

B. D. WHITNEY.

Improvement in Band-Sawing Machines.

No. 126,764.

Patented May 14, 1872.

Fig. 1.

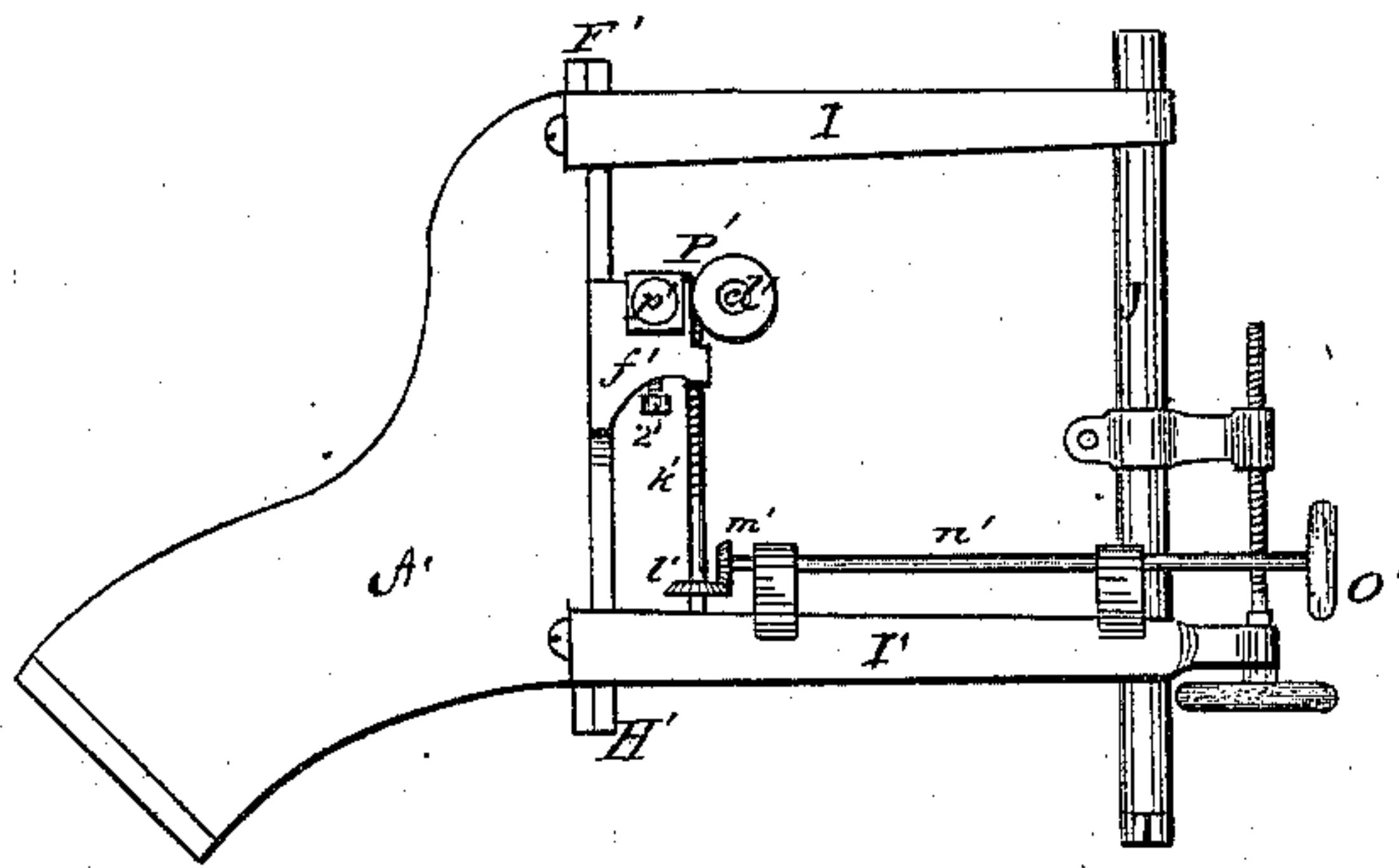


Fig. 2.

