

(No Model.)

G. A. SHIELDS.
SAFETY GUARD FOR RIP SAWS.

No. 528,262.

Patented Oct. 30, 1894.

Fig. 1

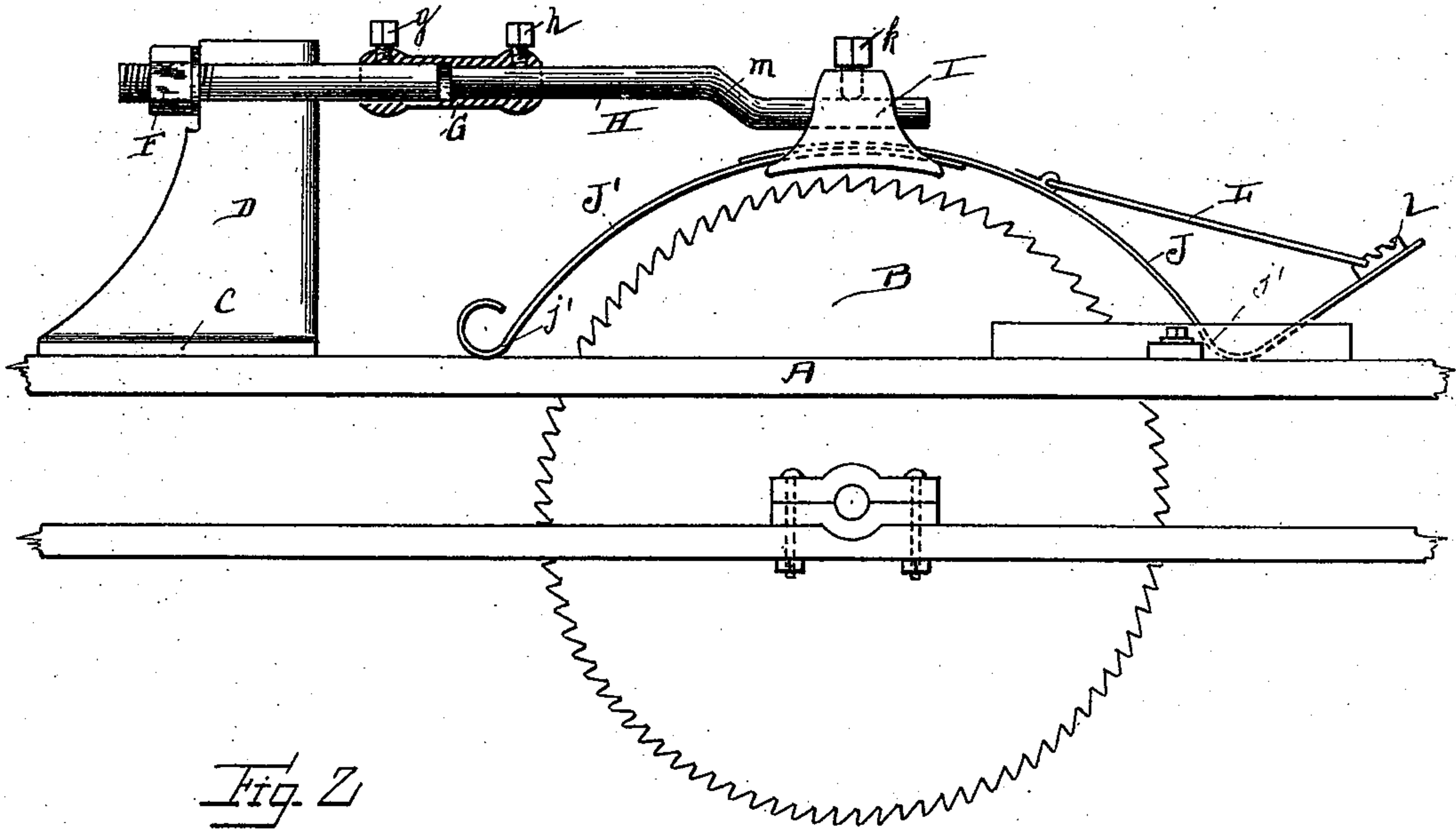


Fig. 2

