

G. W. HERRING.

MACHINES FOR SAWING STAVES AND LATHS.

No. 178,850.

Patented June 20, 1876.

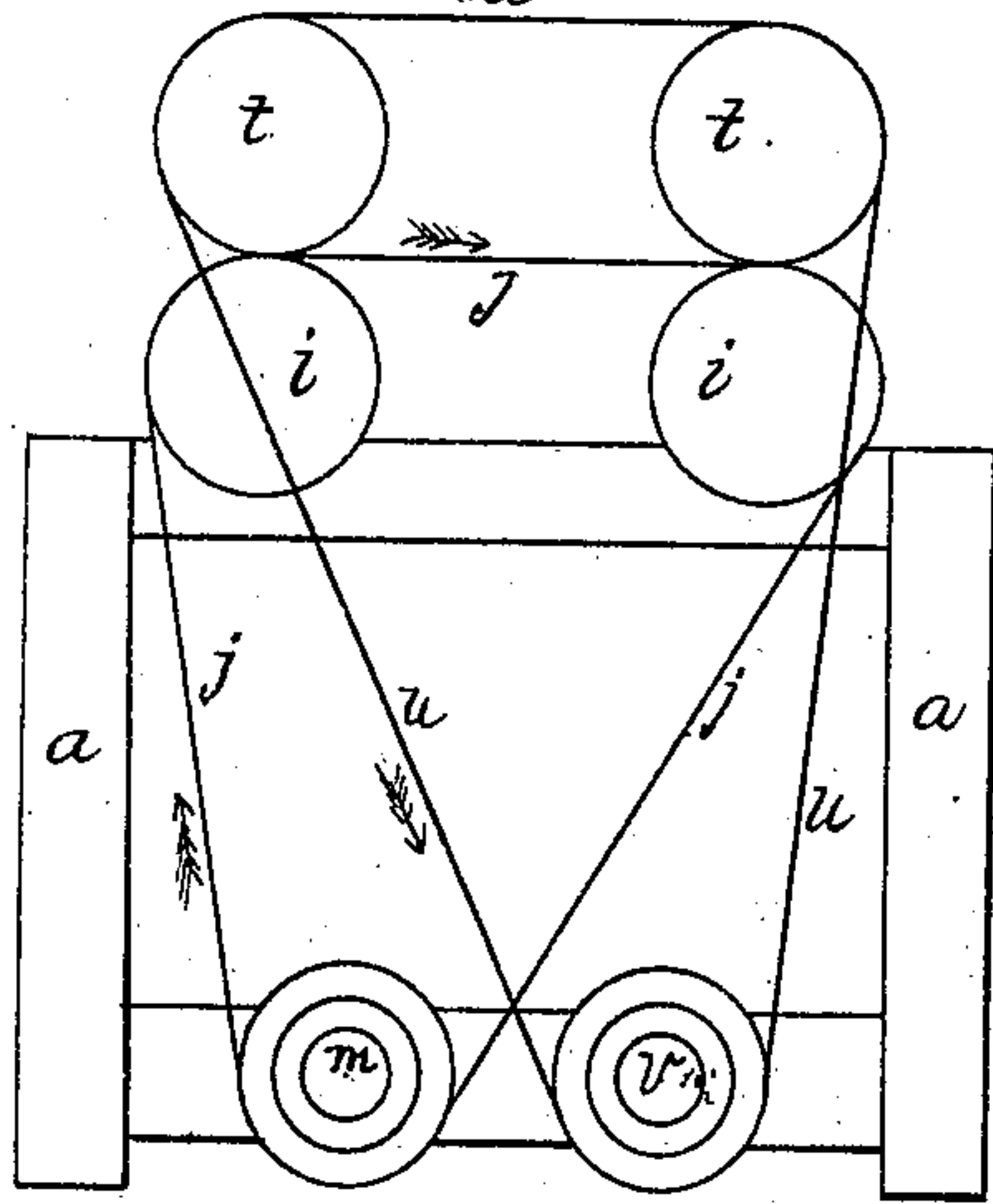


Fig. 5.

