

No. 768,663.

PATENTED AUG. 30, 1904.

J. A. JACKSON.
RIPPING SAW PROTECTOR.
APPLICATION FILED NOV. 18, 1901.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

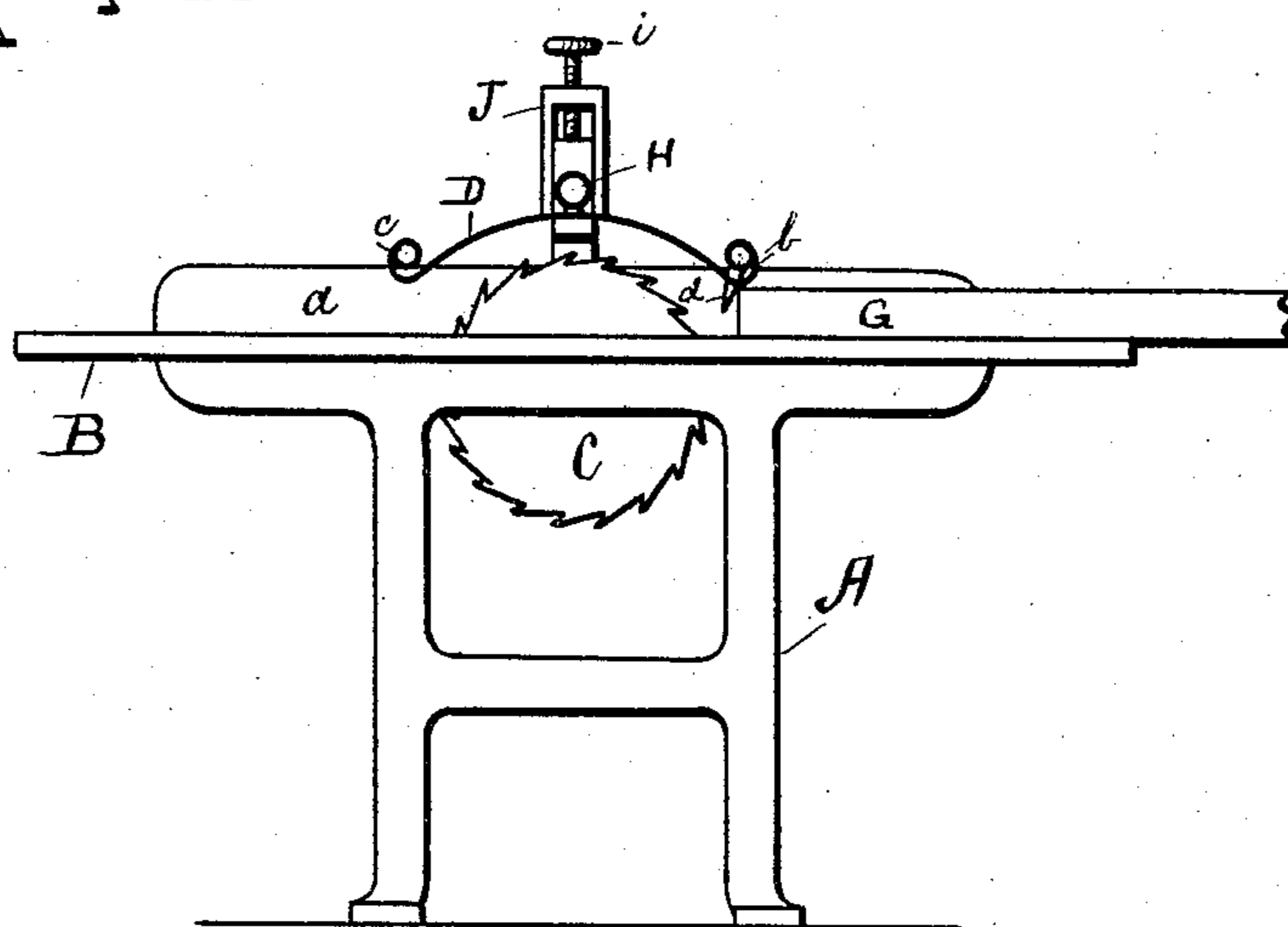
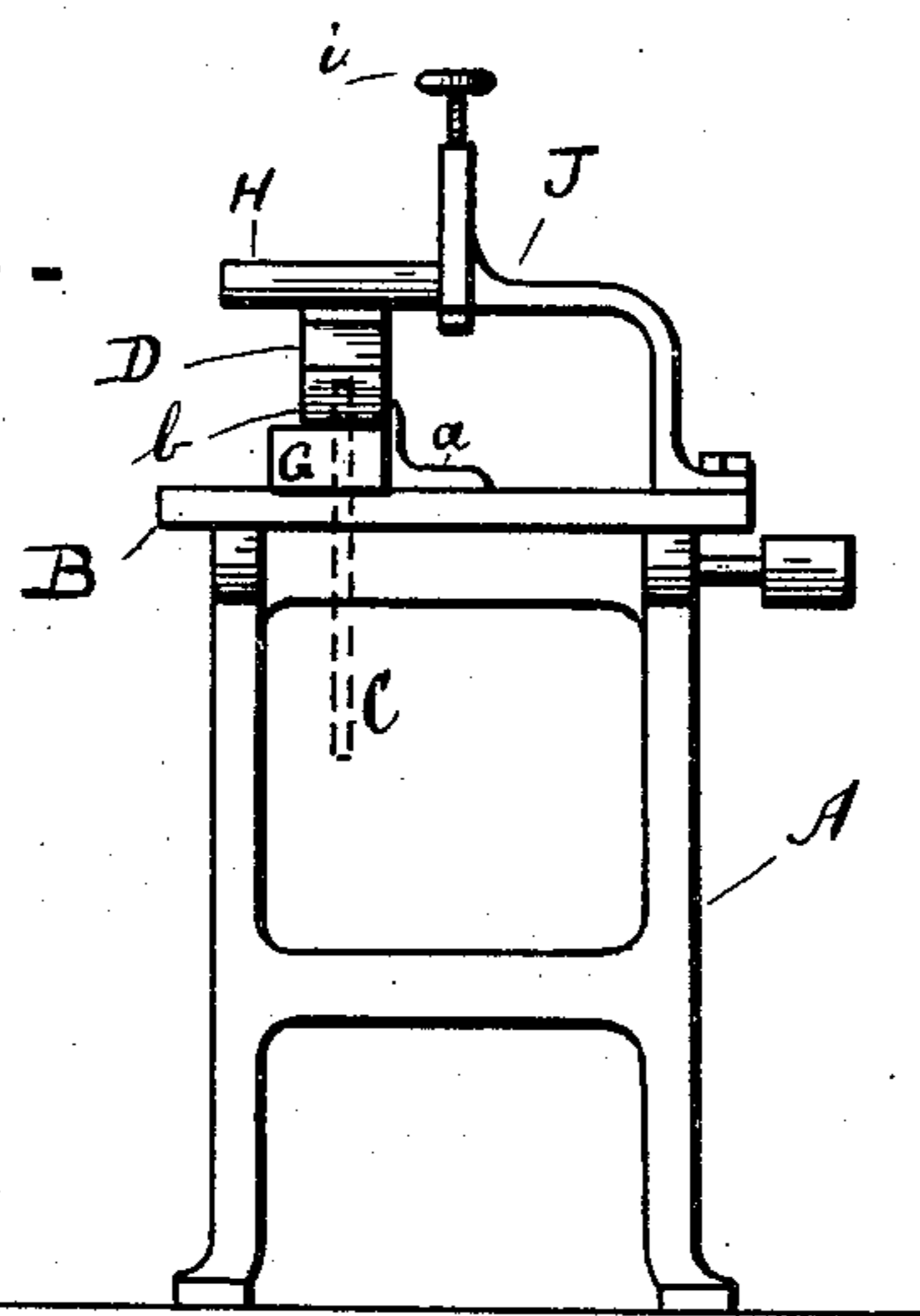


Fig. 2.