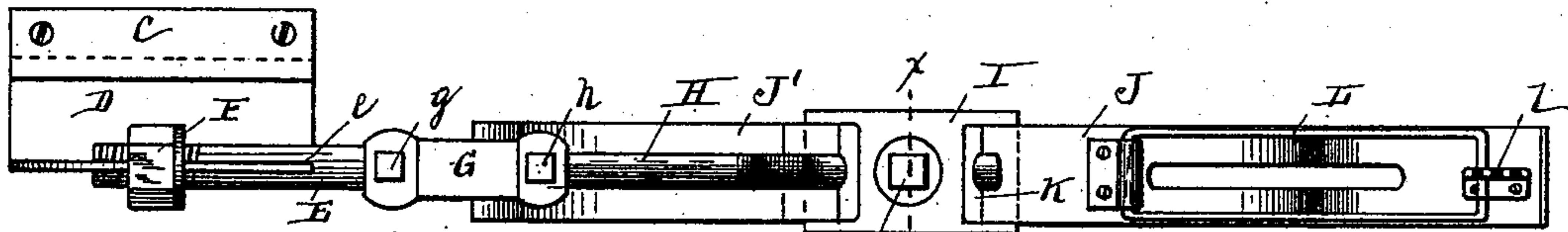


Fig. 3

Fig. 4

Fig. 5

Fig. 6

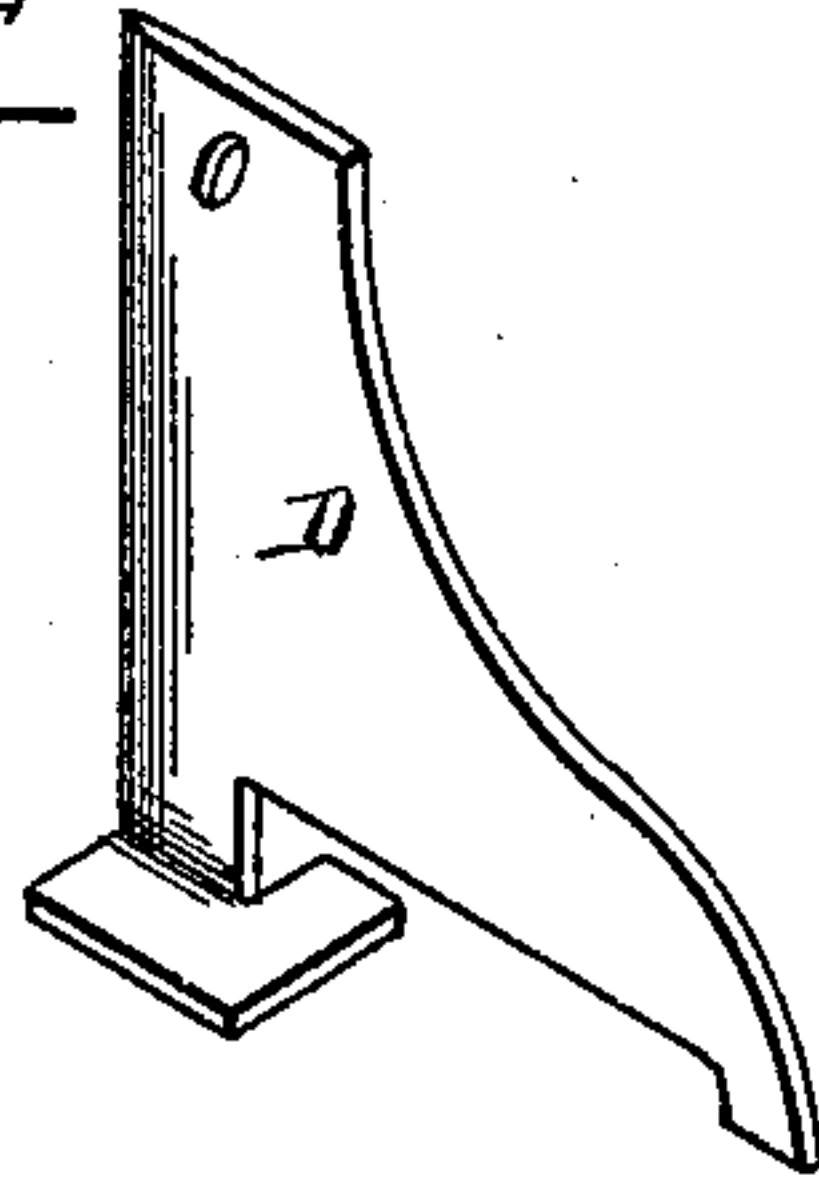