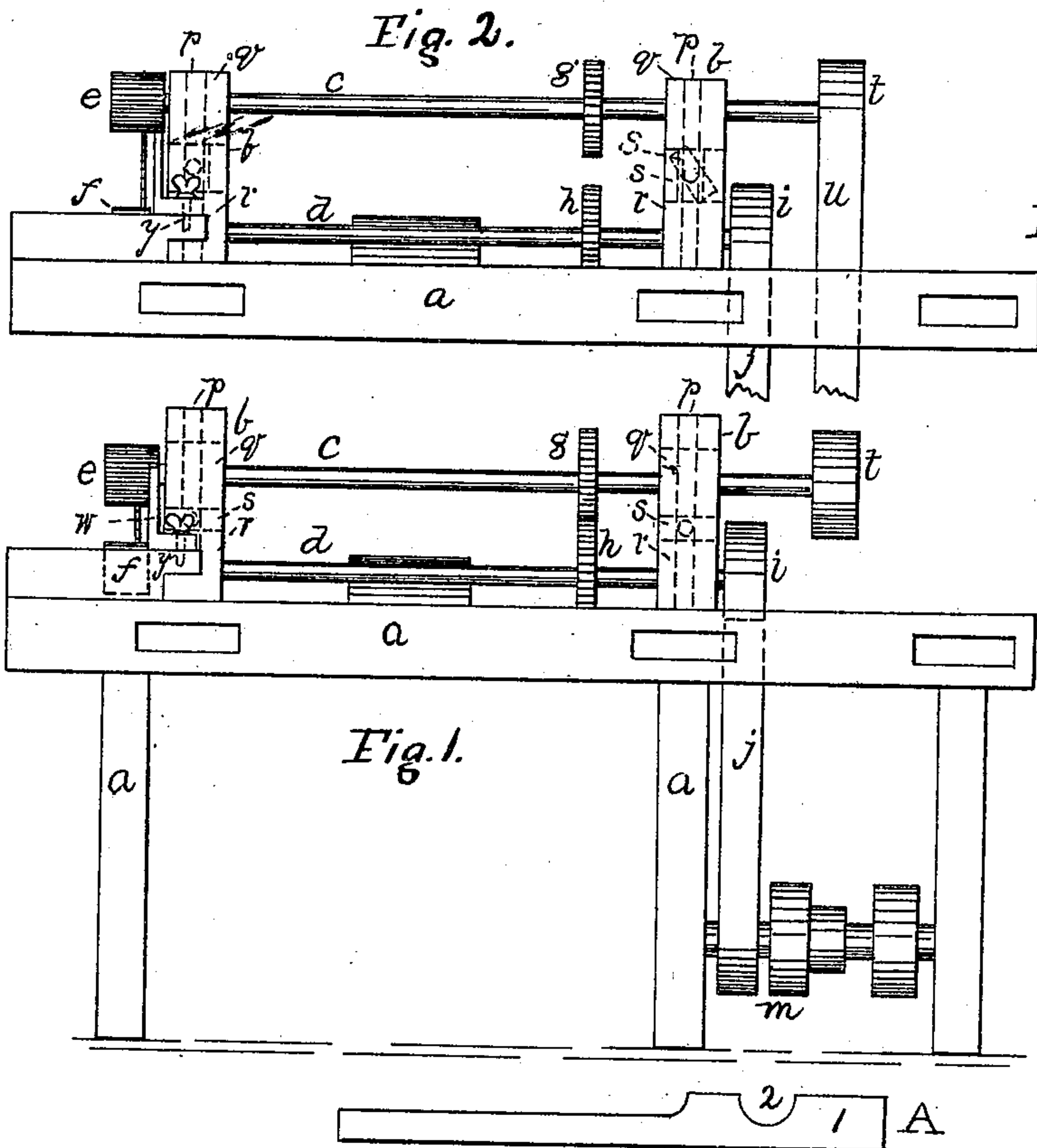


Fig. 1.

Fig. 2.

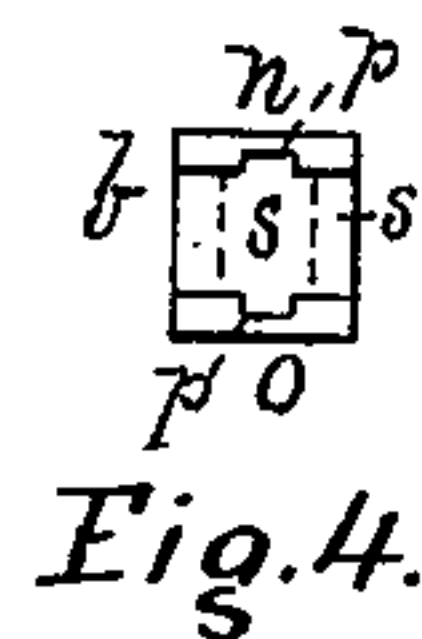


Fig. 4.

