

No. 859,953.

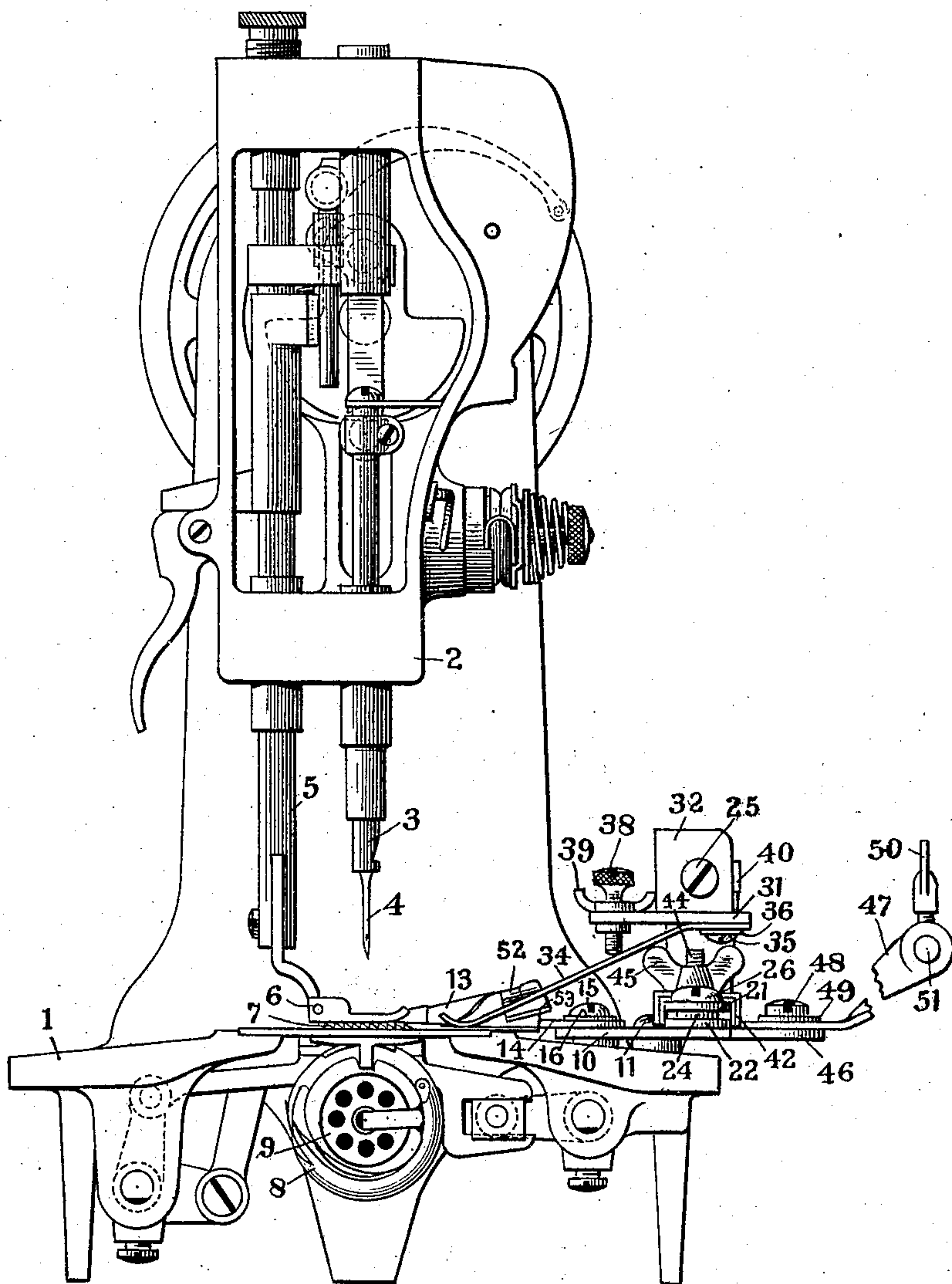
PATENTED JULY 16, 1907.

A. LAUBSCHER.
GUIDE FOR SEWING MACHINE EDGE FOLDERS.

APPLICATION FILED OCT. 8, 1906.

3 SHEETS—SHEET 1.

Fig. 1.



