

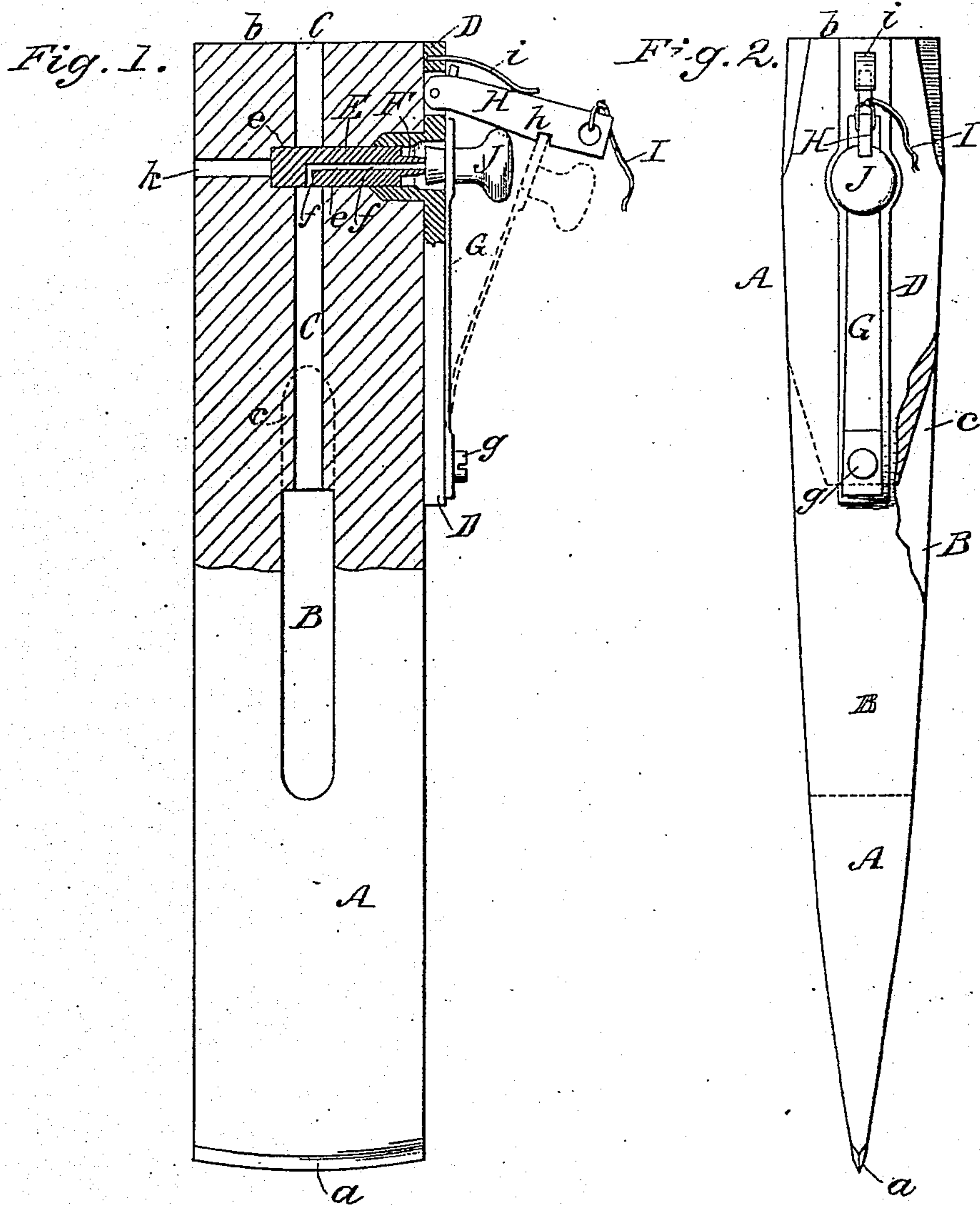
(No Model.)

C. R. COUNTRYMAN.

WEDGE.

No. 315,006.

Patented Apr. 7, 1885.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

CHARLES R. COUNTRYMAN, OF SHERMAN, WYOMING TERRITORY.

