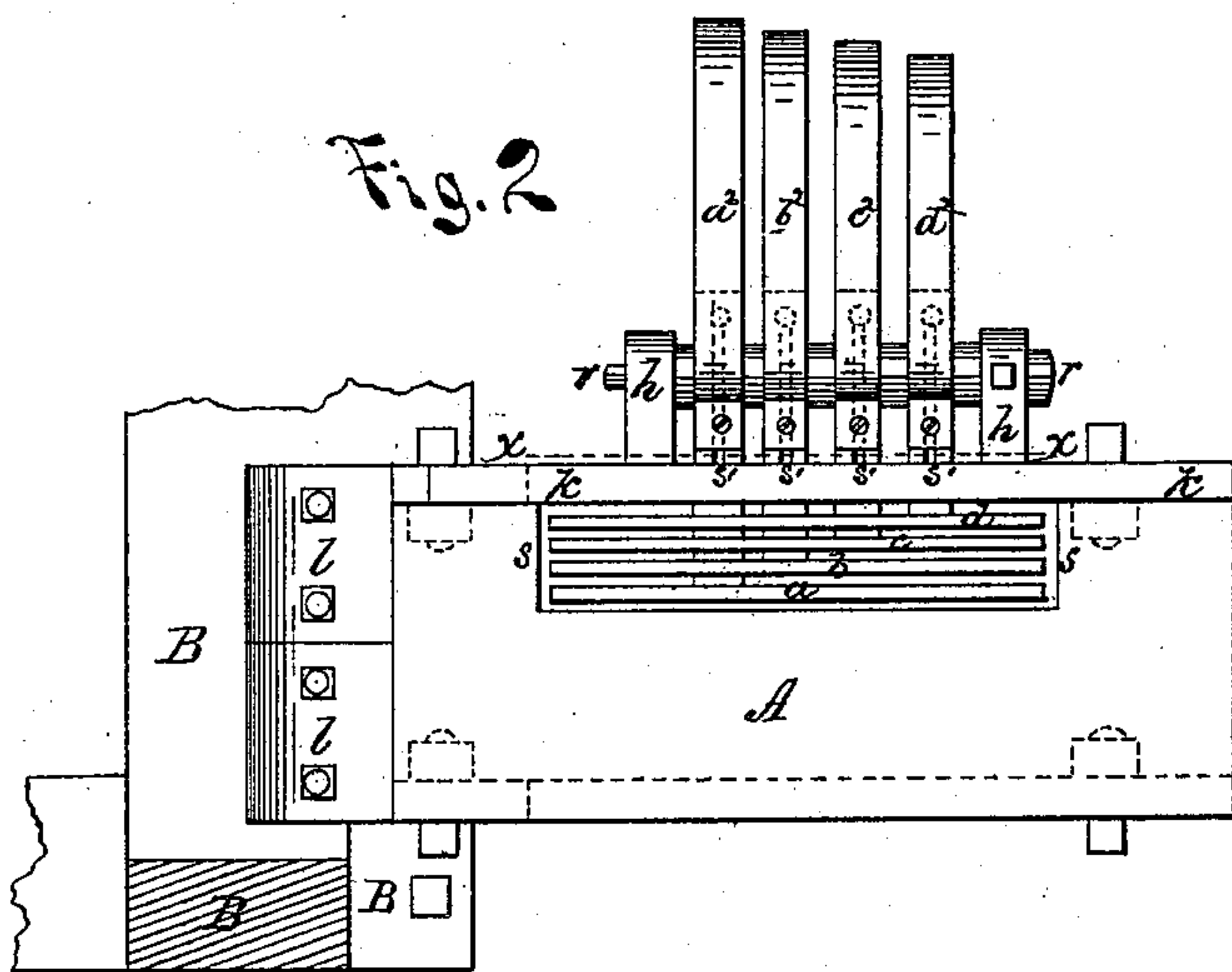