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2 SHEETS—SHEET 2.

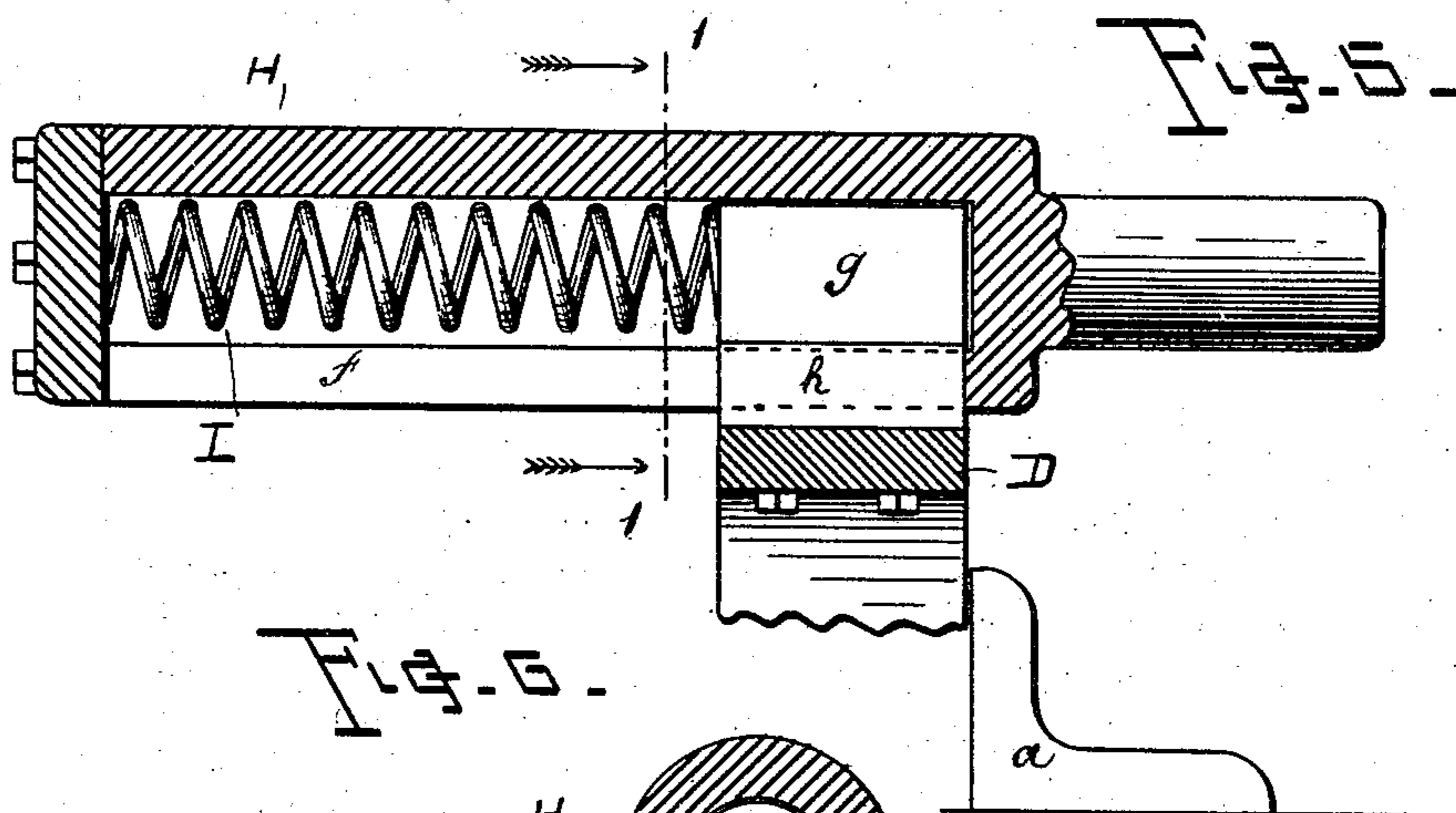