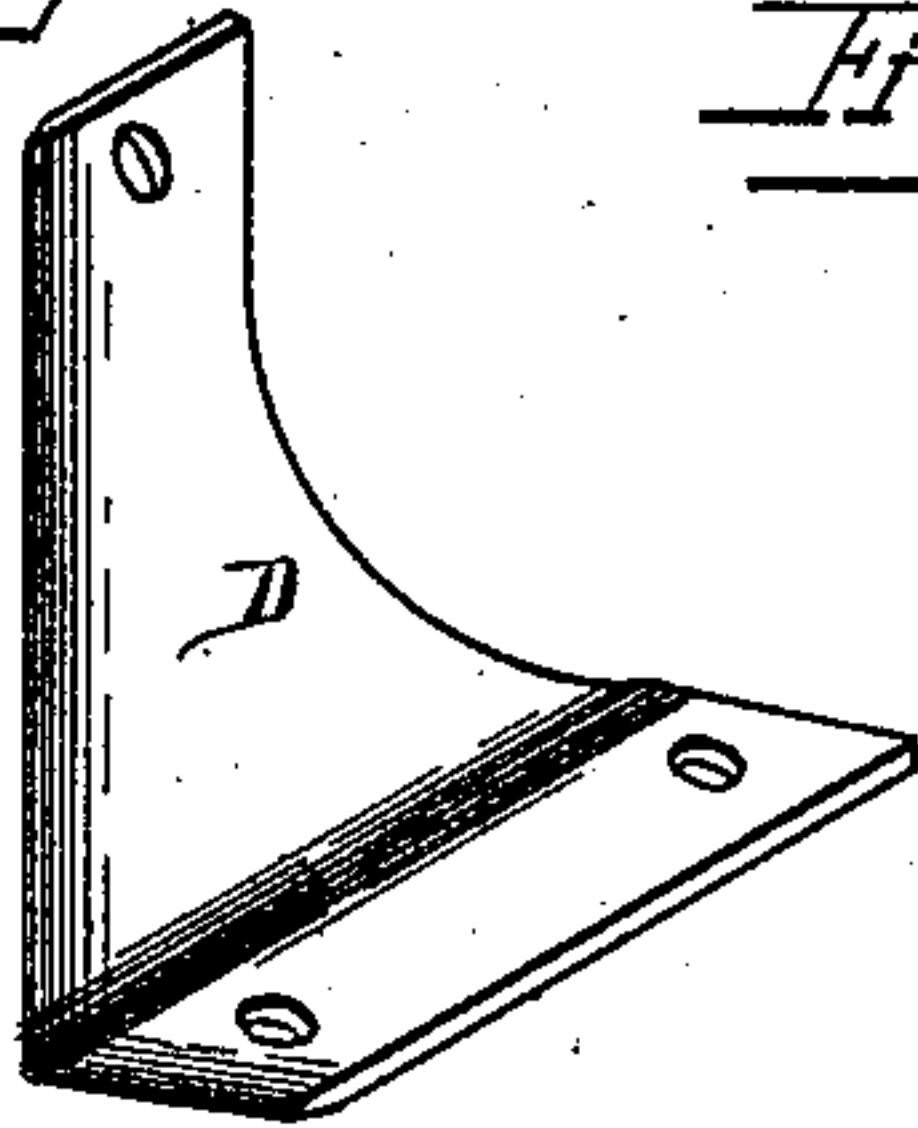
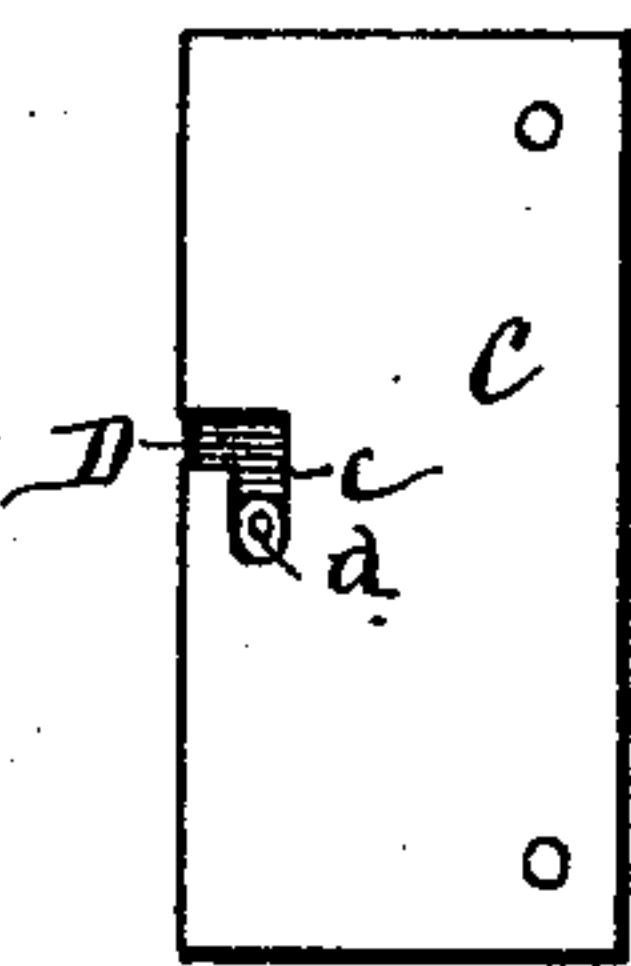