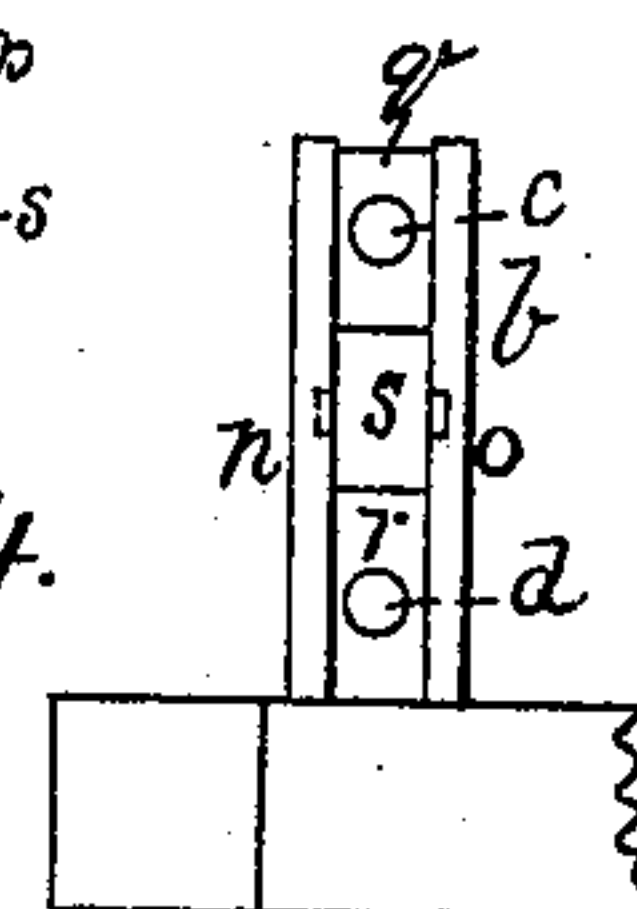


Fig. 3.