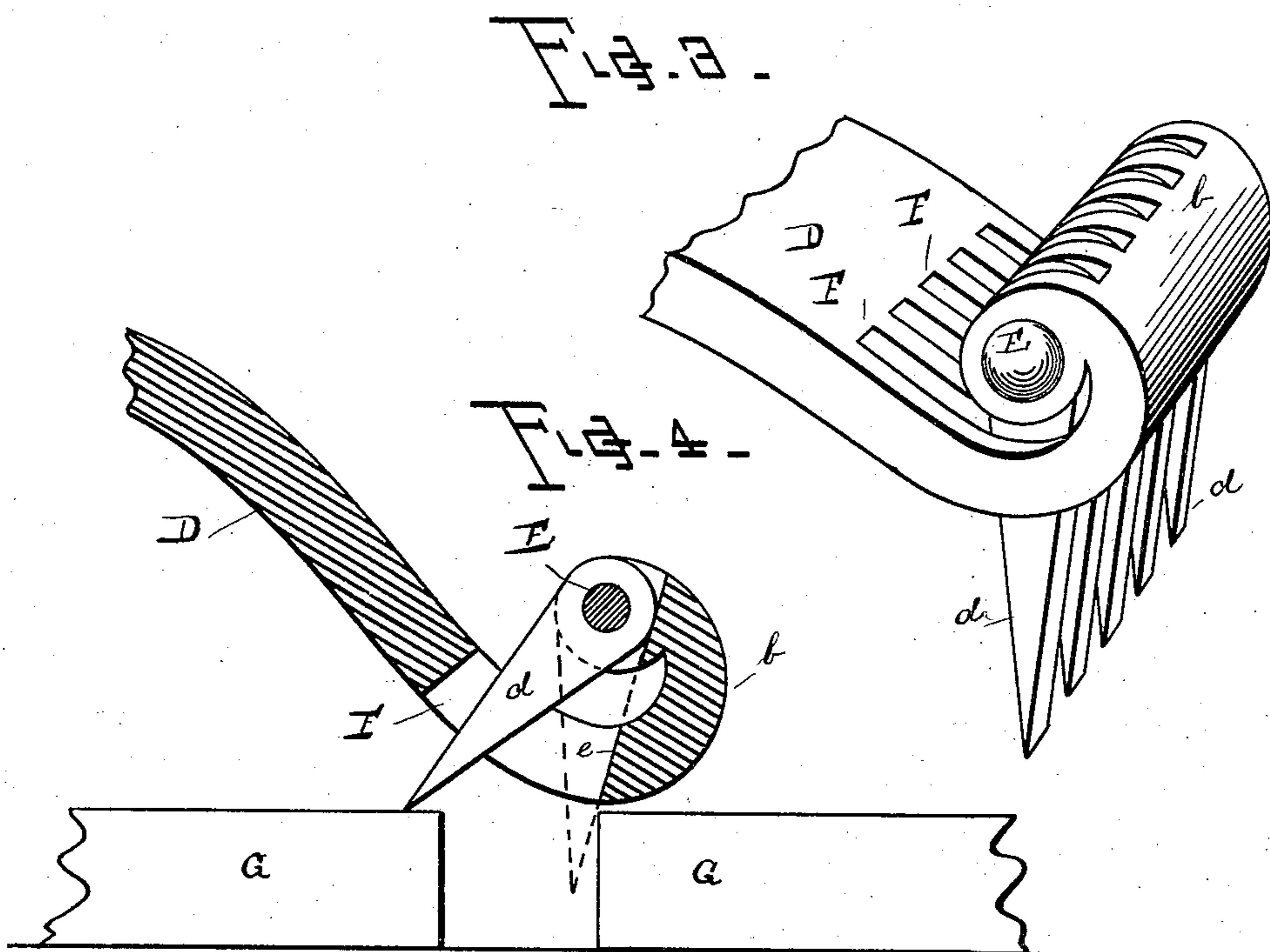
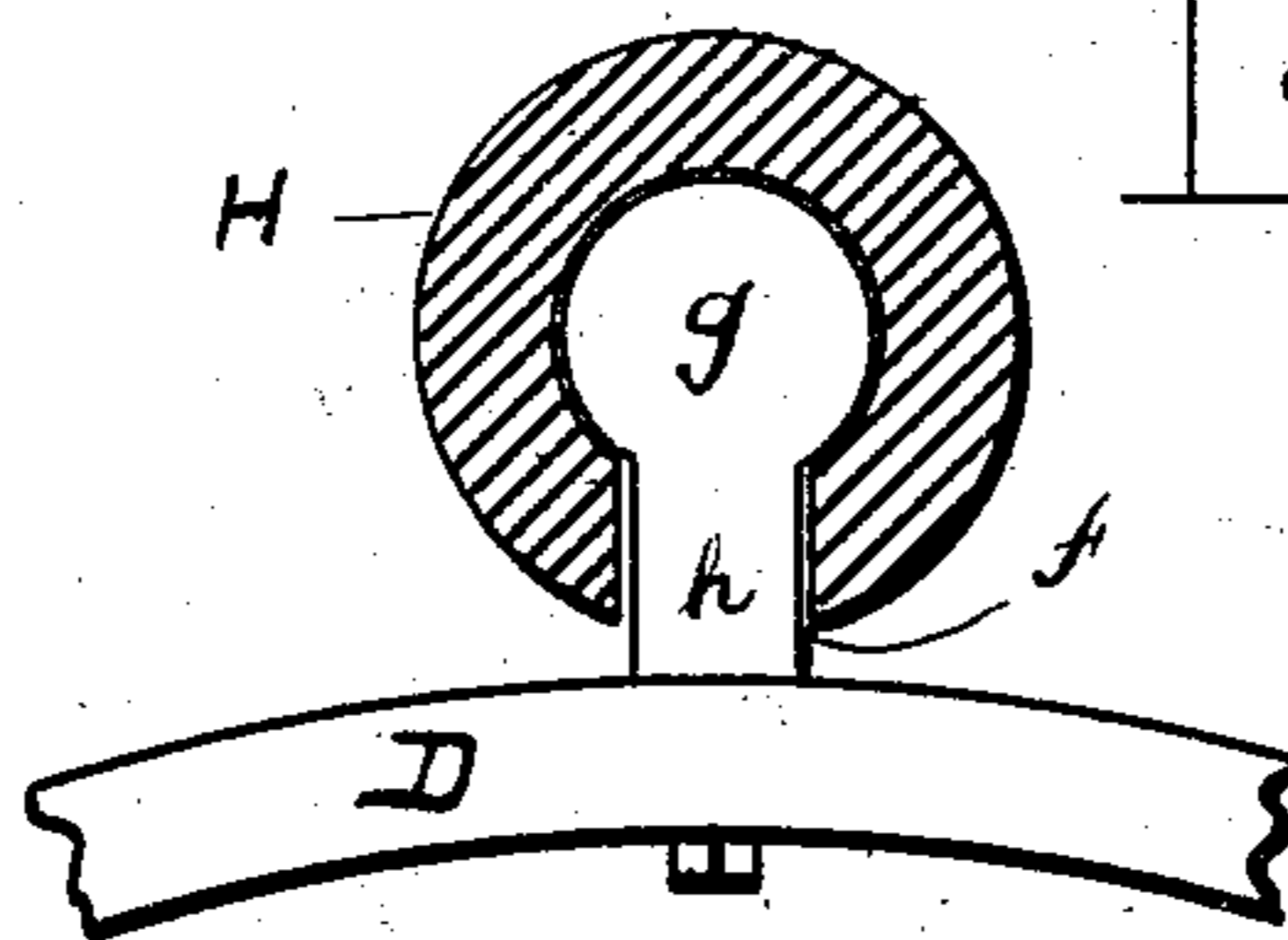