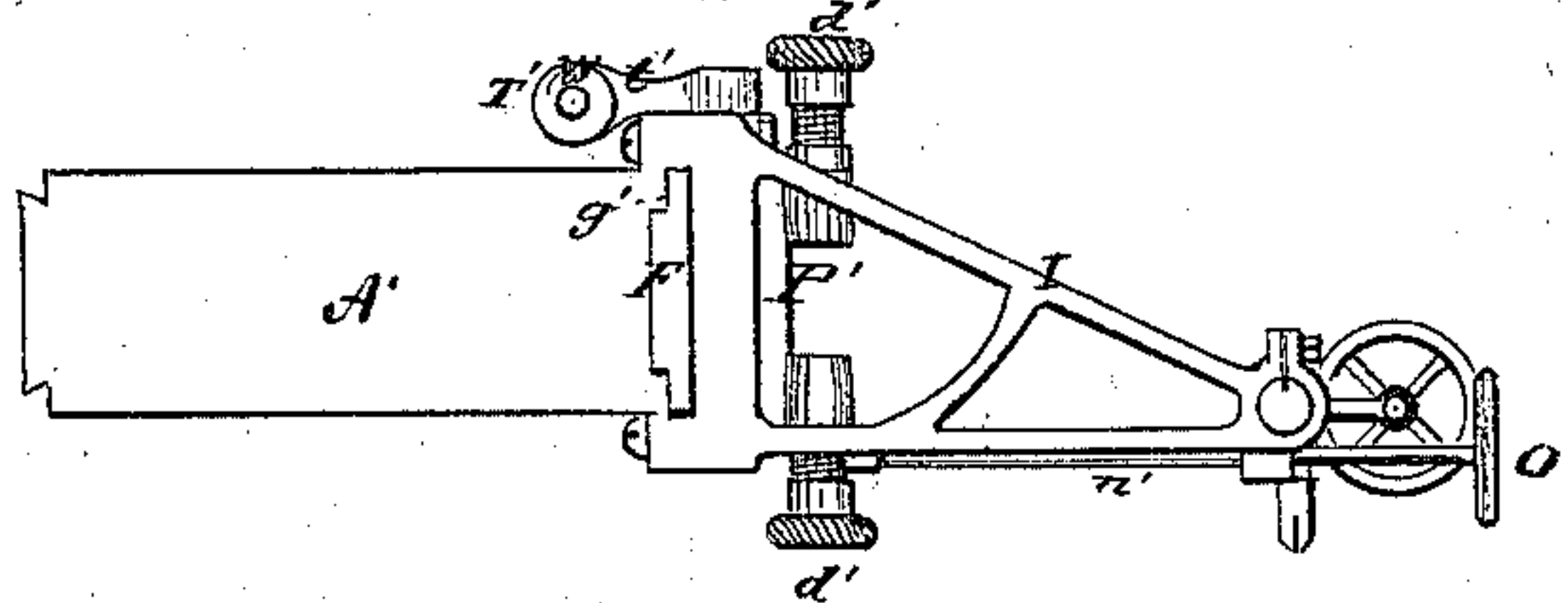


Fig. 3.

