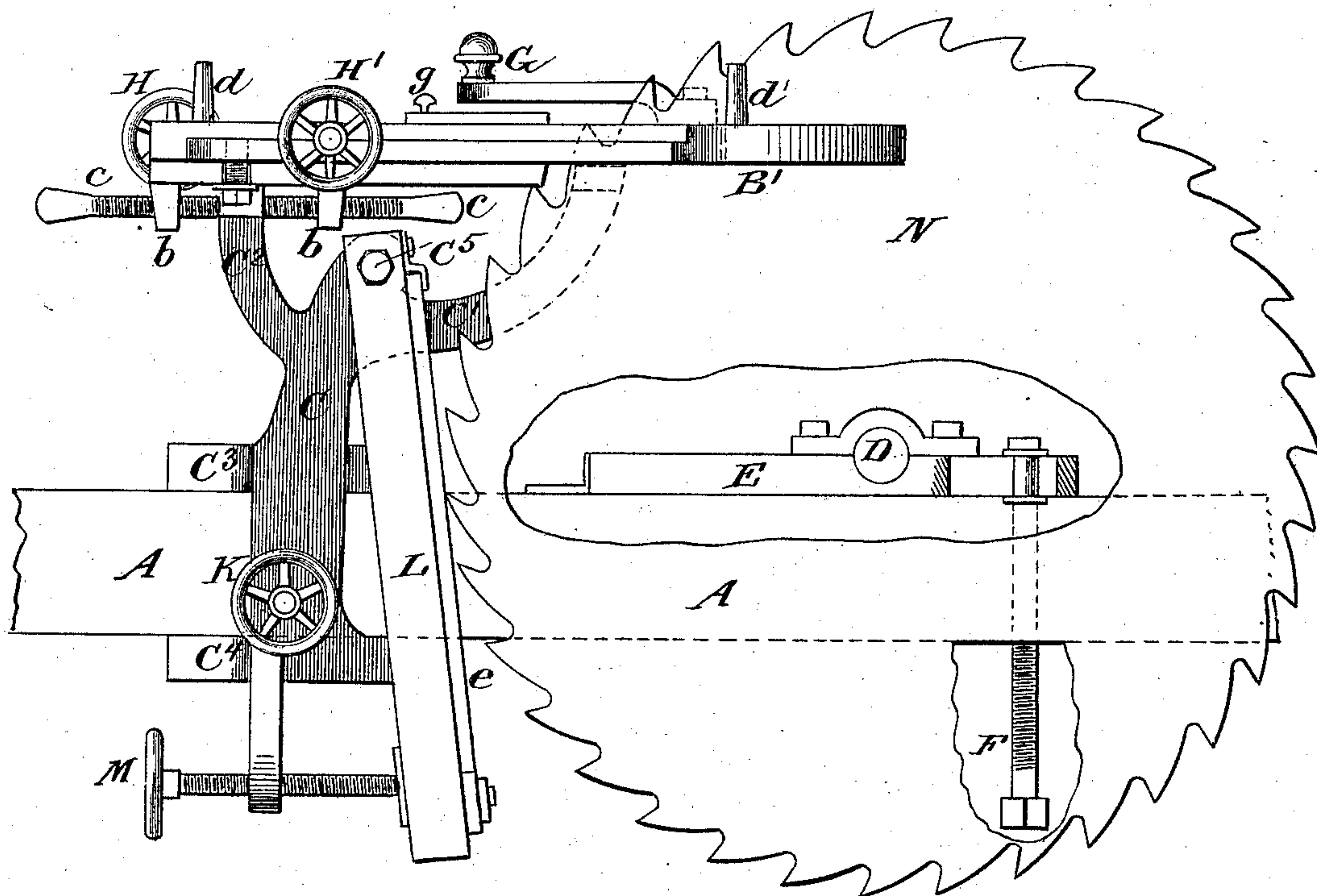
