

(No Model.)

D. BEHMER.
SAW SETTING DEVICE.

No. 336,201.

Patented Feb. 16, 1886.

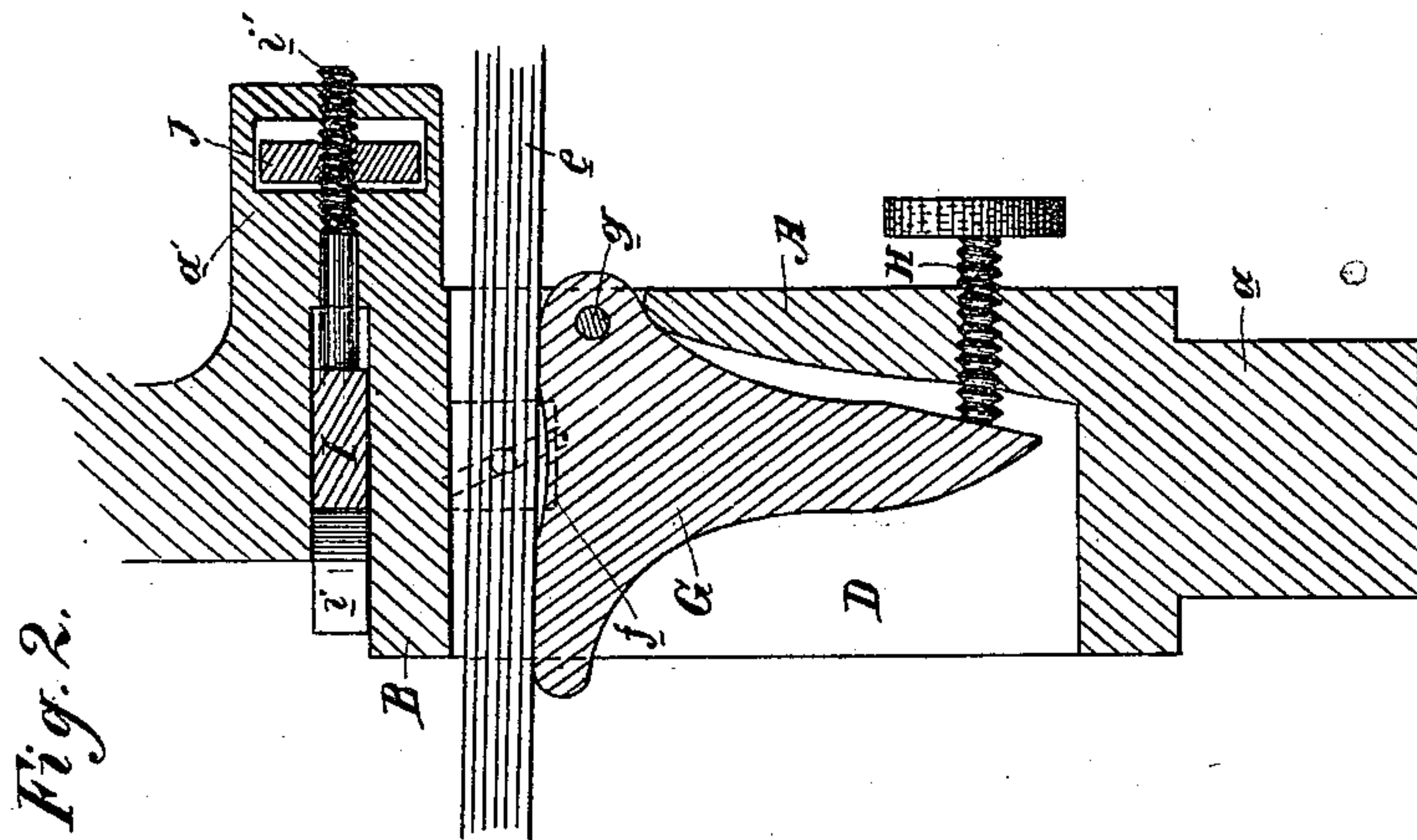


Fig. 2.