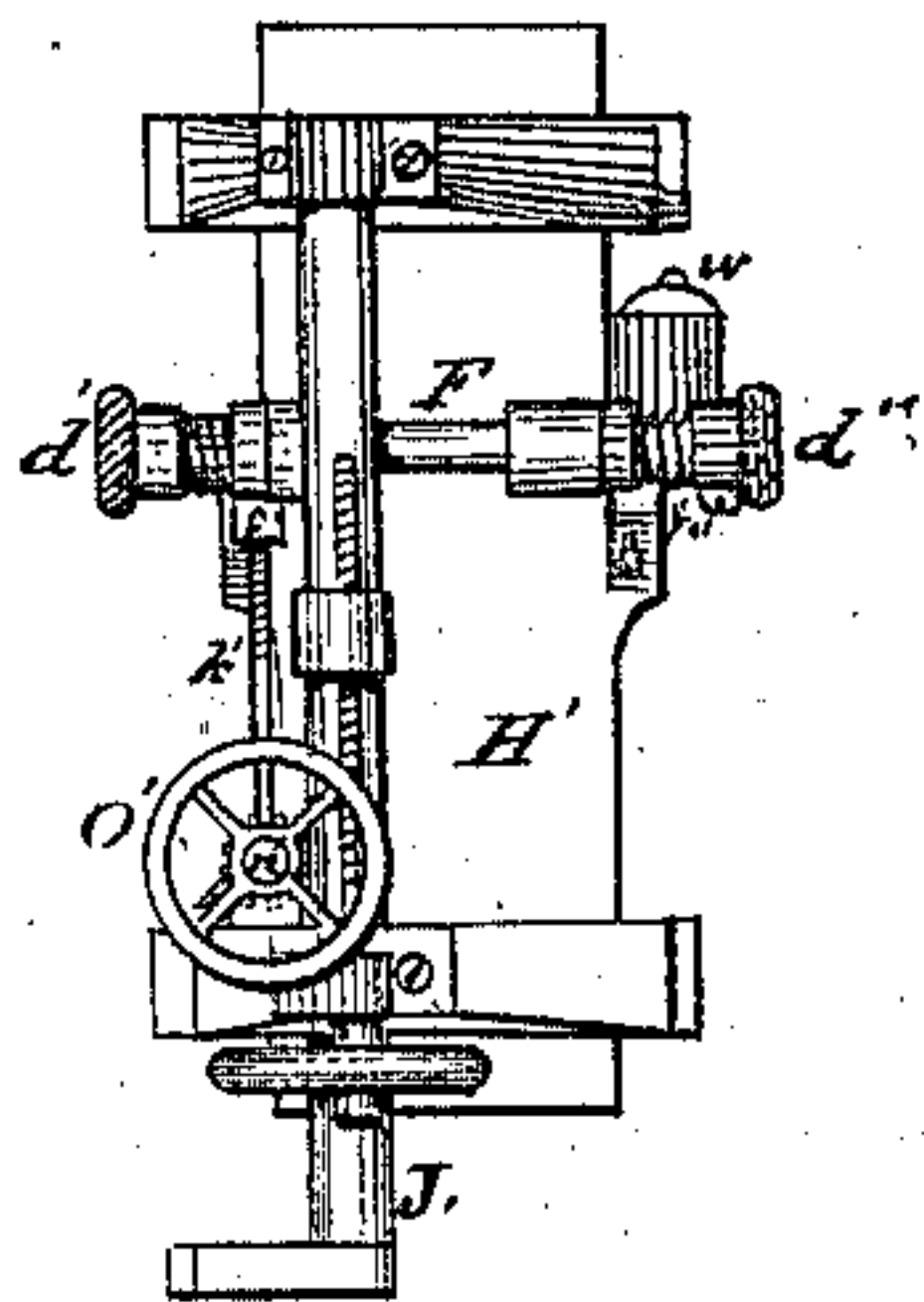
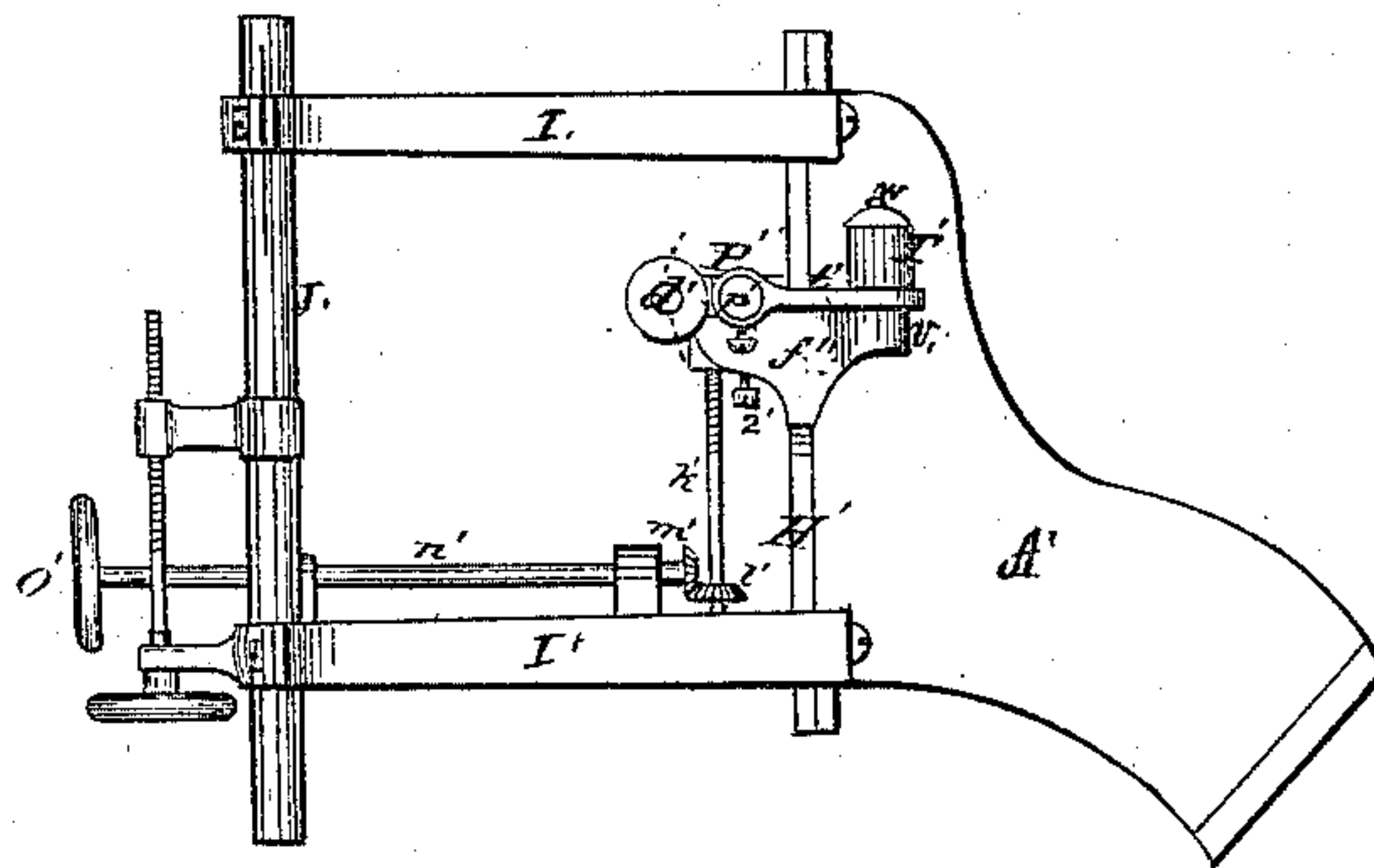