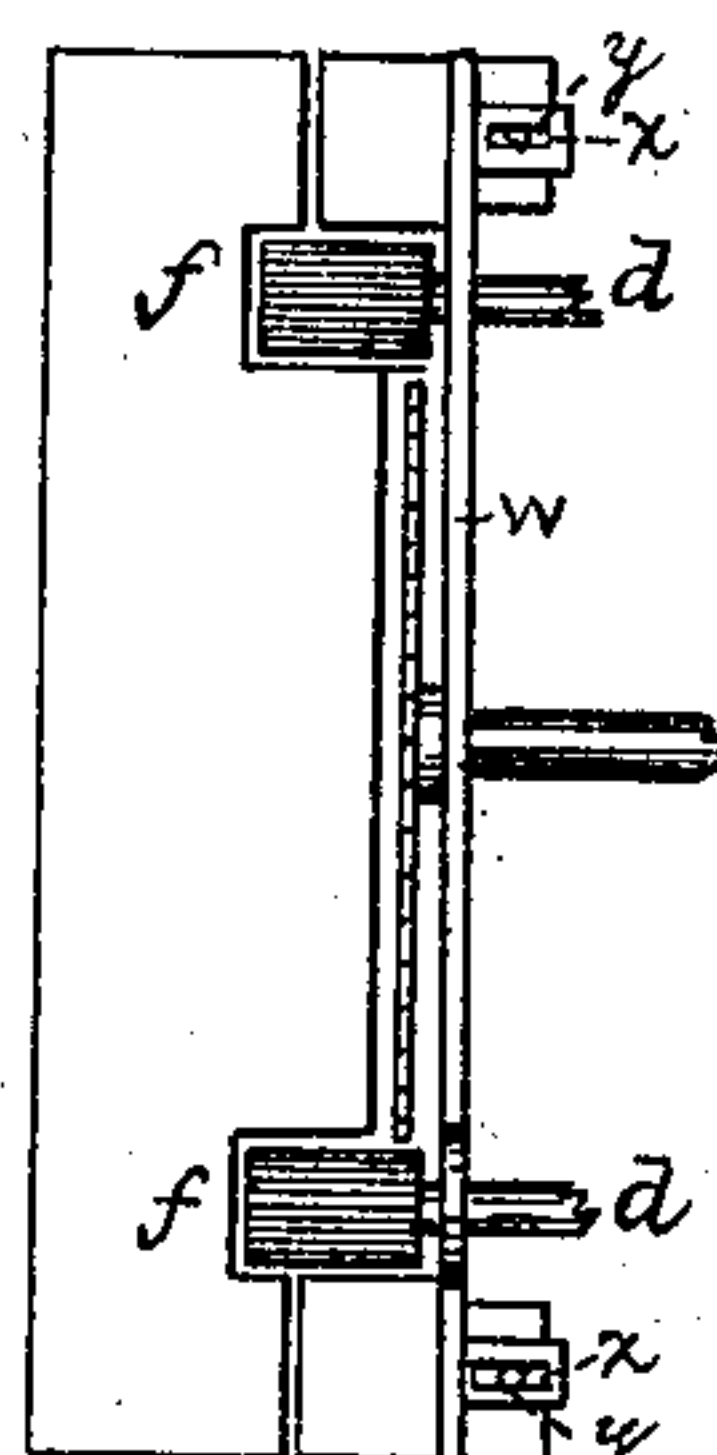


Fig. 6.

Witness

W. E. Brown
John R. Mason

Inventor

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UNITED STATES PATENT OFFICE.

GEORGE W. HERRING, OF BANGOR, MAINE, ASSIGNOR TO JAMES WALKER & CO., OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR SAWING STAVES AND LATHS.

Specification forming part of Letters Patent No. **178,850**, dated June 20, 1876; application filed November 13, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. HERRING, of Bangor, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Machines for Sawing Staves and Laths; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 shows side elevation as arranged for laths; Fig. 2, partial side elevation as arranged for staves; Fig. 3, end view of standard supporting feed-rolls; Fig. 4, top view of same; Fig. 5, end view of machine; Fig. 6, plane of table.

Same letters show like parts.

The object of my invention is the production of a sawing-machine which shall be capable of sawing laths or staves with but slight change; and it consists in certain devices whereby such interchangeability may be readily effected.

My devices are applicable to a lath-machine of any ordinary construction, having either one or two sets of feed-rolls. In such machines the upper feed-rolls commonly receive their motion from gears on their shafts meshing into gears on the shafts of the lower feed-rolls, which are run by a belt. My devices for changing the machine to adapt it for either laths or staves consist, first, in making the upper feed-rolls capable of vertical adjustment, enabling them to feed a strip of the width of a stave, and in providing them with independent actuating mechanism when so raised; and, second, in providing an adjustable gage, by which the thickness of the lumber may be regulated.

Fig. 1 in the drawing shows the machine as a lath-machine, *a* being the frame; *b*, the standards supporting the shafts *c d* of the upper and lower feed-rolls; *e f*, said feed-rolls; *g h*, gears thereon; *i*, pulleys on lower feed-roll shafts; and *j*, a belt, communicating motion thereto from a counter-shaft, *m*, all said parts operating as usual in machines of this character, but being somewhat different in construction to admit of the changes before described.

I will now describe one means of adjusting

the upper feed-rolls: The standards *b*, supporting the shafts *c*, are constructed in two parts, *n o*, grooved upon their inner sides, as at *p*. Between these parts the boxes *q* are held, being retained in place by the grooves, as are likewise the boxes *r* of the lower shafts *d*. Between these boxes *q r* are placed blocks *s*, capable of being turned within the standards, (see dotted lines, Fig. 2,) so as to rest either upon the side or edge in the latter position, serving to raise and hold the upper rolls at the necessary elevation to feed a stave through the machine. When so raised, as before stated, the gears *g h* are thrown out of connection, so that the belt *j* and gear *h* of the lower shafts no longer communicate motion to the upper feed-rolls. To obviate this, I provide said upper feed-roll shafts *c* with pulleys *t* overhanging the pulleys *i* on the shafts *d*, and communicate motion to them by means of a belt, *u*, actuated by a second counter-shaft, *v*.

The thickness of the lath or stave may be regulated by a gage shown at *w*, adjustable by means of slots *x* and screws *y*. A convenient form for this gage is shown in the detail *A*, the wide portion *1* giving a broad bearing for guiding the wide lumber, and the hollow *2* permitting the feed-roll to drop down when the machine is used for narrow lumber. The upper feed-rolls may be provided as usual with the ordinary pressure mechanism.

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

1. In a sawing-machine, substantially of the within-described construction, the vertically-adjustable feed-rolls, provided with independent driving mechanism, whereby said machine may be used interchangeably as a lath or stave machine, substantially as and for the purposes set forth.

2. In a sawing-machine, substantially of the within-described construction, the combination of the adjustable feed-rolls, provided with independent driving mechanism and the adjustable gage, substantially as set forth, for the purposes described.

In testimony that I claim the foregoing, I have hereunto set my hand this 9th day of November, 1875.

GEORGE W. HERRING.

Witnesses:

JOHN R. MASON,

WM. FRANKLIN SEAVEY.