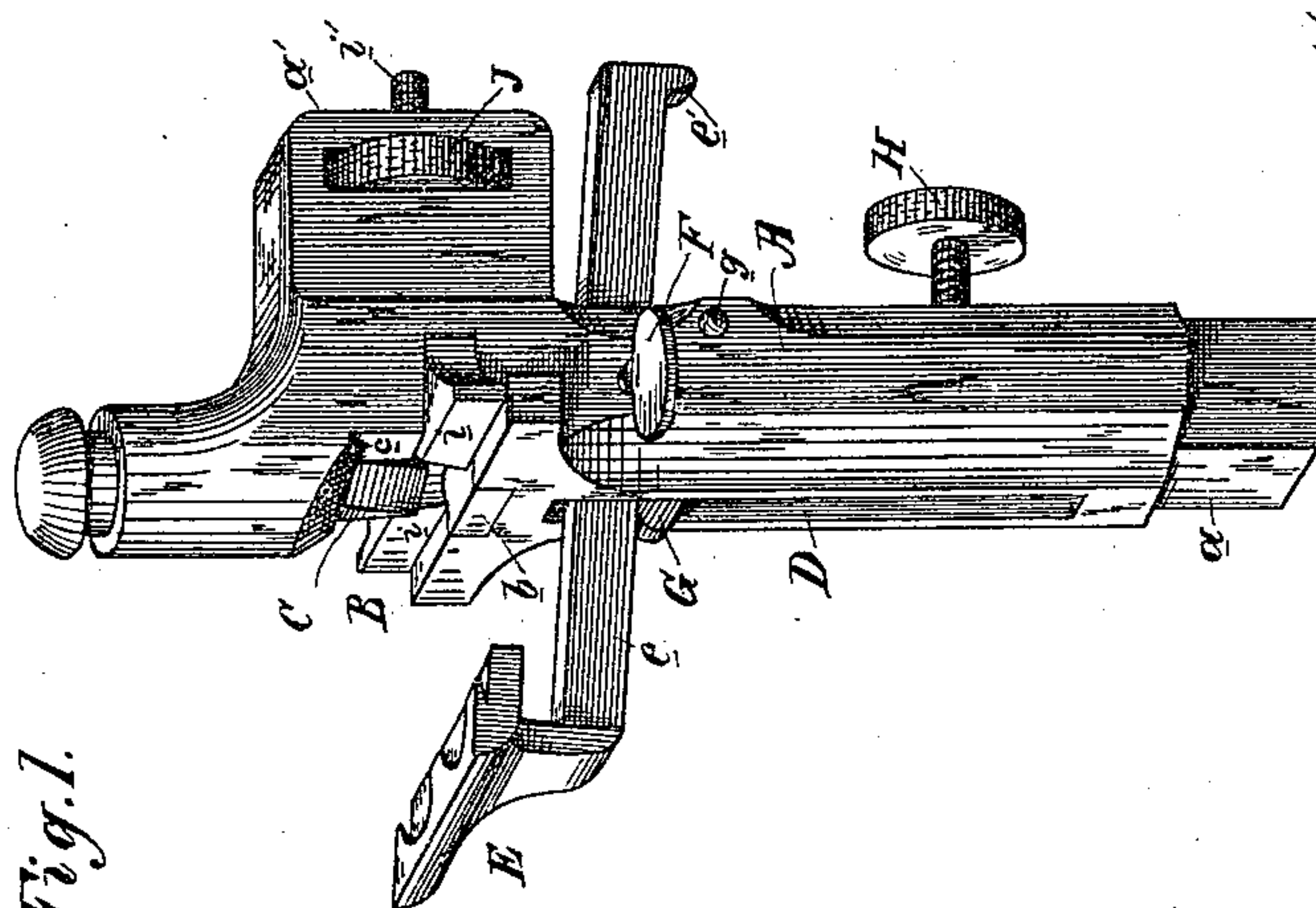


Fig. 1.