Fig. 4.



Witnesses.

H. Poole,
Henry Roberts

Inventor.

Baxter D. Whitney
By J. B. Woodruff
Attorney.

UNITED STATES PATENT OFFICE.

BAXTER D. WHITNEY, OF WINCHENDON, MASSACHUSETTS.

IMPROVEMENT IN BAND SAWING-MACHINES.

Specification forming part of Letters Patent No. 126,764, dated May 14, 1872.

To whom it may concern:

Be it known that I, BAXTER D. WHITNEY, of Winchendon, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Band Sawing-Machines, for compensating for the contraction and expansion of the saw; and the following is the specification of the same, referring to the accompanying drawing, in which—

Figure 1 represents a side view (right side) of the top or upper portion of the frame or standard for supporting the upper saw-driving wheel and its adjusting and compensating mechanism. Fig. 2 shows a plan or top view of the same. Fig. 3 shows a front or end view of the same. Fig. 4 shows the reverse side of Fig. 1.

My invention relates to band sawing-machines; and consists in the form and simplified construction of the devices for adjusting the tension, and compensating for the contraction and expansion of the saw while being operated.

To enable others to make and use my improvements I will describe them more fully, referring to the drawing and the letters of reference marked thereon.

To the top portion of the frame A' , on the face, is fitted a sliding plate, H' , secured in place by the bracket-arms $I I'$, extending out a sufficient distance to support the adjustable sliding vertical holder J and the other adjusting mechanism, consisting of the hand-wheel O' , shaft n' , bevel-gears l' and m' , and screw-shaft k' , connecting with the slide H' , which is provided with journal-box seats $f' f''$, in

which are the movable boxes $p' p''$, for holding the rock-shaft P' , which is provided with bearings $d' d''$, for the wheel-shaft to run in. In the lower part of the box-seats $f' f''$, there are set-screws, for the purpose of adjusting the rock-shaft so as to cause the saw to run in the desired place on the face of the saw-wheels. The rock-shaft P' is provided with an arm, t' , on one end, outside of its bearing, extending back and above the projecting arm v of the box-seat f'' . The arm v is provided with a vertical screw-stud, w , on which a rubber or other yielding substance, forming a spring, T' , acts upon the arm t' to compensate for the contraction and expansion of the band-saw. The spring T' , instead of being applied to the arm t' , as shown, might be placed under the journal-boxes $d' d''$, in which the shaft of the upper band saw-wheel runs, or in any position relative to the rock-shaft that will produce the same result; or, if desired, a weight may be used to bear upon the arm t' , instead of the spring T' .

What I claim as my invention, and desire to secure by Letters Patent, is—

The rock-shaft P' , in combination with the slide H' , the adjustable journal-boxes $p' p''$, arm t' , and compensating-spring T' , when arranged to operate substantially in the manner and for the purpose specified.

In testimony whereof I hereunto subscribe my name.

BAXTER D. WHITNEY.

Witnesses:

E. G. PARKER,
H. B. SMITH.