

(No Model.)

2 Sheets—Sheet 1.

C. EISENHARDT.
HANDLE FOR CROSSCUT SAWS.

No. 327,776.

Patented Oct. 6, 1885.

FIG. 2.

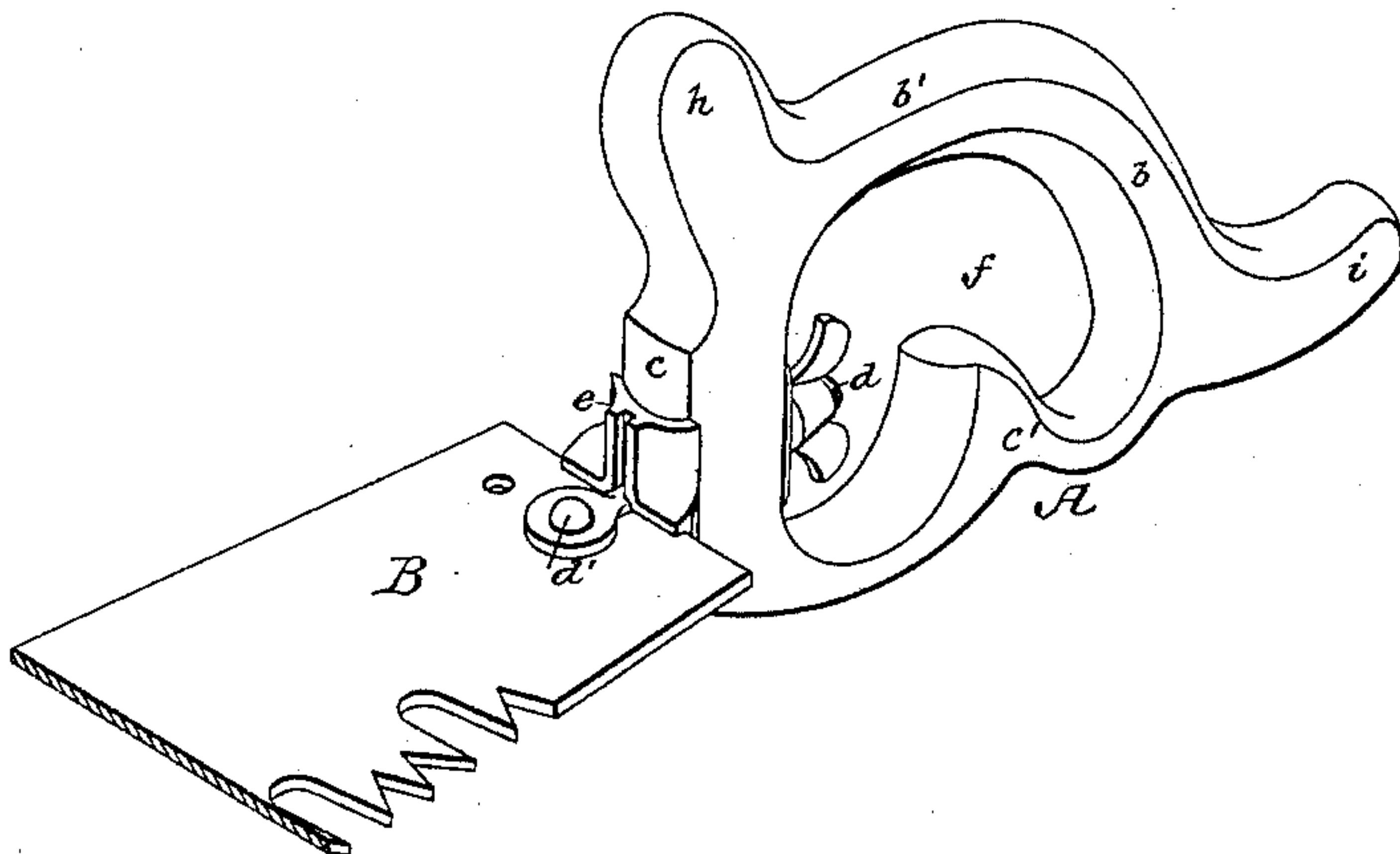
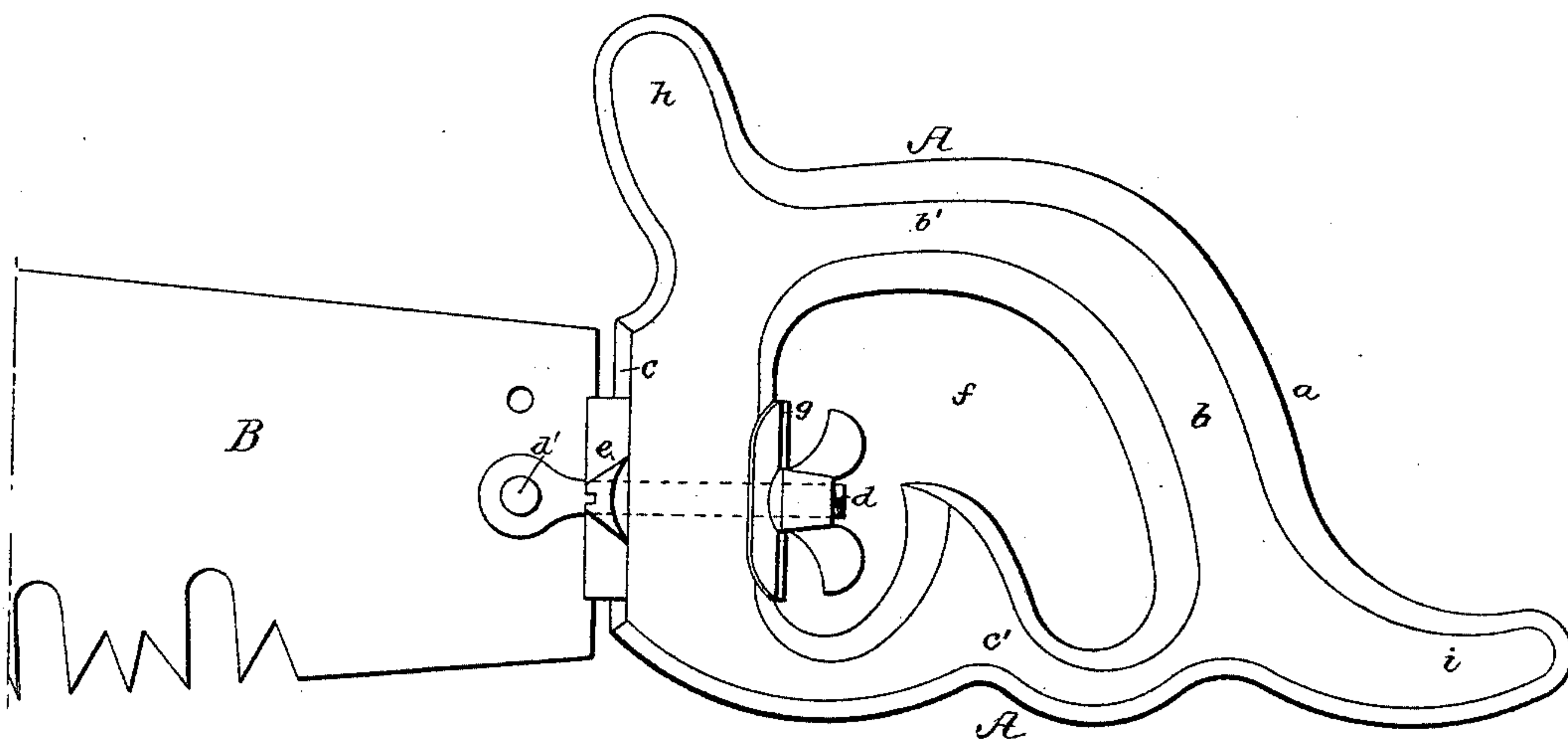