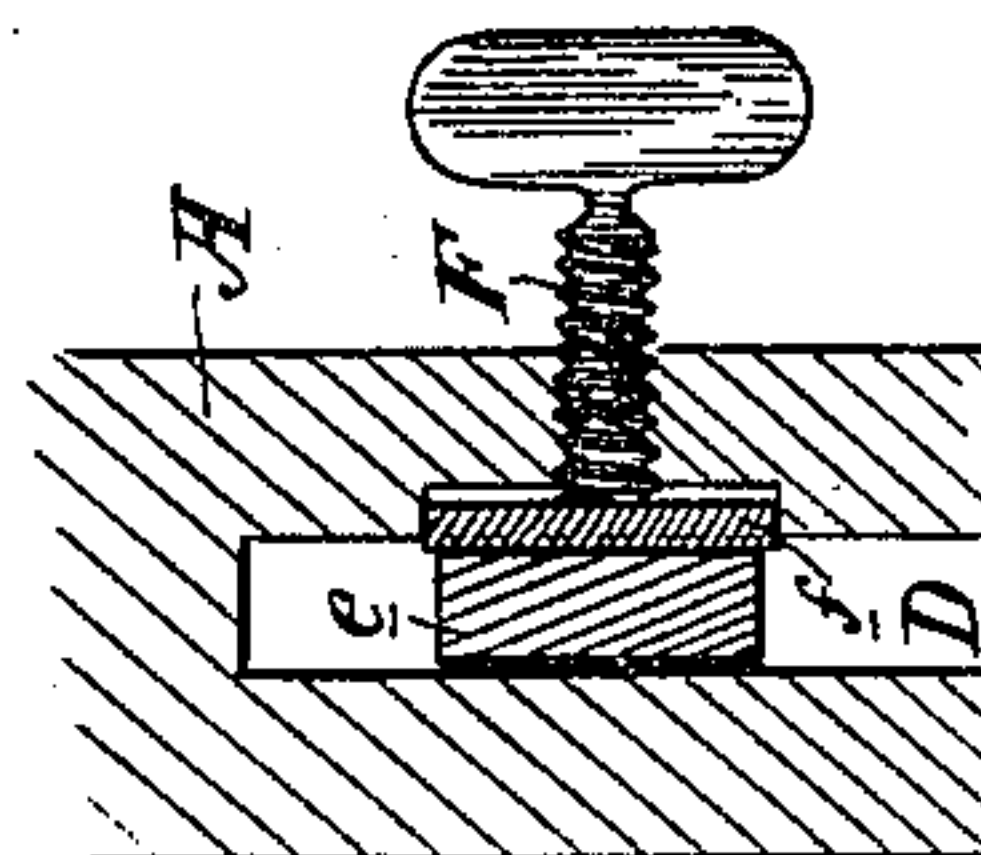


Fig. 3.

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UNITED STATES PATENT OFFICE.

DANIEL BEHMER, OF SANTA ROSA, CALIFORNIA.

SAW-SETTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 336,201, dated February 16, 1886.

Application filed December 12, 1885. Serial No. 185,529. (No model.)

To all whom it may concern:

Be it known that I, DANIEL BEHMER, of Santa Rosa, Sonoma county, State of California, have invented an Improvement in Saw-
5 Sets; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of saw-sets in which an adjustable rest is provided for the saw-blade, and an adjustable gage defines
10 the position of its teeth under the hammer; and my invention consists in the improvements hereinafter described, in the manner of mounting the rest and fixing it wherever adjusted, in the means for adjusting and holding
15 said rest at any desired angle, and in the construction and means for adjusting the tooth-limiting gage.

The object of my invention is to provide a simple, cheap, and effective saw-set.

20 Referring to the accompanying drawings, Figure 1 is a perspective view of my saw-set. Fig. 2 is a vertical section of the same. Fig. 3 is a detail section showing the bearing-plate *f*.

25 *A* is the body or stock of the tool, having a tenon, *a*, on its lower end, adapting it to be mounted or seated in any suitable support. In the upper front portion of the stock is made a transverse groove, forming a ledge, *B*, in the
30 center of which the anvil *b* is located.

C is the hammer, seated in the socketed top of the stock. A spring (not here shown) returns the hammer, which is limited by a cross-pin, *c*.

35 In the stock is made a slot, *D*, through the upper portion of which passes the stem or shank *e* of the rest *E*. This stem slides back and forth freely through the slot, being prevented from moving completely out by a small
40 lip, *e'*, on its rear end. The rest *E* is fitted in the position desired by means of a set-screw, *F*, through the side of the stock, which bears against a small plate, *f*, seated loosely inside and binding against the stem *e*, so that the
45 screw is prevented from marring it.