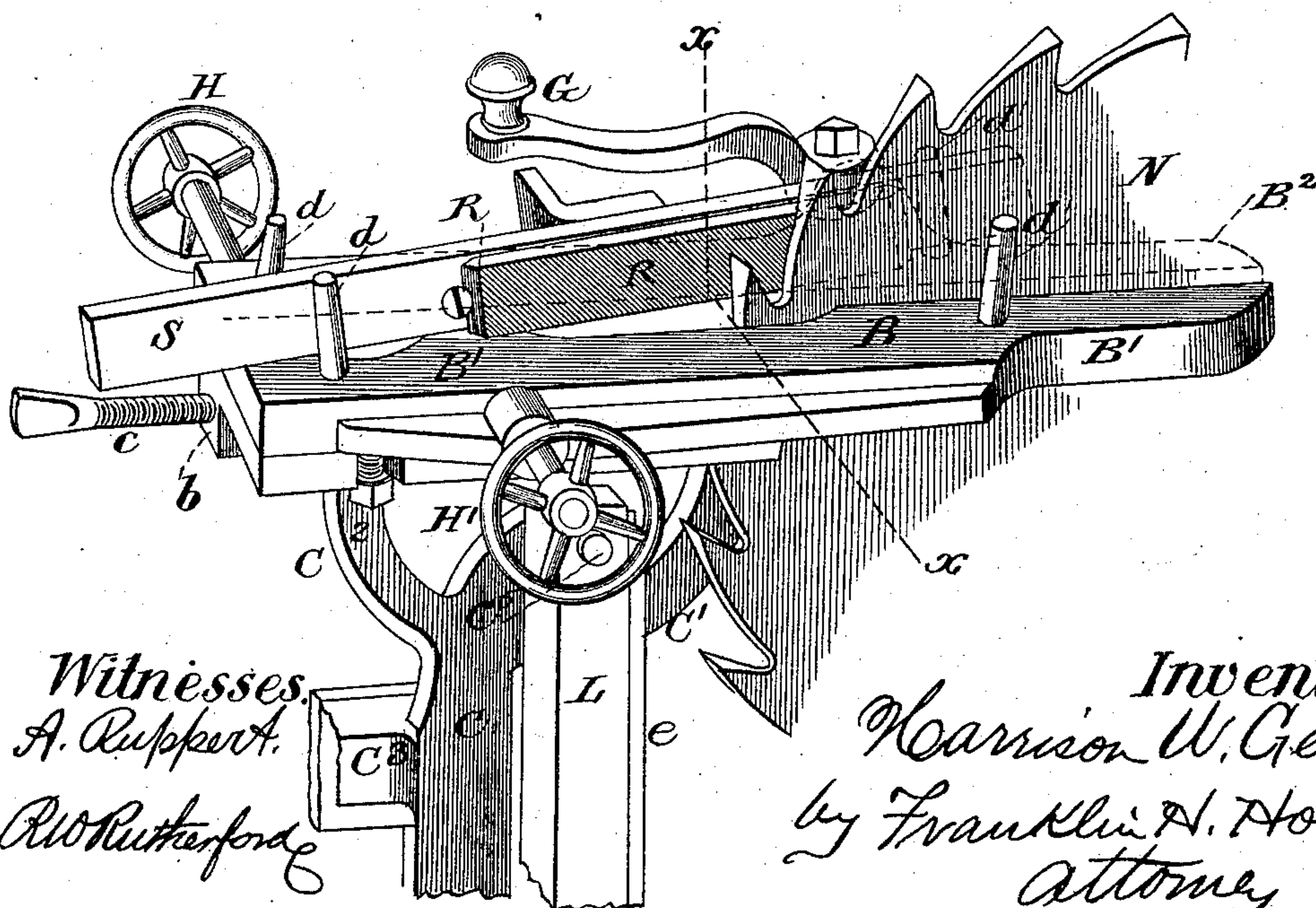