FIG. 1



Witnesses:
William F Davis
Harry Drury

Inventor:
Christopher Eisenhardt
by his Attorneys
Howson & Co

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FIG. 4

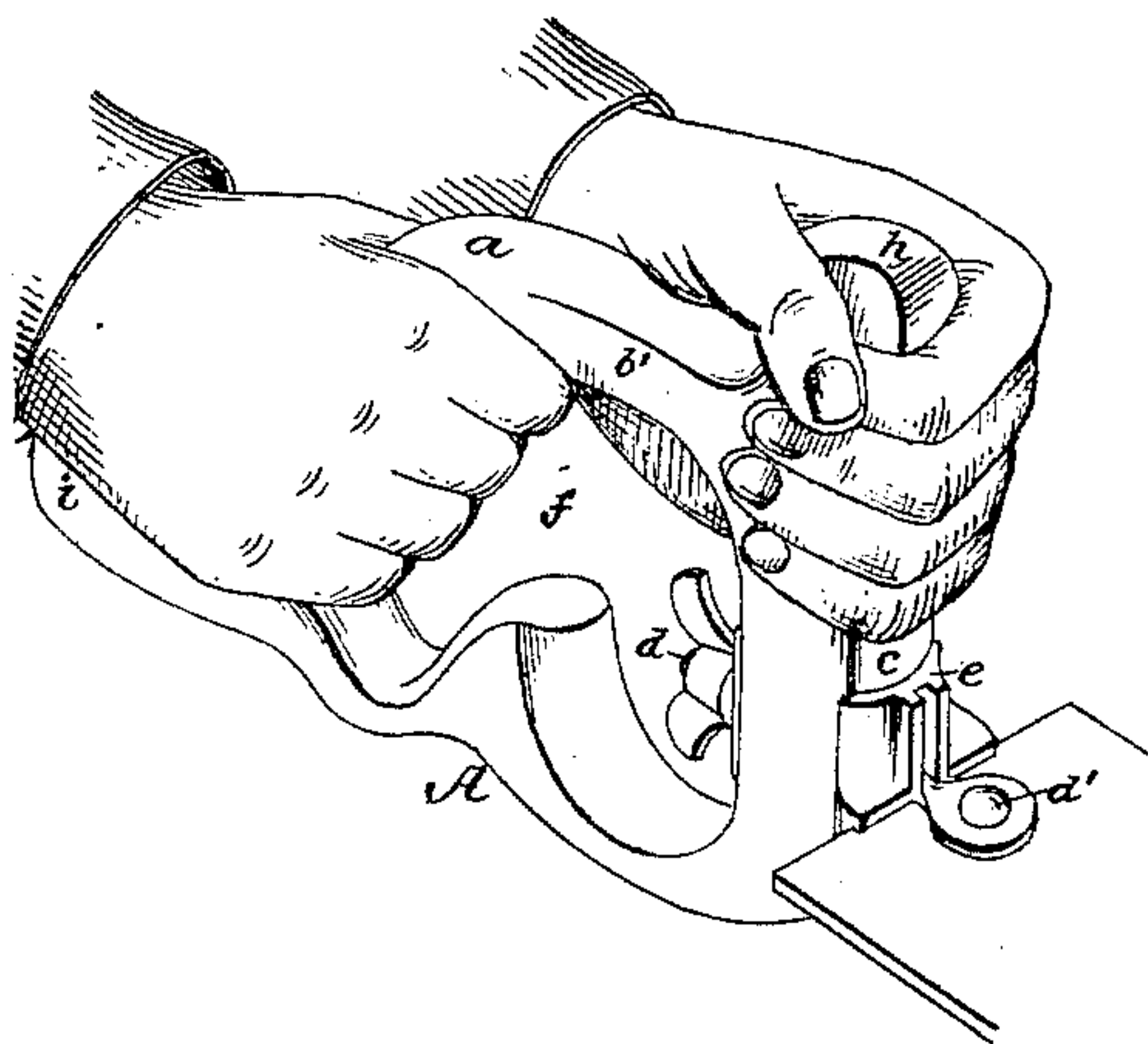
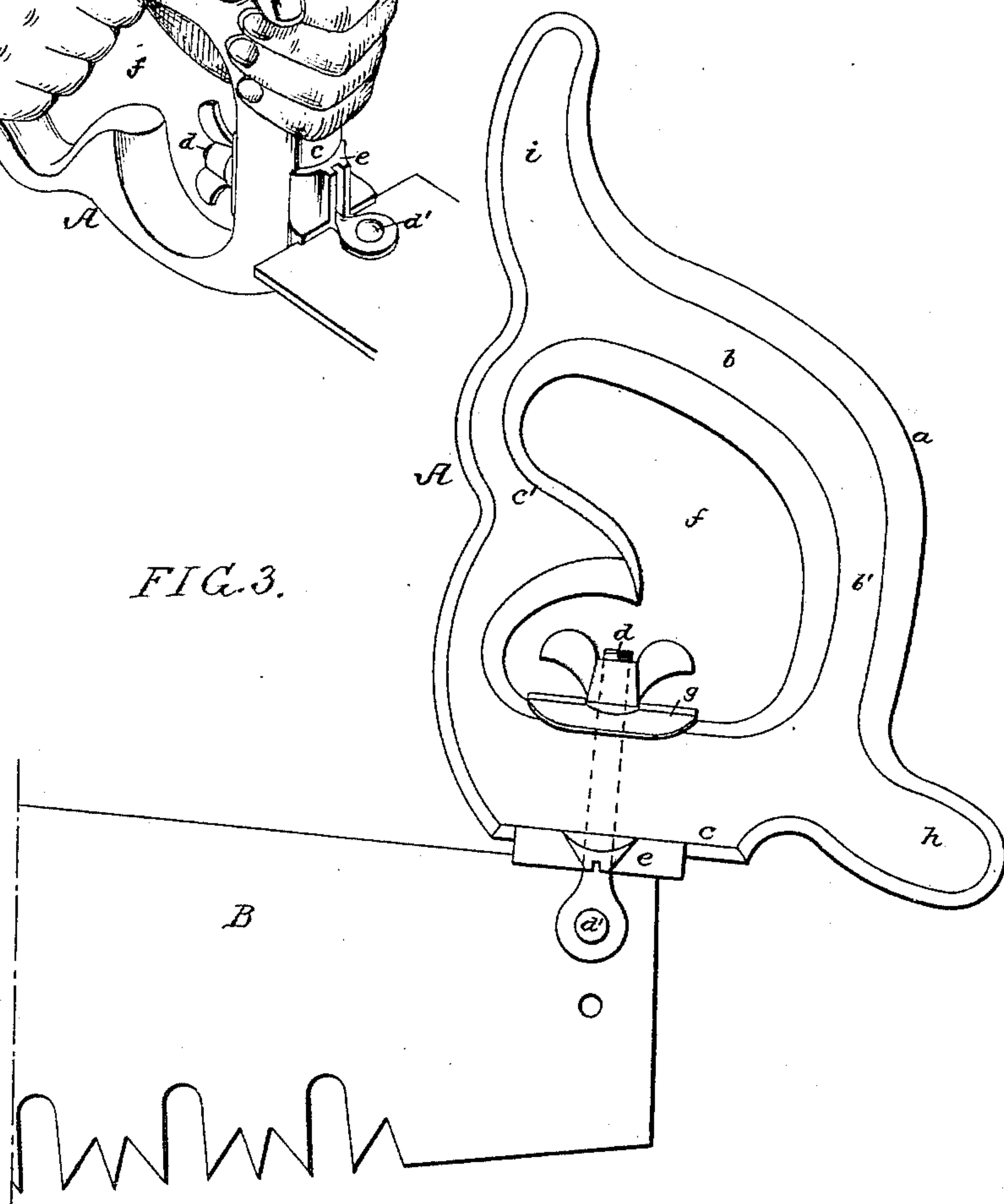


