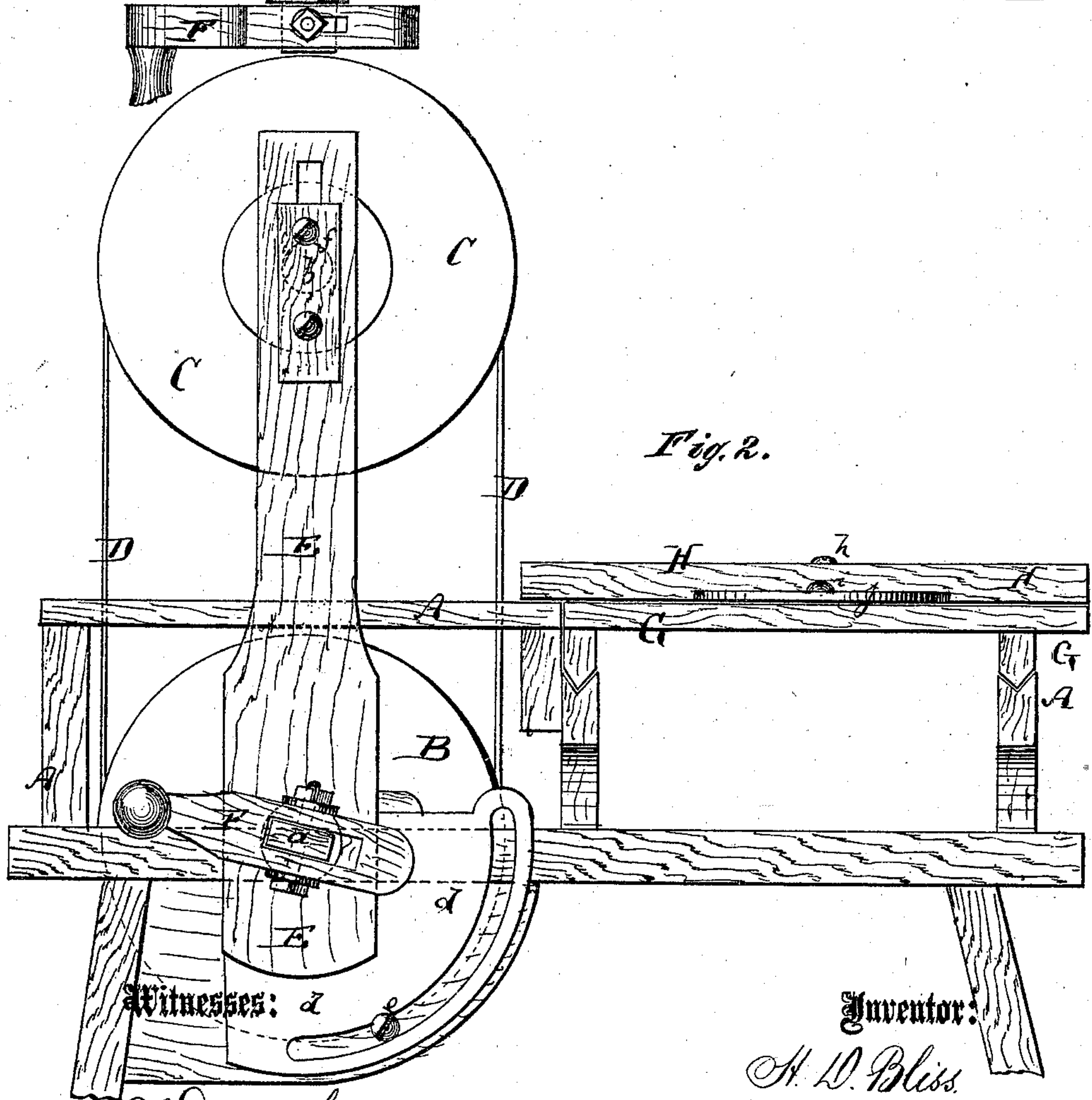
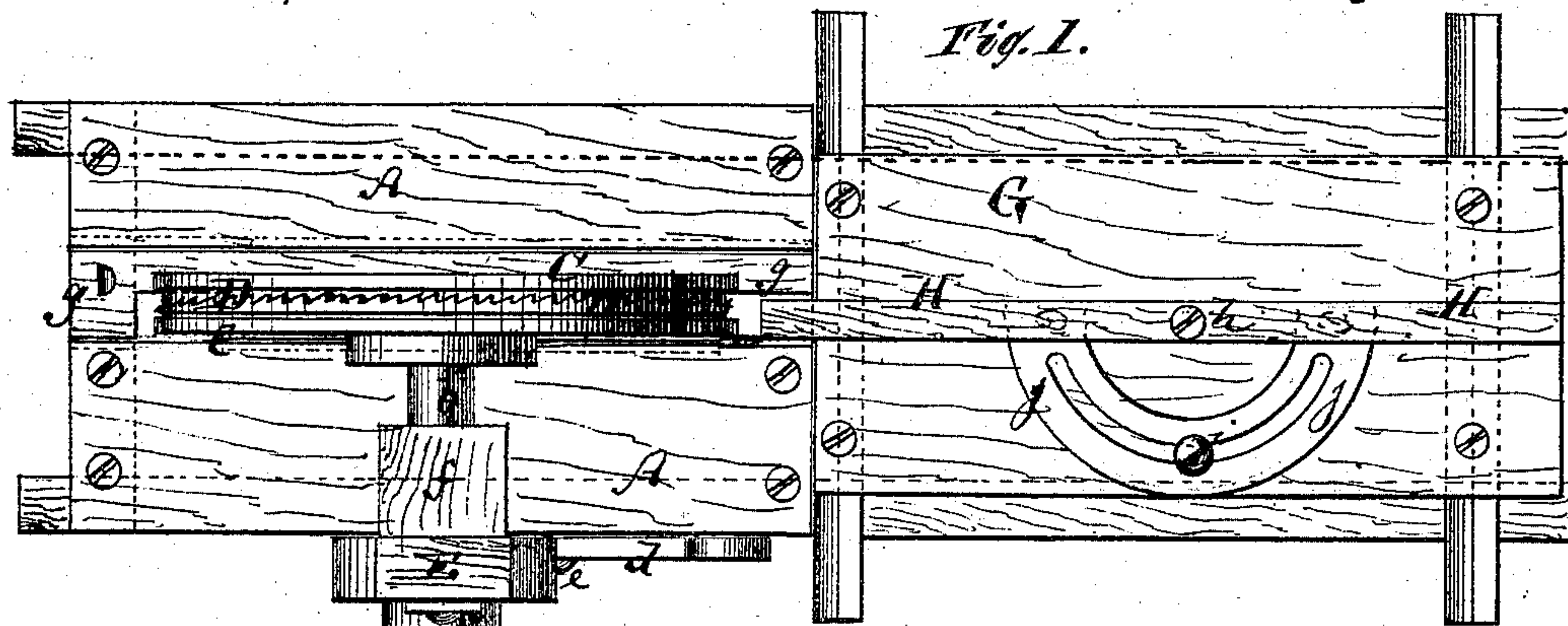