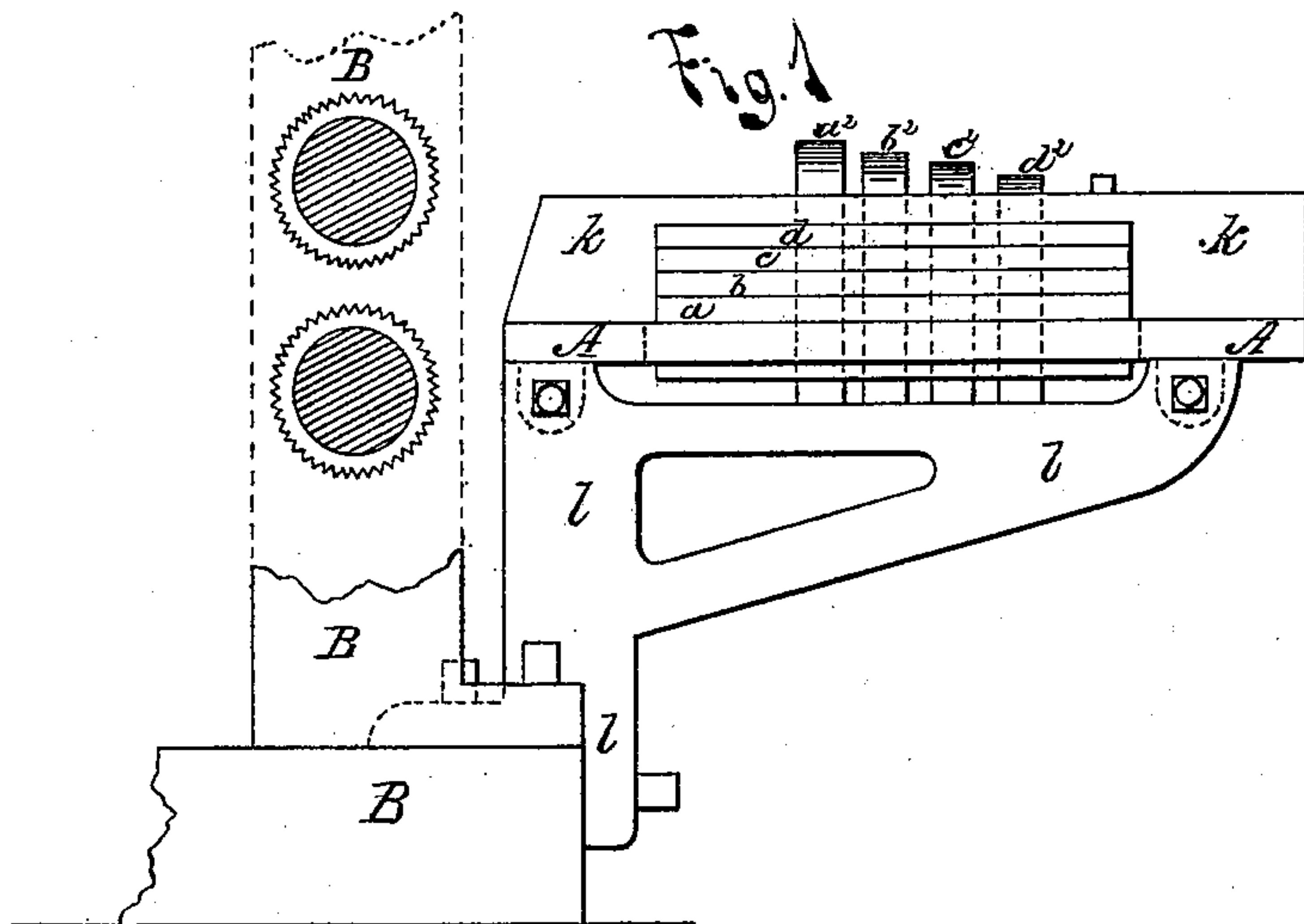