FIG. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHRISTOPHER EISENHARDT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO HAMILTON DISSTON, HORACE C. DISSTON, WILLIAM DISSTON, AND
JACOB S. DISSTON, ALL OF SAME PLACE.

HANDLE FOR CROSSCUT-SAWS.

SPECIFICATION forming part of Letters Patent No. 327,776, dated October 6, 1885.

Application filed May 15, 1885. Serial No. 165,588. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER EISENHARDT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have
5 invented certain Improvements in Handles for Crosscut-Saws, of which the following is a specification.

My invention relates to certain improvements in crosscut-saw handles, the object of
10 the invention being to produce a handle capable of efficient use in different positions with respect to the saw-blade, as more particularly hereinafter set forth.

In the accompanying drawings, Figure 1 is
15 a side view of my improved handle attached to the rear end of a saw-blade, a portion of the latter being shown. Fig. 2 is a perspective view of the handle attached to the rear end of a saw-blade, but at right angles to the latter,
20 as when the saw is to be used in cutting down trees. Fig. 3 is a side view of my handle attached to one end of a saw-blade, at the top thereof, as where the work to be done is that of sawing fallen trees, and Fig. 4 is a perspective view of the handle.

Referring to Figure 1, A is the handle, and B the saw-blade, the two being connected by a well-known clamp, D, consisting in the present instance of two metal plates or washers,
30 *e g*, between which the handle is grasped, and a longitudinally-slotted bolt, *d*, passing through the said grasping-washers and handle, and having at its outer end eyes, through which and through an aperture in that part
35 of the saw-blade which is received within the slot of the bolt passes a pin, *d'*. The other end of said bolt *d* has a screw-thread for the reception of the thumb-nut, the tightening of which against the washer *g* secures blade and
40 handle rigidly together.

For the slotted bolt *d* a bolt having at its outer end a hook to pass through the eye in the blade may be substituted.