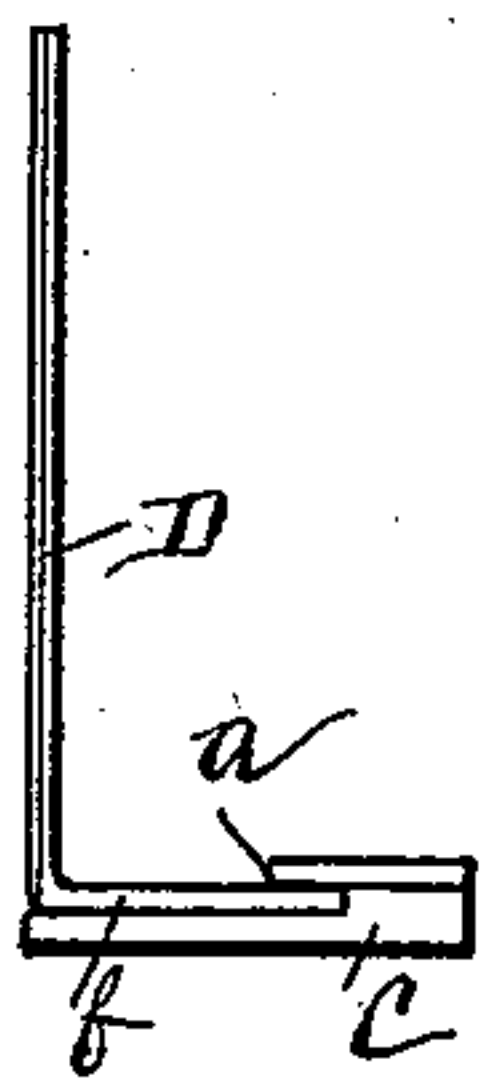
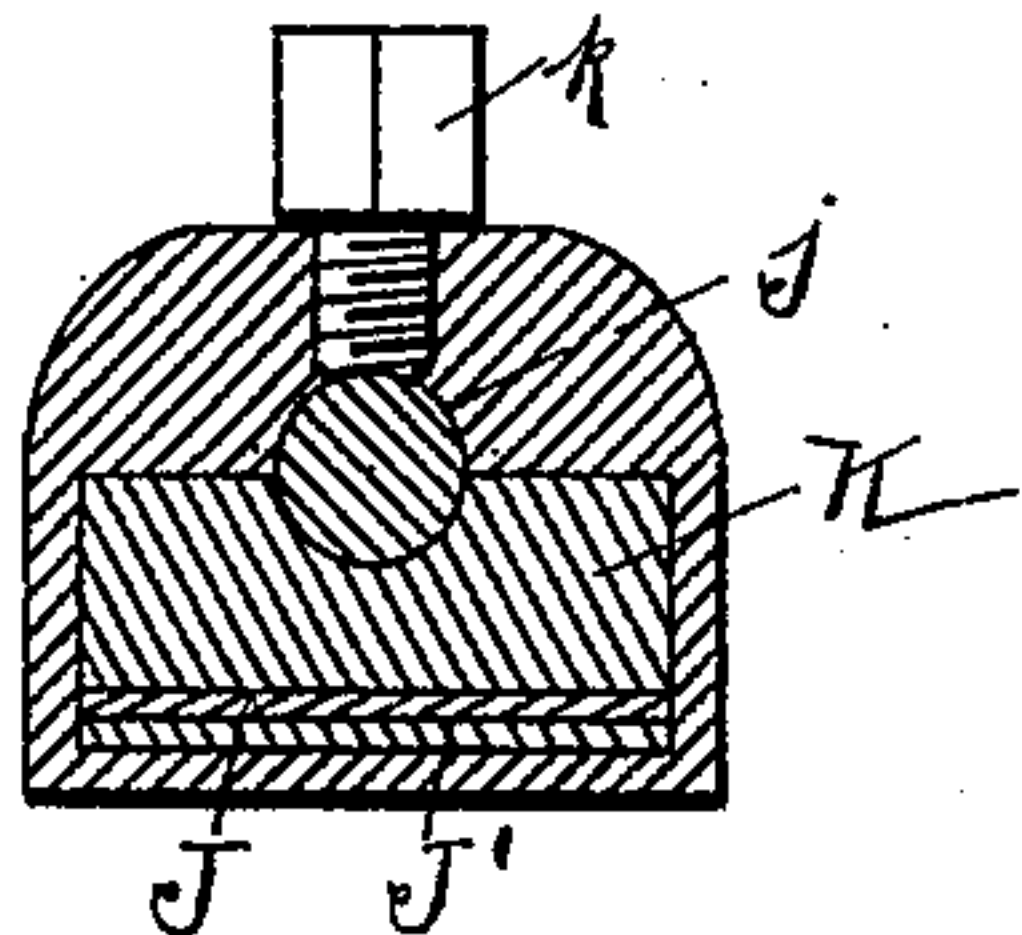