Fig. 6.



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UNITED STATES PATENT OFFICE.

JESSE A. JACKSON, OF OAKLAND, CALIFORNIA, ASSIGNOR OF ONE-THIRD
TO D. V. DEUEL, OF OAKLAND, CALIFORNIA.

RIPPING-SAW PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 768,663, dated August 30, 1904.

Application filed November 18, 1901. Serial No. 82,800½. (No model.)

To all whom it may concern:

Be it known that I, JESSE A. JACKSON, a citizen of the United States, and a resident of Oakland, county of Alameda, and State of California, have invented certain new and useful Improvements in Ripping-Saw Protectors; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates particularly to a protector for ripping-saws; and it consists to provide a series of independent movable teeth secured thereon and of automatic adjustable horizontal means, and further consists in the construction and arrangement of its various parts, as will be more fully described hereinafter.

The object of my invention is to produce a simple and convenient device adapted to be applied to any ordinary-constructed ripping-saw, reference being had to the accompanying drawings, which form part of the following description, in which—

Figure 1 represents a side elevation of an ordinary ripping-saw provided with my improved protector in position. Fig. 2 is a front end elevation of Fig. 1. Fig. 3 is a perspective view of my improved protector broken away, showing particularly the movable teeth secured thereon. Fig. 4 is a sectional view of Fig. 3, showing particularly the working of the movable teeth. Fig. 5 is a longitudinal section of my improved supporter whereby the protector can be automatically adjusted horizontally, and Fig. 6 is a cross-section taken from line 1 to 1 of Fig. 5.

Similar letters refer to similar parts throughout the drawings.

The frame A, with its table B, the circular saw C, and the adjustable guide *a*, constitute a completed ordinary ripping-saw upon which my improved protector is mounted. This protector consists of a metallic plate D, of sufficient length and width and bent corre-

spondingly to the diameter of the saw, above which it is secured.

The forward end *b* and the rear end *c* of the plate are preferably curled outwardly and inwardly, so that in operation the lumber could slide easily beneath. The rear end, however, is thus curled particularly for ornamental purposes, while the forward end provides suitable means to secure the movable teeth *d*, which are held in position by means of shaft E, placed within the aperture formed along the width of the plate at the extreme end of the inward curl. These teeth are preferably made angular in shape and have a sharp end dropping downward beneath the plate, while the other end is round, corresponding with the shape of the curled end of the plate, and sufficiently broad to provide a central aperture corresponding in diameter to the size of the shaft E, to which they are secured independently to each other within the slots F, cut lengthwise through the plate, and at its extreme curled end, as particularly shown in Figs. 3 and 4.

The slots are made long enough toward the ends of the plate to allow the teeth to move backward out of the way and to slide upon the lumber G while passing beneath the plate until its rear end is reached, where the teeth drop out and rest perpendicularly against the shoulder *e*, as particularly shown in Fig. 4. Thus in this manner if the lumber happens to move backward the sharp end of the teeth will naturally stick fast into the wood and prevent thereby any further movements, and the same result can be obtained while the teeth rest perpendicularly against the shoulder *e*. The number of teeth is immaterial; but it is preferable to be sufficiently large to cover lumber of various widths without readjustment.

The plate D is secured above the ripping-saw by means of a horizontal automatic support H. This support consists of a cylindrical shell having a narrow longitudinal slot *f* cut through its lower side. Within the

shell and corresponding with its inner diameter is a solid block *g*, which is provided with a projection *h*, adjusted within the slot just mentioned and projecting downwardly.

5 Against the projection just mentioned the plate D is secured crosswise by means of suitable bolts, as shown in Figs. 5 and 6.