## WEDGE.

SPECIFICATION forming part of Letters Patent No. 315,006, dated April 7, 1885.

Application filed August 30, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES R. COUNTRYMAN, of Sherman, in the county of Albany and Territory of Wyoming, have invented a new and Improved Wedge, of which the following is a full, clear, and exact description.

The object of my invention is to facilitate the splitting of logs by means of wedges.

The invention consists in various details of construction of the firing devices by which the charge in the wedge is exploded and in combinations of the firing devices with the wedge, all as hereinafter fully described and claimed.

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

Figure 1 is a side view of my improved wedge, partly in section; and Fig. 2 is an edge view thereof, partly broken away.

The letter A indicates the wedge, which is to be made of metal, preferably of steel, and having a pointed end, *a*, to enter the log, and a head, *b*, suitably shaped to receive the blows of a maul or hammer for driving the wedge to split the log.

The wedge shown has a hole or opening, B, made through it from side to side, and there is a bore or channel, C, made in the wedge from its top portion, and so as to communicate with the hole B to allow the hole when the wedge is driven to be filled with powder or other explosive to be fired by any suitable fuse or contrivance for splitting the log in case it fails to split sufficiently by the driving of the wedge alone.

I show the bore C made through the center of the head of the wedge; but it may pass from any part of the top portion of the wedge which will be exposed when the wedge is driven, so as to allow charging of the hole B through the bore C. I make the extension *c* to the hole B at each side of the wedge to distribute the force or shock of the explosion over a larger part of the faces of the log which bear on the wedge for better effect in splitting the log.

I show the hole B passing entirely through the wedge, and having a long narrow form at each face of the wedge; but it is evident that

two broad flat openings may be made in the opposite faces of the wedge and be separated by a partition, and both holes may connect with the channel C to be charged therefrom; or the hole or holes B may have any form, size, or direction of traverse in the body of the wedge so as to allow the hole or holes to be charged with an explosive when the wedge is driven, and so that the force of the explosion shall act against the opposing faces of the log.

As above intimated, the hole C may be plugged in any way, and the charge in the hole B be ignited by a fuse introduced into the wedge in any way; but I provide a percussion-cap and trigger and hammer device for this purpose, as next described.

D is a plate having fixed to it the plug E, which fits a hole, *e*, bored in the wedge, and so that the plug E crosses the bore C to plug it up after the hole B is charged with the explosive. The plug E has a passage, *f*, through it which connects the bore C with the nipple F, formed on the end of the plug to receive a percussion-cap of any kind, which will, when struck by the spring-hammer G, fire the explosive in the wedge.

I connect the hammer G by a screw or pin, *g*, with the plate D, and the upper end of the hammer is adapted to enter a notch, *h*, of a pivoted trigger, H, which is pressed down by a spring, *i*, and has a pull-cord, I, connected to it, so that when the hammer is caught in the notch *h* of the trigger, as in dotted lines in Fig. 1, and the cord I is pulled, the hammer will fall forcibly on the cap placed on the nipple F to fire the explosive in the wedge and split the log.

The hammer G has a suitable head or pull-knob, J, by which to draw it out conveniently for setting the trigger on it.

The fit of the plug E in its hole *e* holds the plate D and its entire firing mechanism to the wedge, and a hole, *k*, may be made in the wedge through which to introduce a punch or tool for driving the plug E with the plate D and firing mechanism clear of the wedge, so that these parts will not interfere with the driving of the wedge, as will readily be understood.

The force of the exploded charge expends



itself in splitting the log without damaging the wedge, which may be used repeatedly in the manner above described.

Having thus described my invention, I claim  
5 as new, and desire to secure by Letters Patent—

1. The combination, with the wedge A, having a hole, B, and channel C, of the plug E, crossing the channel C and having the passage *f* and nipple F, and a hammer, G, and  
10 devices for setting and releasing the hammer, substantially as shown and described.

2. The combination, with the wedge A, hav-

ing a hole, B, and channel C, of the plug E, having a passage, *f*, and nipple F, and fastened to a plate, D, to which plate a spring- 15 pressed hammer, G, and trigger H are attached, all substantially as shown and described.

CHARLES R. COUNTRYMAN.

Witnesses:

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