D. J. MURRAY.

FEED TABLE FOR SAWING MACHINES.

No. 343,057.

Patented June 1, 1886.



Witnesses.
T. E. Nelson.
K. Steele.

Inventor.
Donald J. Murray.
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Atty.

(Model.)

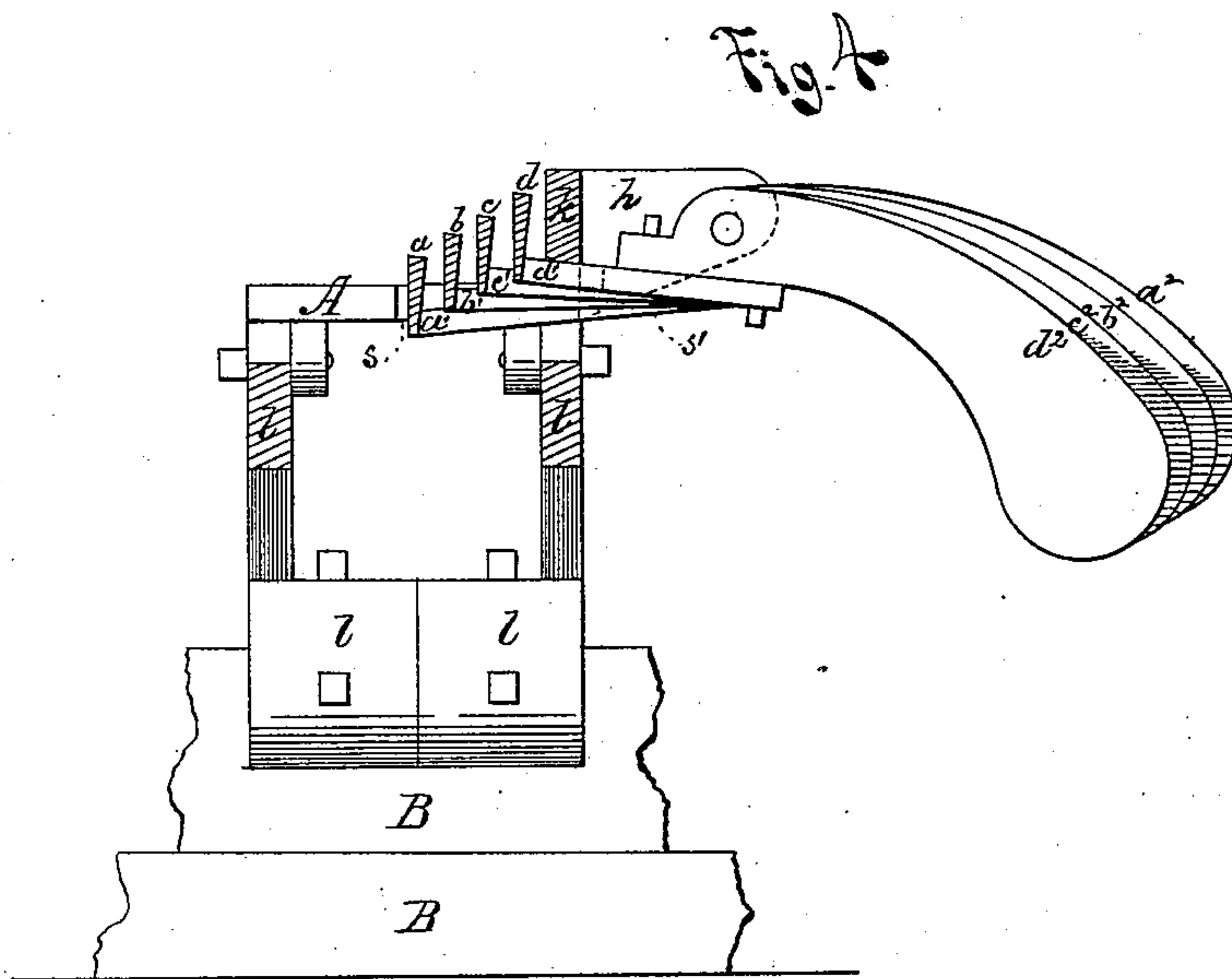
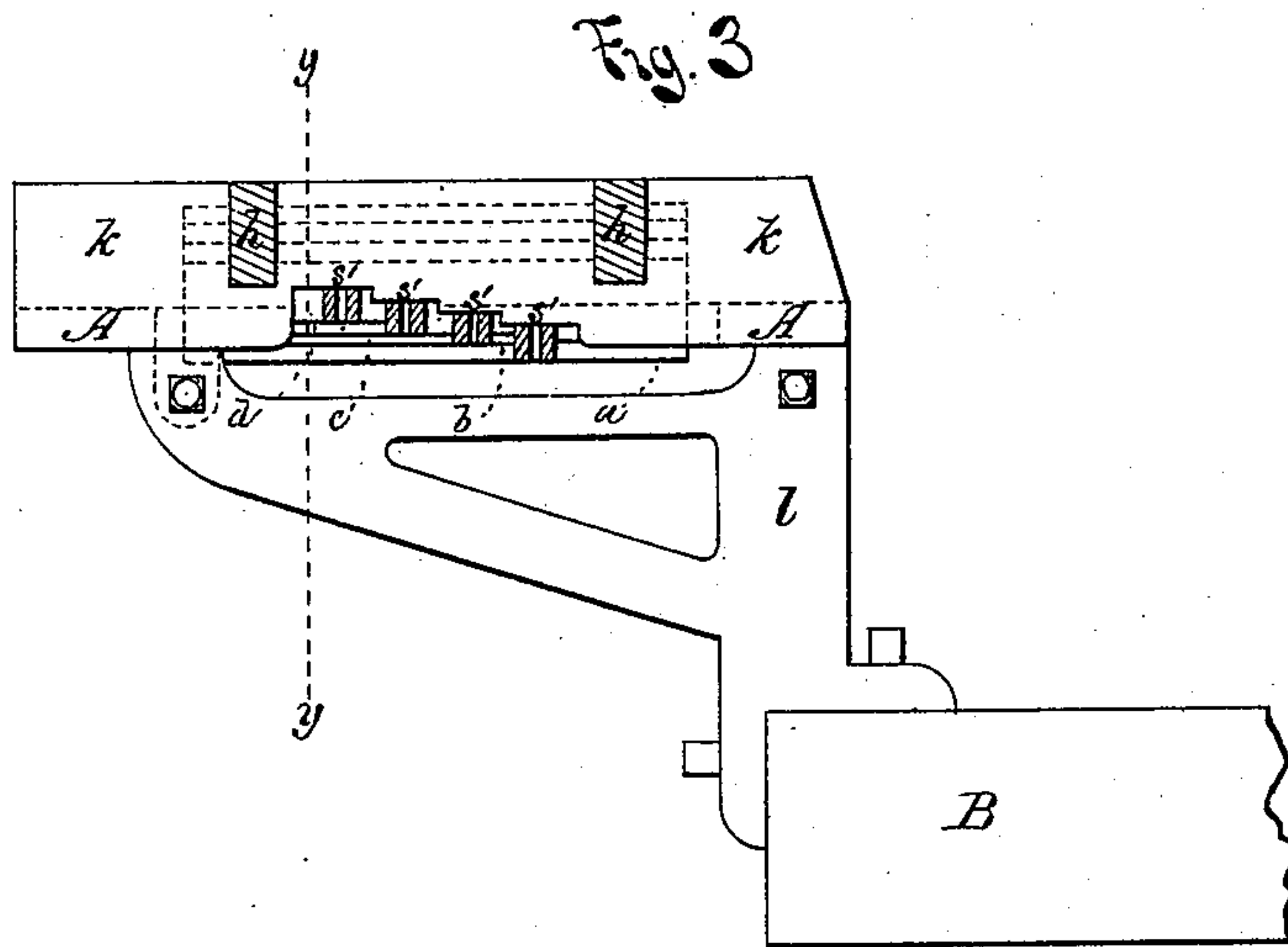
2 Sheets—Sheet 2.