The block *g* is adapted to slide freely within the shell and kept in position by means of
10 a coiled spring I, placed between the block and the forward end of the shell, which forces constantly the block toward the rear end. Its movements, however, are controlled by the action of the adjustable guide *a*, which may
15 be forced against the adjacent side of the plate D, as shown particularly in Fig. 5, thus moving and adjusting horizontally the plate D according to the width of the lumber to be ripped. The rear end of the shell is reduced
20 in diameter, as shown in Fig. 5, and secured to the vertical adjustable bracket J, mounted upon the table B, as shown in Figs. 1 and 2, and provided with a screw and hand-wheel *i*, secured to the bracket for controlling its ver-
25 tical adjustment.

I am aware that various changes can be made in the construction and shape of my invention without, however, affecting its scope, and, believing I have produced novel and use-
30 ful improvements in ripping-saw protectors and having described the same,

What I claim, and desire to secure by United States Letters Patent, is—

1. In a ripping-saw protector consisting of
35 a bow-shaped plate bent outwardly at one end to form a support, a series of slots cut upon said support in combination with movable teeth secured within said slots, substantially as set forth and for the purpose specified.

40 2. In a ripping-saw protector consisting of a bow-shaped plate, having a series of slots cut lengthwise thereon, in combination with independent movable teeth secured within said slots, substantially as set forth and for
45 the purpose specified.

3. In a ripping-saw protector having a bow-shaped and an outward and inward curled forward end, in combination with movable teeth secured to the inward curl, substantially as
50 set forth and for the purpose specified.

4. A ripping-saw protector consisting of a horizontally and vertically adjustable bow-shaped plate, bent outwardly at its forward end, in combination with a series of independ-
55 ent teeth secured thereon, substantially as set forth and for the purpose specified.

5. In a ripping-saw protector consisting of a metallic plate, provided at one end with an upward support, slots cut upon said plate,
60 and the support, in combination with independent teeth secured to said support by means

of suitable shaft, and adapted to move freely within said slots, substantially as set forth and for the purpose specified.

6. A ripping-saw protector consisting of a
65 suitable plate provided with a series of independent teeth mounted thereon, in combination with automatic adjustable means controlled by the position of the lumber-guide of the ripping-saw for adjusting said plate
70 horizontally, substantially as set forth and for the purpose specified.

7. In a ripping-saw protector a horizontally-adjustable support, consisting of a cylindrical shell having a movable block secured
75 therein, in combination with a bow-shaped plate secured to said block and provided with a series of independent teeth secured thereon, said support being controlled by the position of the lumber-guide of the ripping-saw, sub-
80 stantially as set forth and for the purpose specified.

8. In a ripping-saw protector, a bow-shaped plate curled outwardly at its forward end and having a series of independent teeth mounted
85 upon the curled end, in combination with a horizontal support for said plate, consisting of an automatic adjustable block secured within a vertically-adjustable cylindrical shell, said block depending in its adjustment on the po-
90 sition of the lumber-guide of the ripping-saw, substantially as set forth and for the purpose specified.

9. A ripping-saw protector consisting of a bow-shaped plate curled outwardly at its ends
95 and having a series of independent teeth secured thereon, in combination with a horizontal support consisting of a cylindrical shell, provided with automatic adjustable block secured therein and to said plate, said block
100 depending in its adjustment on the position of the lumber-guide of the ripping-saw, substantially as set forth and for the purpose specified.

10. A ripping-saw protector consisting of a
105 suitable plate provided with horizontal adjustable support consisting of cylindrical shell having a longitudinal slot, a movable block secured within said shell and projecting through the slot and means to move said block, said
110 block being limited in its movement by the engagement of the protector with the lumber-guide of the ripping-saw, substantially as set forth and for the purpose specified.

In testimony whereof I have affixed my sig-
115 nature, in presence of two witnesses, this 3d day of October, A. D. 1901.

JESSE A. JACKSON.

In presence of—

E. P. VAUGHAN,
A. S. PARÉ.