Fig. 2.



Witnesses:
A. Ruppert
A. W. Rutherford

Inventor.
Harrison W. Georgia
by Franklin H. Hough
Attorney

(No Model.)

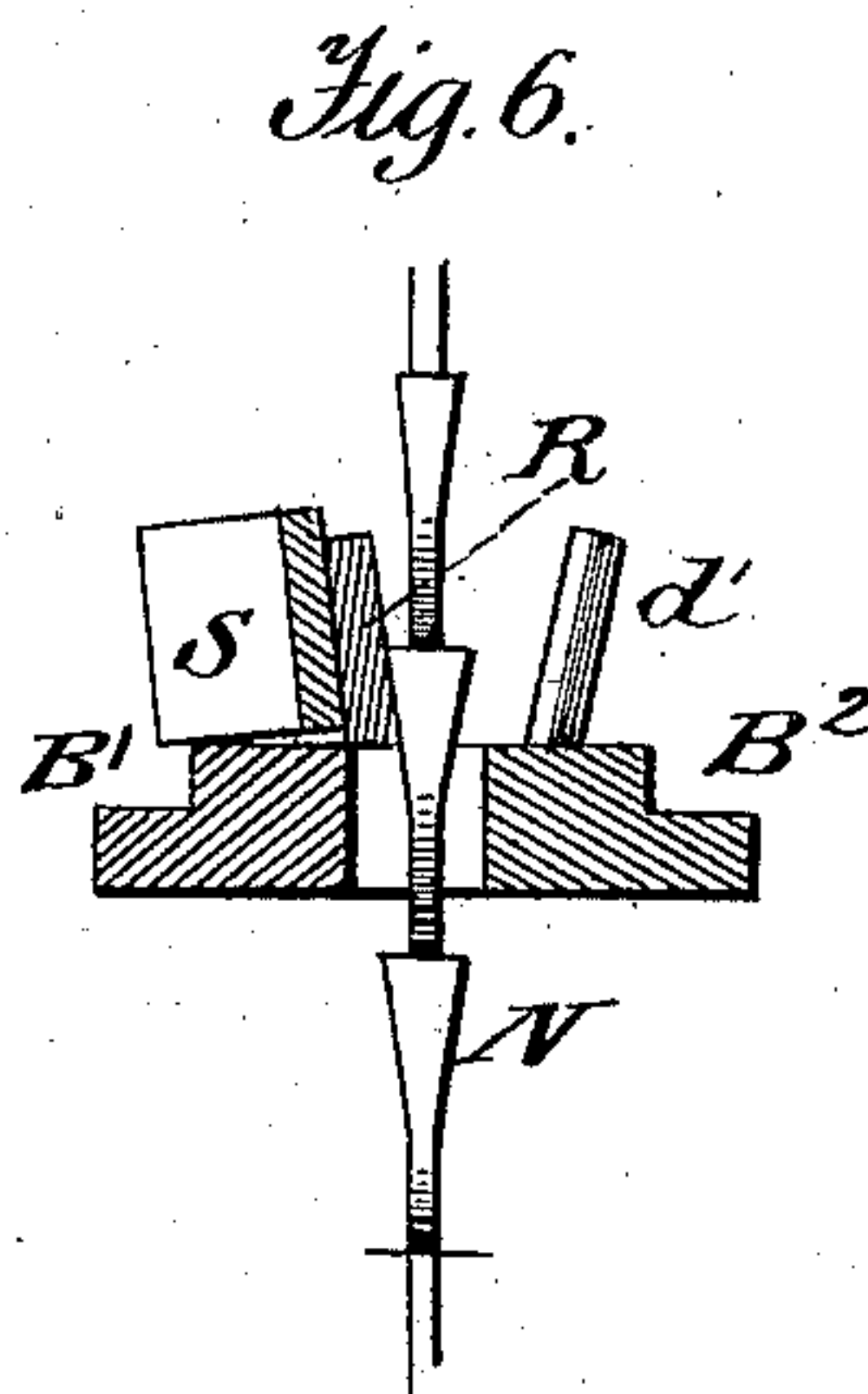