Fig. 7



WITNESSES

Geo. M. Anderson
Phil. Massi.

INVENTOR

Geo. A. Shields
By E. W. Anderson
Attorney

UNITED STATES PATENT OFFICE.

GEORGE A. SHIELDS, OF ANDERSON, INDIANA, ASSIGNOR TO THE SHIELDS MANUFACTURING COMPANY, OF SAME PLACE.

SAFETY-GUARD FOR RIP-SAWS.

SPECIFICATION forming part of Letters Patent No. 528,262, dated October 30, 1894.

Application filed January 31, 1894. Serial No. 498,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. SHIELDS, a citizen of the United States, and a resident of Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Safety-Guards for Rip-Saws; and I do 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 to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation of the invention applied. Fig. 2 is a top plan view of the invention. Fig. 3 is an end view of the splitter and socket. Fig. 4 is a bottom view of the socket. Figs. 5 and 6 are detail views showing modified forms of the splitter, and Fig. 7 is a section on the line $x x$, Fig. 2.

This invention has relation to certain new and useful improvements in safety guards for rip-saws; and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the accompanying claims.

The object of the invention is to provide a simple, convenient, and practical device, adapted to be supported over the exposed portion of a rotary saw, and thereby greatly lessen the chances of injury to the operator, either by contact therewith, or by flying missiles thrown from the saw.

Referring to the accompanying drawings, the letter A designates a saw table of the usual form, and B a rotary saw.

Set in the table at the rear of the saw, is a socket plate C, adapted to receive and support a vertical splitter D. In the drawings, I have shown the socket plate C as having a groove or guide a , for the horizontal base b of the splitter, and an L-shaped slot c , which is engaged by a pin d projecting from the under side of the said base b . Other suitable forms of socket plate may however be employed.

Figs. 5 and 6 show different forms of splitters.

The upper end portion of the splitter en-

gages a longitudinal slot e in the end portion of a horizontal rod E, and is held therein by means of a nut and washer F, on the threaded end of said rod. The forward end portion of the said rod is adjustably held in a coupling sleeve G by a screw g . In the other end portion of said sleeve is held one end portion of a second horizontal rod H, which is also adjustable and is held by a screw h . The opposite end portion of the rod H is held in a clamp I which also holds the guard plates J, J'. Said clamp has a semi-cylindrical groove j , which receives one-half of the rod, a removable wedge K being provided with a similar groove to receive the other half. The wedge K is seated in a cut-away portion of the clamp, and the rod H is adjustably held by means of a screw k .

The guard plates J, J' consist each of an arched strip, preferably of spring metal. Their upper ends overlie each other and are held in the clamp I between the wedge K and the lower wall of the cut-away portion. Said wall is preferably somewhat convex, and the face of the wedge is concaved to conform to the curvature of the plates. These plates are arched over the periphery of the saw, as shown, and their lower ends are bent upwardly as at j' in order to facilitate the passage thereunder of the board or other material which is being sawed. The lower end of the plate J under which the material passes to the saw is bent upwardly to a greater extent than is the corresponding portion of the plate J', and in order to regulate the bearing tension of this portion, I hinge or pivot a bail device L to the plate, said device at its lower end being arranged to engage with projections or teeth l on the turned up portion. By engaging this bail with different of these projections or teeth it will be apparent that the tension may be regulated.

By loosening the clamp I the guard plates may be extended or contracted upon each other to fit saws of different diameters, the construction of the support as above described providing also for the necessary horizontal and vertical adjustments of the parts to correspond.

The rod H, while it may be straight, is pref-

erably bent as shown at *m*, so that by turning said rod the guard plates may be swung either to the right or left of the saw.

The splitter keeps the kerf open, preventing the lumber from closing on the saw, and also from pinching and heating the latter.

Having described my invention, what I believe to be new, and desire to secure by Letters Patent, is—

10 1. In a saw guard, the combination with a socket piece, the splitter engaging said socket, the adjustable two-part rod supported by said splitter, of the clamp I having the cut away portion, the wedge seated therein, the adjust-

able guard plates held in said clamp, and a tension device for one of said guard plates, substantially as specified.

2. In a saw guard, the clamp I, having the cut-away portion, the wedge seated therein, the holding screw, and the adjustable guard plates held in said clamp, substantially as specified.

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

GEORGE A. SHIELDS.

Witnesses:

SAMUEL P. MOORE,
HIRAM TUCKER.