D. J. MURRAY.

FEED TABLE FOR SAWING MACHINES.

No. 343,057.

Patented June 1, 1886.



Witnesses.
T. C. Kellogg.
H. Steele.

Inventor.
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Atty.

UNITED STATES PATENT OFFICE.

DONALD J. MURRAY, OF WAUSAU, WISCONSIN.

FEED-TABLE FOR SAWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 343,057, dated June 1, 1886.

Application filed September 21, 1885. Serial No. 177,724. (Model.)

To all whom it may concern:

Be it known that I, DONALD J. MURRAY, a citizen of the United States of America, residing at Wausau, in the county of Marathon and State of Wisconsin, have invented certain new and useful Improvements in a Feed-Table for Sawing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is an improved feed-table for saw-machines, being more especially adaptive to lath-machines, and embraces in brief the following novel features: a vertically-slotted plane-table furnished with a conjoined pair of bracket-arms by which to attach said table to the frame of a saw-machine, and also said table having a vertically-elevated edge or rigid side piece behind and longitudinally parallel to said slot, and upon the outer side of which project a pair of bracket-lugs, between which, upon a suitable fulcrum-rod, are hung a series of independently-balancing counterweighted and adjustable lever-guides, so as to be readily and automatically depressed within said table-slot and mutually co-operate with a series of saws correspondingly and adjustably hung in the same frame to which said feed-table is attached, all of which and their purposes are hereinafter more fully described, and illustrated by the accompanying drawings, in which like letters designate identical parts of said device in the different figures, respectively.

Figure 1 is a side elevation of said feed-table, showing the vertical fronts and top edges of the series or tier of parallel lever-guides above the table-plane, the counter-weights of said guides, and the outer side of one of said bracket-arms to which the table is bolted, and by which it is also attached to the saw-frame, a portion of which is also shown in section. Fig. 2 is a plan view of said table, showing the top edges of said guides within said table-slot, the balancing and counterweighted lever-arms of said guides, the top edge of the rigid guide, and the pair of lugs or hangers which support the fulcrum-rod upon which said counter-weights are adjustably ranged. Fig. 3 is the obverse side of said table as shown by Fig. 1, showing a cross-sectional rear view, corresponding to the dotted line xx in Fig. 2,

of the properly-adjusted positions of the slotted lever-arms of said balancing-guides; and Fig. 4 is a rear end view of said table and its attaching bracket-arms, showing in transverse section on the line of yy in Fig. 3 the proper and normally relative positions of said lever-guides and table-plane.

The letter A represents the feed-table, which is made of suitable material and of dimensions to hold any bolt—say of laths—broad enough to engage at once all the saws of the saw-frame to which it is attached. Said table has a rectangular slot, s , cut vertically and longitudinally through its plane, as shown, within which said lever-guides are suitably adjusted and balanced, also has a side piece vertically elevated behind and parallel to the outer edge of said table-slot, which serves as a rigid guide, k , for said broad lath-bolt on its passage to the saws; and said table is also furnished with a conjoined pair of bracket-arms, l , to which it is firmly bolted, as shown, and by which it is securely attached to said saw-frame B, a sectional portion of which is herewith shown, especially in Fig. 1, which also illustrates, within dotted lines, the transverse section of the pair of feed-rollers coming between the feed-table and the saws. Upon the outer side of said fixed guide are made or secured a pair of horizontally-projecting lugs or hangers, h , which serve to support the ends of the fulcrum-rod r , made of suitable material and dimensions, and after being thrust into proper position, as shown, is firmly secured in place by a set-screw. Upon said rod are successively hung and adjusted in proper alignment with said drop-guides and connective lever-arms the counter-weights of said levers. These guides $a b c d$ are made of suitable material, in the shape of rectangularly-edged slats of suitable dimensions, and are suitably adjusted, as hereinafter described, in a vertical position within said table-slot and parallel to each other, with equal intervals between the longitudinal inner edge of said slot and said rigid guide, each said drop-guide being suitably fastened upon or forming part of one end of an adjustive lever-arm, respectively shown herewith as $a' b' c' d'$, the other end of each of said arms being relatively and