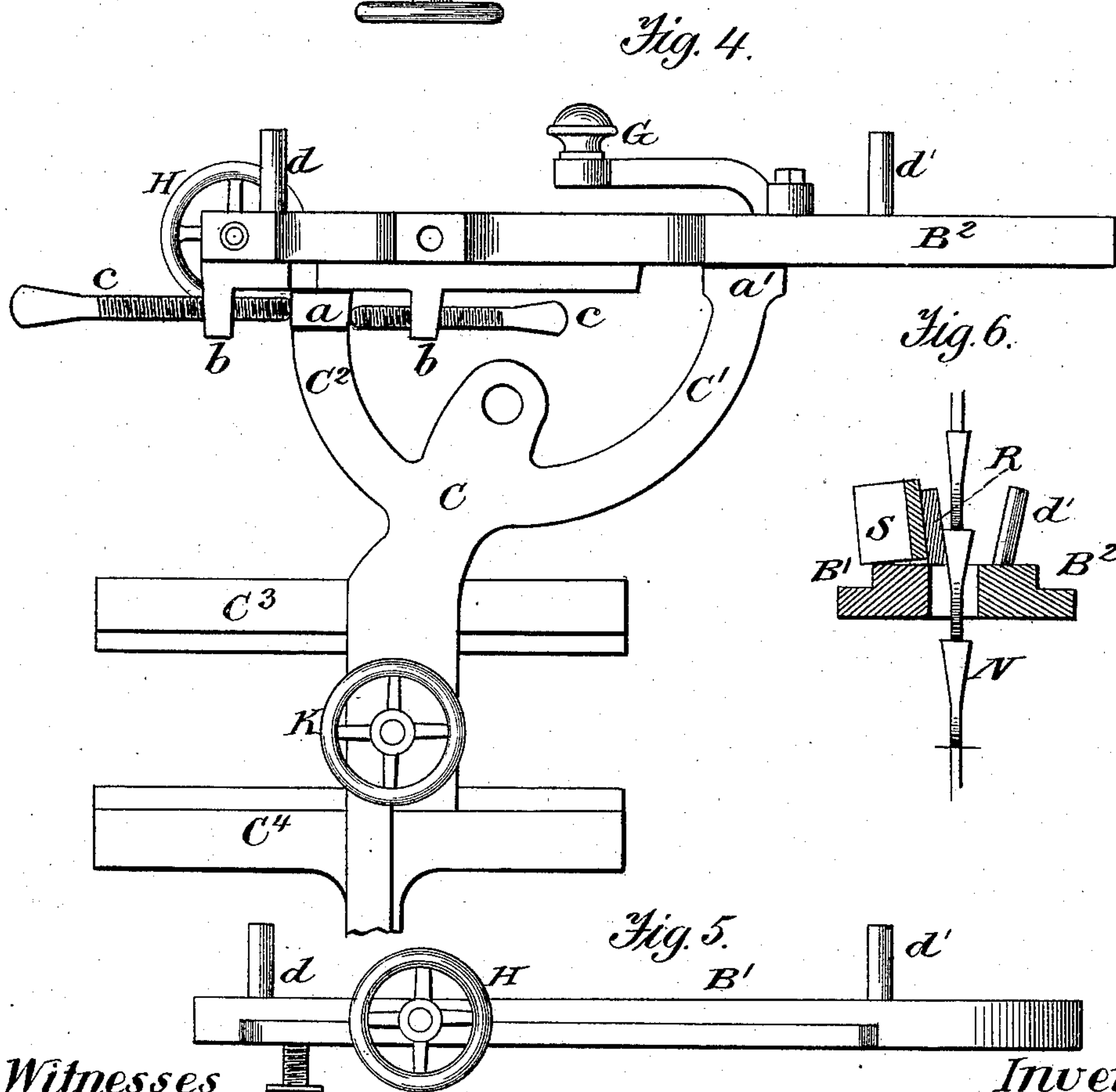
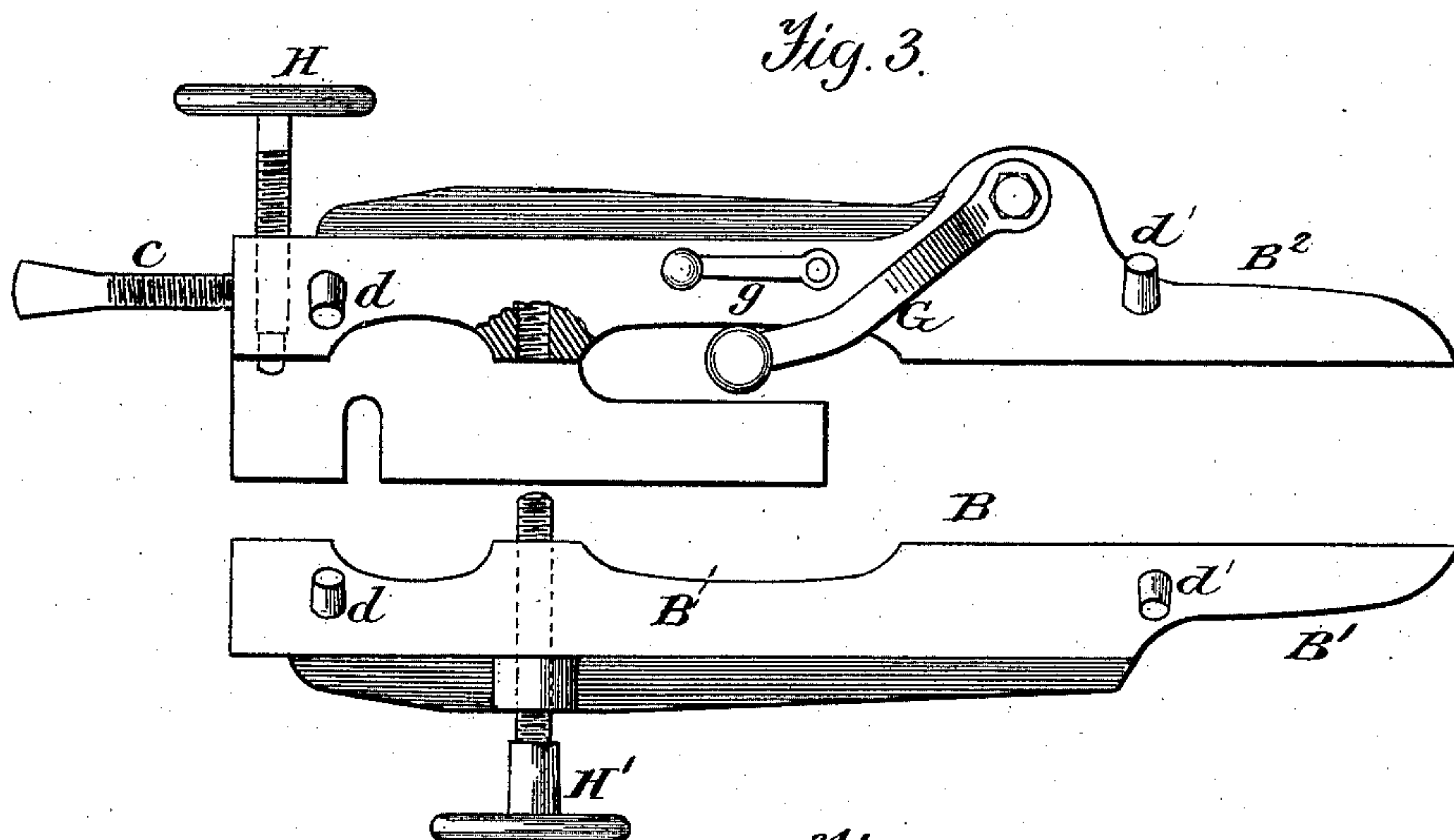
2 Sheets—Sheet 2.