Pivoted in the slot *D* by the pin *g* is a cam or bell-crank lever, *G*, the upper arm of which bears under and supports the stem of the rest *E*, which, however, moves freely back and
50 forth upon it. Through the back of the stock is let a thumb-screw, *H*, which bears against

the rear of the downwardly-extending arm of the cam or lever *G*. By operating this screw the upper arm of the lever raises and lowers the rest *E* through any desired length of arc, 55 and supports and holds it at any desired angle, and by reason of the full and long support which this upper arm affords said rest is held at the same angle, no matter how far from or how close to the body of the stock it may be 60 set.

I is a limiting-gage, consisting of two divergent feet, *i*, moving on the ledge *B* of the stock on each side of the anvil, and uniting in a single threaded stem, *i'*, which passes back 65 through the stock in an extension, *a'*, made with it.

On the stem *i'* is a thumb-nut, *J*, which is housed by the extension *a'* of the stock, its milled rim being exposed in the same manner 70 as in the ordinary monkey-wrench adjustment.

The operation of my saw-set is as follows: The set-screw *F* being loosened, the rest *E* is drawn out to the distance required for the proper width of blade to be operated upon. 75 Then while said screw is still loose the thumb-screw *H* below is operated, and the rest is raised or lowered to the desired angle. While the cam-lever positively raises the rest, the latter moves by its own weight in lowering as 80 the lever is freed from the impingement of screw *H*. When the desired angle has been reached, the set-screw *F* is turned up, so that the bearing-plate *f* binds the stem of the rest and holds it in proper position, being further 85 supported on the upper arm of the lever. Then the thumb-nut *J* is operated to set the gage *I*, and the tool is ready to be used.

It will be observed that the rest *E* and the lever *G* are both held in position by the single 90 pivot-pin *g*, which passes through the lever, and the rest cannot be taken out from the stock without first removing this pin, which, however, when removed, will allow all the parts to be taken out for repairs or the substitution of 95 others.

I am aware that in saw-sets of this nature it is not new to provide a rest which is adjustable both to and from the stock, and also 100 through an arc to the desired angle, nor is it new to provide a limiting-gage operated by a screw; and I do not therefore claim these fea-

tures, broadly, but limit myself to the exact construction and mechanism whereby I am enabled to make a very simple and at the same time a very effective tool.

5 Instead of the vertically-moving spring-hammer which I have shown, I can use other forms equally as well known—such, for example, as the swinging hammer.

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

1. In a saw-set, the slotted stock A, having an anvil and a hammer, in combination with
15 the saw-blade rest E, having a stem, *e*, passing through the slotted stock, and the means by which said rest is adjusted to any desired angle, consisting of the bell-crank or cam lever G, pivoted in said slotted stock, and bearing
20 with its upper arm under the stem of the rest, and the thumb-screw H, bearing against the lower arm of the lever, substantially as herein described.

2. In a saw-set, the slotted stock A, having an anvil and a hammer, in combination with
25 the saw-blade rest E, having a stem passing loosely through said slotted stock, whereby it can be adjusted to and from the stock, the set-screw F, for holding said rest in the position to which it is adjusted, the pivoted bell-crank
30 or cam lever G in said stock supporting the

rest and bearing with its upper arm under its stem, and the thumb-screw H, bearing against the lower arm of the lever, whereby said lever is caused to raise or lower the rest to any angle desired, substantially as herein described. 35

3. The combination, with the stock A, having the slot D, anvil *b*, hammer C, and tail-piece *a'*, of the rest E, having lip *e'*, and stem *e*, the set-screw F, and plate *f*, the bell-crank G, having pivot *g*, the adjusting screw H, and
40 the gage I, having feet *i*, screw-stem *i'*, and nut J, all constructed and arranged to operate as described.

4. In a saw-set, the slotted stock A, having an anvil and a hammer, in combination with
45 the saw-blade rest E, having a stem, *e*, passing through the upper edge of its slot, and the lip *e'* on the rear end of the stem, the bell-crank or cam lever G, bearing with its upper arm under the stem *e*, the pin *g*, by which said lever is pivoted, and the thumb screw H, for operating the lever, substantially as herein de-
50 scribed.

In witness whereof I have hereunto set my hand.

DANIEL BEHMER.

Witnesses:

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F. G. NAGLE.