Washer *e*, against which the rear or top
45 edge of the saw-blade bears, is provided, as usual, with two central grooves at right angles to each other, the blade finding its bearing in one or other of these grooves, accord-

ing to the position in which the handle is attached to the blade.

The handle is formed as follows: It has a
50 straight portion, *c*, by which it is attached to the saw-blade, two horns or projections, *h i*, each of a size and shape adapting it to be conveniently grasped by the user's hand, a bent
55 or curvilinear portion extending from the base of one to that of the other of said horns or projections and of a character and length affording two several hand-holds, *b b'*, and a piece,
60 *c'*, connecting horn or projection *i* with straight side *c*. These parts surround a central aperture, *f*, of a shape and size allowing for the reception of the inner end of screw-bolt *d* and its thumb-nut, and also for the passage of the
65 user's hand for the purpose of grasping the part *a* of the handle without coming into contact with said bolt or nut.

If this handle be attached to the saw in either the position shown in Fig. 1 or that shown
70 in Fig. 2, the operator may conveniently operate the saw, if the work be sufficiently light, by grasping section *b* of part *a* of the handle with one hand, while, if the work be heavier, he may also grasp the horn or projection *h*
75 with his other hand.

If the handle be attached to the saw as shown
80 in Fig. 3, the operator may work the saw conveniently by grasping the section *b'* of part *a* of the handle with one hand and the horn or projection *i* with the other.

It will be noticed that the horns or projections *h i* are at an angle to each other, projection *h* being practically on a line with side
85 *c* and projection *i* with side *c'* of the handle, so that when the handle is attached to the end of the blade the projection *h* and when it is attached to the top of the blade the projection *i* is in the best position to serve as a hand-
90 hold.

It will also be noticed that the shape of the
95 handle and the relative positions of the horns *h* and *i* and the intervening bent or curvilinear part *a* of the handle to each other and to that part, *c*, of the handle by which it is secured to the blade are such that whatever the position of the handle with respect to the

blade one of the operator's hands, when both are used, will be a little to the rearward of the other—a condition more advantageous and less tiresome than where the hands are close together or in line with each other.

It will also be noticed that the relation of the bent or curvilinear part *a* of the handle to the straight side *c* is such that whether the position of the handle be that of Fig. 1 or that of Fig. 2 the operator's grasp upon said bent or curvilinear portion *a* is at such a point that the thrust upon the blade is practically upon a plane with the line of travel of the blade. This, when the handle is in the position of Fig. 2, prevents the tendency to "buckle" existing when the handle is of such construction that the thrust is from above or below that line. In the present instance the curvilinear portion *a* or grip of the handle is shown as of such a length and curvature as to present two distinct hand-holds, *b b'*, substantially at right angles to each other; but I wish it to be understood that I do not desire to confine myself to the precise form and proportions shown, as it will be evident that they may be changed without departing from my invention so long as the grip *a* extends above and in rear of the opening *f* of the handle, so as to present a convenient hand-hold for the operator, whether the handle be attached to the end or top of the blade.

I claim as my invention—

1. A saw-handle having a portion, *c*, whereby it may be attached either to the end or top of a saw-blade, a hand-hold, *f*, a grip portion, *a*, and a projection, *i*, said grip portion ex-

tending above and in rear of the hand-hold and permitting the convenient grasp of the handle whether the latter is attached to the end or top of the blade, and said projection *i* providing an additional hand-hold above the grip *a* when the handle is attached to the top of the blade, all substantially as specified.

2. A saw-handle having a portion, *c*, whereby it may be attached either to the end or top of the saw-blade, an opening, *f*, a grip portion, *a*, extending above and in rear of said opening, and projections *h* and *i* at the extremities of said grip portion *a*, all substantially as and for the purpose set forth.

3. A saw-handle having a portion, *c*, whereby it may be attached either to the end or top of a saw-blade, and having hand-holds *b b'*, substantially at right angles to each other, and an opening, *f*, between said hand-holds and the portion *c*, all substantially as and for the purposes set forth.

4. A saw-handle having a portion, *c*, whereby it may be attached either to the end or top of a saw-blade, two hand-holds, *b b'*, substantially at right angles to each other, an opening, *f*, between said hand-holds and the portion *c*, and projections *h i* at the extremities of said hand-holds *b b'*, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTOPHER EISENHARDT.

Witnesses:

HENRY BOSSERT,
HARRY SMITH.