H. W. GEORGIA.

COMBINED JOINTER AND SIDE DRESSER FOR SAWS.

No. 366,215.

Patented July 12, 1887.



Witnesses
A. Ruppert.
R. W. Rutherford

Inventor:
Marrison W. Georgia
by Franklin H. Hough
Attorney

UNITED STATES PATENT OFFICE.

HARRISON W. GEORGIA, OF SMETHPORT, PENNSYLVANIA.

COMBINED JOINTER AND SIDE-DRESSER FOR SAWS.

SPECIFICATION forming part of Letters Patent No. 366,215, dated July 12, 1887.

Application filed March 24, 1887. Serial No. 232,246. (No model.)

To all whom it may concern:

Be it known that I, HARRISON W. GEORGIA, a citizen of the United States, residing at Smethport, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Jointer and Side-Dresser for Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification.

Like letters refer to the same parts throughout the several views.

My invention relates to devices for use in jointing and side-dressing circular saws; and it has for its object to provide an appliance in which I incorporate, in a simple and inexpensive and easily-operated device, an arbor for holding and an appliance for perfectly jointing and side-dressing circular saws.

To this end, and to such others as the invention may relate, the same consists in the peculiar construction, and in the novel combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and particularly defined in the claims.

In the drawings, Figure 1 is a side elevation showing the device as used in jointing a circular saw, parts being shown as broken away in order to more clearly illustrate the details of construction. Fig. 2 is a perspective view, in which the device is shown as used in side-dressing a circular saw. Fig. 3 is a plan view of the jaws separated. Fig. 4 is a side elevation of the same with the front jaw removed. Fig. 5 is a side elevation of the front jaw detached. Fig. 6 is a cross-section on line *x x* of Fig. 2.

Referring now to the details of the drawings, A represents a cleat or strip, preferably of wood, which is bolted or otherwise securely attached to the front edge of a work-bench, table, or other suitable support.

B represents the clamping-jaws, made in two sections, B' B². The supporting-bracket C is provided with upright jaw-supporting arms, C' C², and also provided with the par-

allel horizontal extensions C³ C⁴ upon the inner face and adapted to bear upon the upper and lower faces of the supporting-cleat A, and while thus furnishing a means for supporting the bracket at the same time admit of a free lateral movement upon the same. The upper end of each of the arms C' C² is provided with an enlarged portion, *a a'*, which furnishes a stable support for the clamping-jaw. Beneath the surface of the rear jaw, and at a short distance to the front and rear of the bracket-arm C², are provided the ears *b b*, through which pass the thumb-screws *c c*, which serve to secure the clamping-jaw in position upon the bracket.

D is an arbor secured to the upper surface of the block or strip E, one end of which block is hinged to the strip A, and is made adjustable by means of the adjusting-screw F, which is passed upward through the strip A, and is secured at its upper end to the free end of the strip E.

G is a swinging arm, one end of which is pivoted to the upper surface of the rear clamping-jaw at such a point as to allow the free end of the arm, which is provided with a suitable handle, to be turned so as to intercept the teeth of the saw, which is held between the clamping-jaws, and insure the stopping of the saw in the proper position to present the tooth next to be dressed at the proper point to be operated upon by the file used in side dressing the same.

H H' are screws for adjusting the jaw-sections. Each of the jaws B' B² is provided upon its upper face at the adjusting end of the same with a pin or projection, *d*, these pins being inclined inwardly at a slight angle, as shown; and each of the jaws is also provided upon its upper face, near its opposite end, with a similar pin, *d'*, the said pins *d'* being inclined outwardly, or in a direction opposite to that of the pins *d*, and at an angle corresponding with the angle of said pins.

K is an adjusting-screw passed through the upright portion of the bracket C and bearing against the face of the strip A.

L is a pendent oscillating bar, preferably of wood, though, if desired, it may be constructed of metal. This bar is pivoted at its upper end to the extension C⁵ of the bracket C, and has

removably secured to its face, adjacent to the saw, a file, *e*.

M is an adjusting-screw, passed through the lower end of the bracket-arm C and bearing against the lower end of the bar, as shown.