adjustably secured by its counter-slot and set-bolts underneath the inner end of its respective counter-weight of the series $a^2 b^2 c^2 d^2$, as shown. Said lever-guides are thus made capable of easy arrangement—the one behind, with its top edge suitably above the line of, the other in tier, so as to be each freely and independently depressed by the lath-bolt placed upon it; and being equally and evenly beveled on their top edges and rear sides, as shown, they can also be arranged relatively to the table-plane and slot, that when the lowest outer guide, a , being fixed, as described, upon the longest lever-arm, a' , and the farthest from the outer end of the table, is depressed by a single lath-bolt, said depression is suitably limited to the top plane of said table by the upper bar of the adjacent arm of the bracket l ; and when any or all of the succeeding guides are also depressed by wider lath-bolts, the bottom edge of each successive guide-slat rests evenly upon each previously-depressed lever-arm, so that the said adjustments, beveling, and relative arrangement, together with said checking bracket-bar, keep the parallel top edges of said lever-guides evenly flush with the top surface of the table-plane, and with suitable spaces between the vertical slats, thereby facilitating the guidance of the lath-bolt to the saws, while preventing any liability of clogging the slats with sawdust. The respective counter-weights $a^2 b^2 c^2 d^2$ of said lever-arms $a' b' c' d'$ of the guides $a b c d$ are made, ranged upon said fulcrum-rod, and adjusted upon said lever-arms, to sufficiently overbalance said guides and readily and automatically return them to their intended normal position above said table-plane, as shown, thereby making it easy to place successive lath-bolts at will against the front or vertical face of the suitable guide or guides of the series. Said counter-weights may be furnished with suitable trunnion-sleeves or correspondingly-pierced washers, which serve, together with said adjustive lever-arms, to aid said arrangements of slat-guides and keep them always in a parallel position, as described, by properly filling any overspaces on the fulcrum-rod between the counter-weights, as shown. The number of lever-guides in the feed-table should always be one less than the number of saws in the saw-frame to which it is attachable. Thus, saws from two to ten in number may be conveniently worked, and by using collars or washers of suitable thickness to correspondingly separate the saws on their arbor or arbors, any desired thickness of laths, uniform or otherwise, can be obtained.

The operation of the above-described feed-table and the saws in the frame of the machine to which it is attached is as follows: Should there be, for instance, five saws in frame and four lever-guides in table, the second saw and the first or outer guide are ranged in line, then the third saw and the second guide, and so on to the last saw of the series

and the rigid guide. Then should it appear, upon taking up a lath-bolt, that only one lath can be clearly cut from it, place said bolt lengthwise against the front of the first guide, which will direct the bolt just clear of the second saw, causing the first saw to cut the refuse material from the bolt and the lath thus made to pass the next saw. Should it, however, appear that the chosen bolt is broad enough to make two laths, it is placed upon the first guide, which is thus depressed into the table-slot and against the second guide, which will cause the bolt to slide just clear of the third saw, whereby the first saw will cut away the refuse, as before, and the second saw cut the remaining body into two laths. Again, for a three-lath bolt, press down two guides and slide the bolt along the front of the third guide, and so continue until in the case of a five-lath bolt, press down all four guides and slide the bolt along the front face of the last or rigid guide, which cause the first saw to remove the refuse and the other four saws to cut five laths. Finally, should a suitable dividing-ridge be placed in line with the first saw, the refuse, after passing the saw, will be made to fall into a conveyer and the laths into a binding-frame, ready to be tied into bundles.

The useful results of the herein-described feed-table are that the lath-bolt material will be so guided that the bark will not be cut by the saws, thereby dulling them and also causing refuse pieces to fly wildly about the saw-machine; that such facilities are afforded for the ready and proper adjustment of the lever-guides in the feed-table and with the saws in the saw-frame of a lath-machine as that said alignments may at any time be conveniently and quickly made or corrected, and the machine caused to produce any desired uniform thickness of lath conformable to the most economical use of the bolt material; and that the saw-machine to which said feed-table is attached will the more readily do its own assorting. Therefore,

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

1. The attachable feed-table furnished with the conjoined attaching-brackets, the drop-slot through said table-plane, and the vertical rigid guide upon outer edge of same, the last having the projecting hanger-lugs, whereby upon a transversal fulcrum-rod are arranged and hung the respective counter-weights of the ranging slat-guides vertically counterpoised within said drop-slot upon successively overreaching and adaptively-slotted lever-arms, each intermedially set-screwed underneath the inner end of its respective counter-weight, and all made and arranged to automatically co-operate with saws set in the machine to which said table is attached, substantially as and for the purposes herein specified.

2. In the attachable feed-table herein described, the combination, with the drop-slot

and vertical rigid guide of said plane-table,
of the vertically-counterpoised and ranging
slat-guides automatically depressible within
said drop-slot, each upon the inwardly and
5 successively overreaching end of its respect-
ive and adaptively-slotted lever-arm inter-
medially set-screwed underneath the inner
end of its independently and rangingly hung

counter-weight, substantially as and for the
purposes herein specified. 10

In testimony whereof I affix my signature in
presence of two witnesses.

DONALD J. MURRAY.

Witnesses:

J. M. SMITH,

CHAS. W. HARGER.