

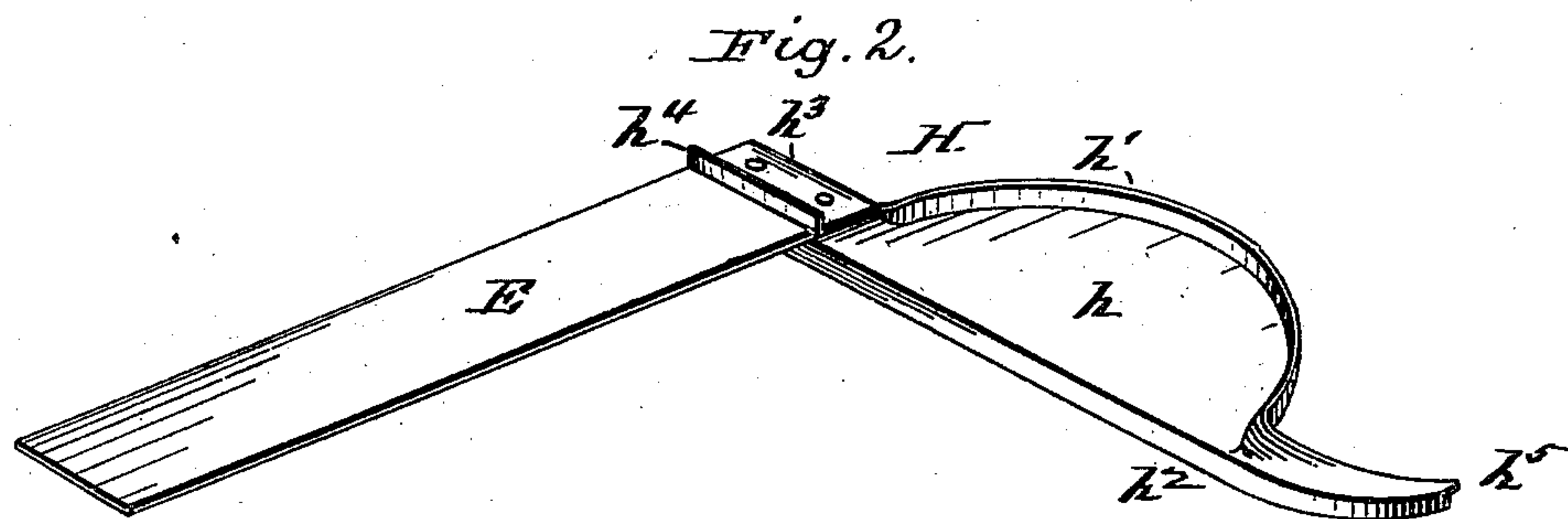
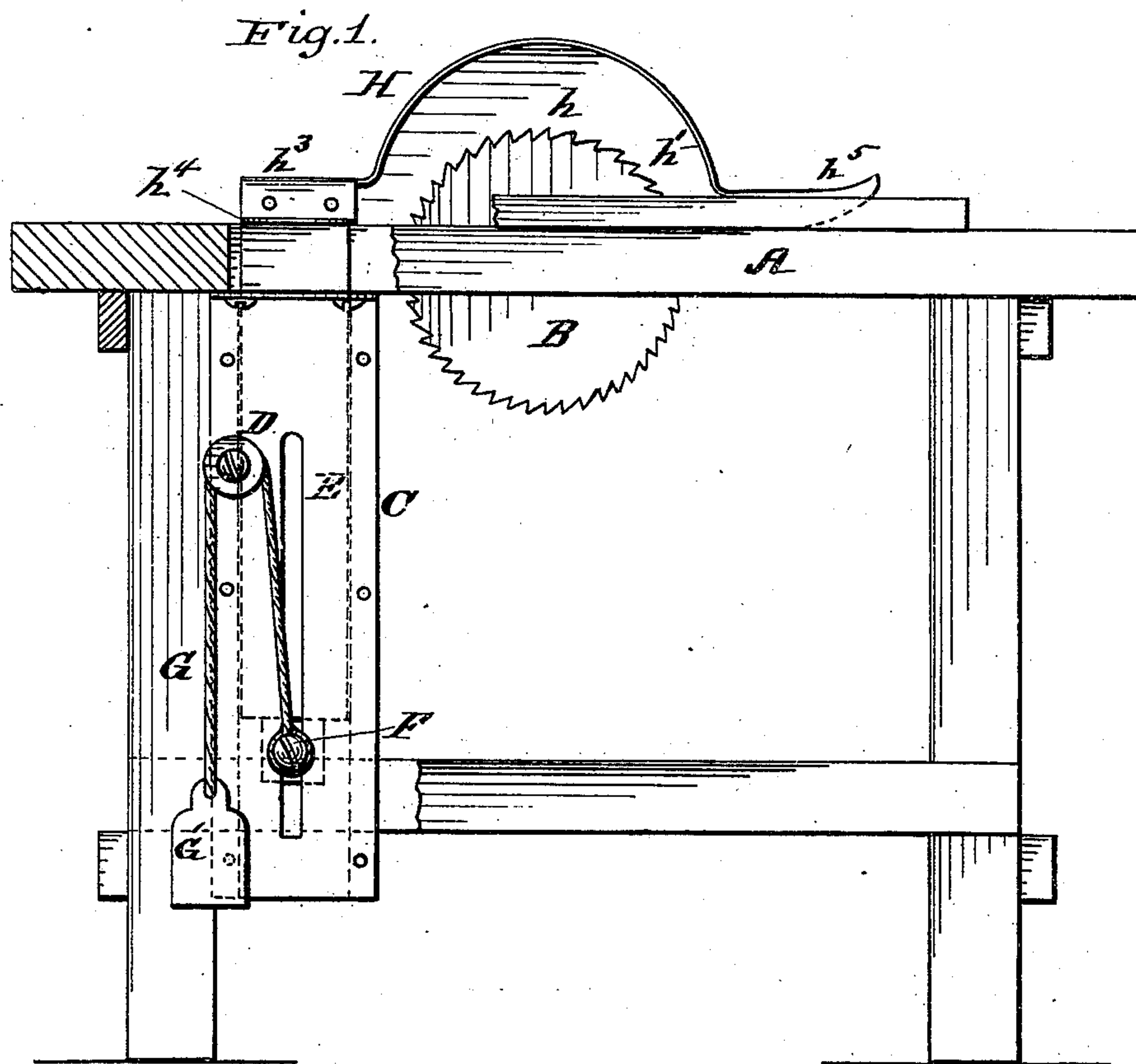
(No Model.)