H. D. BLISS.

Improvement in Band-Sawing Machines.

No. 130,618.

Patented Aug 20, 1872.



Witnesses: *a*

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# UNITED STATES PATENT OFFICE.

HOSEA D. BLISS, OF HAMBURG, IOWA.

## IMPROVEMENT IN BAND SAWING-MACHINES.

Specification forming part of Letters Patent No. 130,618, dated August 20, 1872.

Specification describing an Improvement in Band Sawing-Machine, invented by HOSEA D. BLISS, of Hamburg, in the county of Fremont and State of Iowa.

In the accompanying drawing, Figure 1 is a top view of my improved sawing-machine. Fig. 2 is a back view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to improvement in the class of band sawing-machines wherein the saw is so hung as to be inclined from a vertical plane when desired; and it consists, chiefly, in the construction and arrangement of parts whereby the standard carrying the pulleys upon which the saw is mounted may be adjusted at various angles to the reciprocating table with ease, dispatch, and certainty.

A in the drawing represents the sawing-machine table or frame, of suitable size, form, and material. B is the lower and C the upper drum holding the band-saw D. The shaft *a* of the lower drum has its bearings in the frame A, and serves also as a pivot for the lower end of the post E, in whose upper part the shaft *b* of the upper drum has its bearings. The band-saw is laid around the two drums and is operated by means of a crank-handle, F, which is applied to the shaft *a*. On the latter the post E can be inclined at will to bring the cutting portion of the saw in a similar inclined position. A slotted segment, *d*, on the post, receiving a set-screw, *e*, serves as a means of fastening the post in any desired position. The crank F is slotted where it connects with the shaft *a*, and can be lengthened or short-

ened in consequence, in order to give the requisite amount of power. For giving the right tension to the saw the shaft *b* is hung in a block, *f*, which can be set up or down in the slotted upper part of the post E. *g* is a slide in that part of the table through which the saw passes, and is moved in or out, as may be required, whenever the saw is changed from a vertical to an inclined position, or vice versa. G is the sliding carriage on which the wood is fed to the saw, and H is a ledge or rest arranged on top of this carriage. The rest H is pivoted by a pin, *h*, and can thereon be turned to hold the wood obliquely or at right angles to the saw, as may be desired. By a screw, *i*, passing through a slotted segment, *j*, the rest H can be secured in suitable position.

I propose to use a band-saw with teeth of such form that it can be reversed by being turned inside out whenever the teeth are blunt on one side. Regular V-shaped teeth, properly upset, will best answer this purpose.

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

The improved sawing-machine, formed of the table A, slide *g*, carriage G, pivoted guide H *j*, pivoted post E, slotted adjusting-plate *d*, pulleys B C, band-saw D, and crank-shaft, all constructed, arranged, and operating as specified.

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Witnesses:

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