From the foregoing description the operation of the device will be readily understood. The saw having previously been properly swaged, is placed upon the arbor D, and the pendent jointing-bar L is moved forward by means of the adjusting-screw M until the file carried upon the face of the bar is brought into contact with the edges of the saw-teeth, as shown, and a simple revolution of the saw will result in perfectly jointing the same. After jointing the saw the bar L is adjusted, as shown in Fig. 2, and the clamping-jaws are so adjusted as to bring the teeth of the saw within the central portion of the opening P, between the jaws, and the bracket is secured in the desired position by tightening the adjusting-screw K. If it is found in adjusting the device that the diameter of the saw is such as to prevent the same from being properly adjusted within the clamping-jaws while the saw-arbor is in its normal position, the arbor is adjusted by means of the adjusting-screw F. After having thus properly adjusted the saw within the jaws the gage-arm G is turned across the opening P, so as to intercept the teeth of the saw, and the saw is slightly turned, so as to cause one of the said teeth to bear against the lower surface of the arm G. By turning the adjusting screw H' the saw is held in this position, and the gage-arm is then turned to one side, and the file R, which is adjustably secured to the face of the handle S, is placed so as to bear against the inner face of one of the pins *d* and the outer pin, *d'*, upon the opposite jaw, thus causing the face of the file to bear against the side edge of the saw-tooth at the proper angle for side-dressing the same, as shown in Fig. 6 of the drawings, this angle being regulated by the angle of the pins, as will be readily understood. After the first tooth has been dressed the adjusting screw H is turned so as to permit the saw to be turned, and the next succeeding tooth is brought into position, and the operation repeated until all of the teeth have been operated upon.

In order that short and imperfect teeth may be perfectly side-dressed, I have provided a supplemental stop, *g*, adapted, when turned across the opening between the clamping-jaws, to intercept the short tooth of the saw at a point slightly below that at which it would be stopped had the stop-arm G been used.

While my invention is more particularly adapted for use in jointing and side-dressing circular saws, it will be at once evident that it may also be used in side-dressing any of the various forms of reciprocating saws, in which case the arbor D will not be used, but the saw will be placed at an angle and clamped be-

tween the clamping-jaws, as will be readily understood.

Having thus described my invention and set forth its merits, what I claim to be new, and desire to secure by Letters Patent, is—

1. The combination, with the clamping-jaws, of the supplemental stop *g*, carried by one of said jaws, substantially as and for the purpose described.

2. In a device for the purpose described, a two-part clamp combined with a stop, as G, pivoted to one of said parts, substantially as described.

3. In a device for the purpose described, the combination, with the clamp, of a stop, as G, and a supplemental stop, as *g*, substantially as and for the purpose described.

4. The combination, with a two-part clamp, of a stop, as G, pivoted upon one of said parts, and a supplemental stop pivoted upon the same part and constructed to move in a lower plane than said stop G, substantially as and for the purpose described.

5. In a device for the purpose described, a saw-clamp provided with a recess to receive the saw, combined with pins arranged in pairs upon said clamp upon opposite sides of said recess, substantially as and for the purpose described.

6. In a device for the purpose described, a saw-clamp provided with a recess to receive the saw, combined with pins arranged in pairs upon opposite sides of said recess, the pins in each pair being inversely inclined, the inclination of the pin upon one side of said recess at one end being the same as the inclination of the pin upon the opposite side at the other end, substantially as and for the purpose described.

7. The combination, with the side-dressing devices, of an arbor carried by a swinging support, substantially as and for the purpose described.

8. In a device for the purpose described, the combination, with the side-dressing devices and the strip A, of the strip E, hinged to the strip A and carrying the arbor D, and the screw F, passed vertically through the strip A and engaging the free end of the strip E, substantially as and for the purpose described.

9. A device for the purpose described, comprising side-dressing devices, an adjustable clamp carrying the same, an oscillating jointing device, an adjustable arbor, and a swinging support for the same, all arranged and operating substantially in the manner and for the purpose specified.

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

HARRISON W. GEORGIA.

Witnesses:

FRANKLIN H. HOUGH,
A. C. PANE.