D. W. SWANK.

SAW GUARD.

No. 273,404.

Patented Mar. 6, 1883.



Witnesses:
L. A. Marceron
J. P. Towne

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UNITED STATES PATENT OFFICE.

DAVID W. SWANK, OF ANDERSON, INDIANA.

SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 273,404, dated March 6, 1883.

Application filed May 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. SWANK, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Circular-Saw Guards; 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 the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to a guard for circular saws; and the novelty consists in the construction, arrangement, and adaptation of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The object of the invention is to provide a separable attachment to circular-saw mills adapted to prevent injury to the operator arising from cutting of the hands by the saw, by the saw flying into pieces when running free, or by the lumber being thrown back upon the operator, and in abating the inconvenience of flying dust; and to these ends the invention consists essentially in a guard having one closed side, an extending flange upon said side, an oppositely-extending flange adapted to ride the sawed piece of lumber, a dust-catching flange upon the other edge, and an inclined feed-piece upon the front, the whole being made from a properly-cut single piece of sheet metal. This guard is rigid, with a vertical shank which operates in guides, and a counterpoise serves to compensate toward the gravity of the guard, as shown.

The invention is fully illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, partially broken away; and Fig. 2, a perspective view of the guard removed.

Referring to the drawings, A represents a suitable bench or table, in which is journaled a circular saw, B, and which is provided with a vertical guide, C, carrying a pulley, D. Operating in the guide C is an arm, E, and from a pin, F, a rope, G, passes over the pulley D, and has secured upon its free end a counterpoise, G'.

Rigid with the arm E is the guard H, which is constructed as follows:

h represents a semicircular closed vertical side, the segmental edge of which is provided with a flange, h' , which projects over the saw, or that portion of the saw above the table, and h^2 a flange which rests upon the table when the saw is not in operation; h^3 , a projecting portion having a flange, h^4 , which rides upon the sawed lumber, and h^5 an incline under which the lumber is forced to elevate the guard.

The guard H, as thus described and shown, is formed of a single piece of sheet metal or wood. The flange h^4 holds the guard elevated until the succeeding piece of lumber is in position. The arm E serves to hold the saw-kerf open, and prevents the lumber from riding as well as the saw from binding. The flange h' prevents the dust from flying, and the counterpoise G' prevents the arm E from binding in the guide C when the end of the guard-carrying incline h^5 is forced upward by the lumber.

I am aware that it is not broadly new with me to provide dust-abating devices for circular saws, nor is it new with me to provide a guard having an incline and means for retaining an elevated position when in operation, as such devices have been before known and used, and are not sought to be covered in this application; but

What I do claim is—

1. The guard H, composed of the closed side h , flange h' , projecting portion h^3 , having flange h^4 , and incline h^5 , formed of a single piece of sheet metal or wood, combined with the kerf-arm E, and the whole adapted to serve relatively to a circular saw as set forth.

2. The guard H, formed of a single piece of metal, as described, and having arm E, operating in vertical guides C, beneath the table, and serving in the saw-kerf to prevent binding of the saw, the pulley D, rope G, and counterpoise G', the whole constructed, arranged, combined, and adapted to serve as and for the purpose specified.

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

DAVID W. SWANK.

Witnesses:

CHAS. JONES,
H. C. PAYNE.