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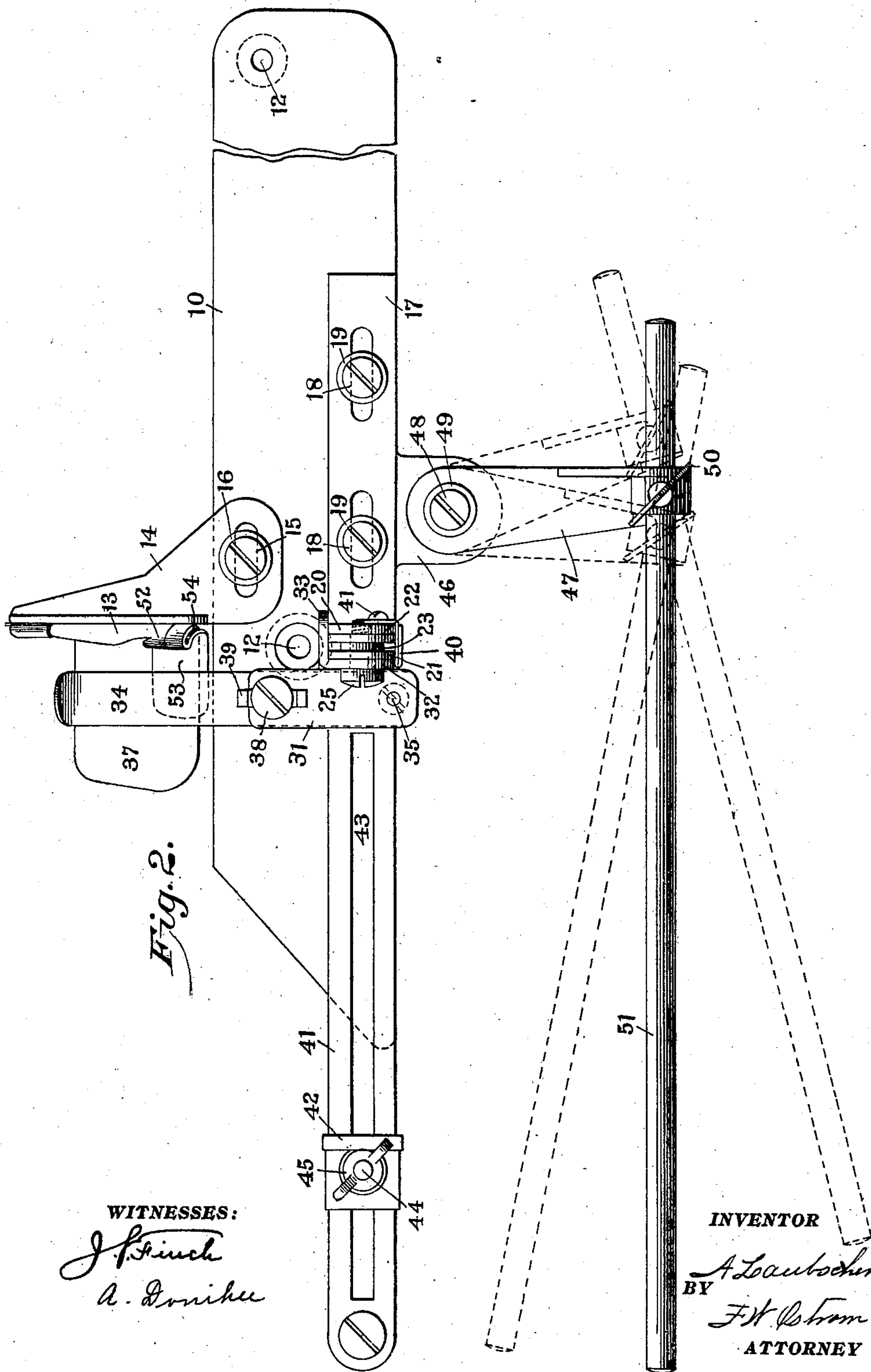
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3 SHEETS—SHEET 3.

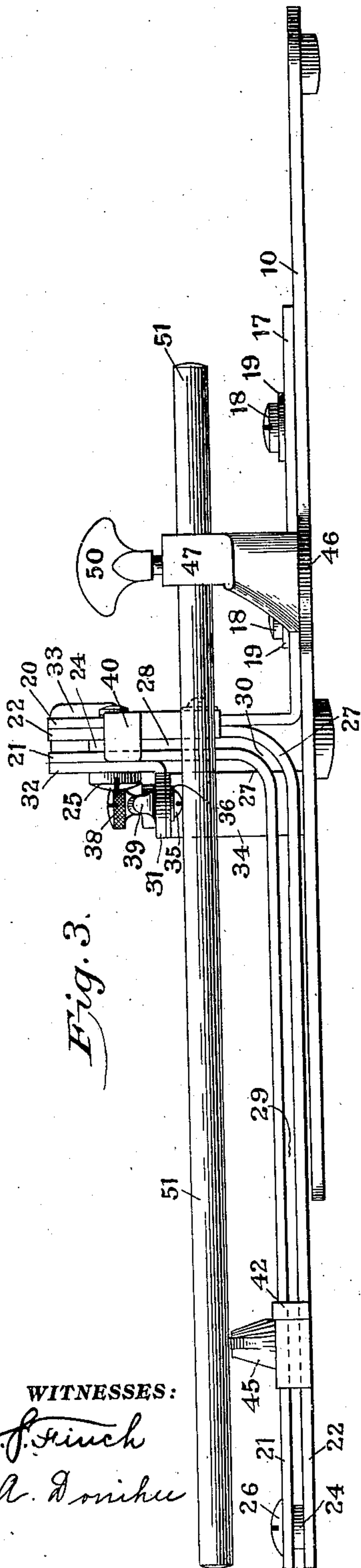


Fig. 3.

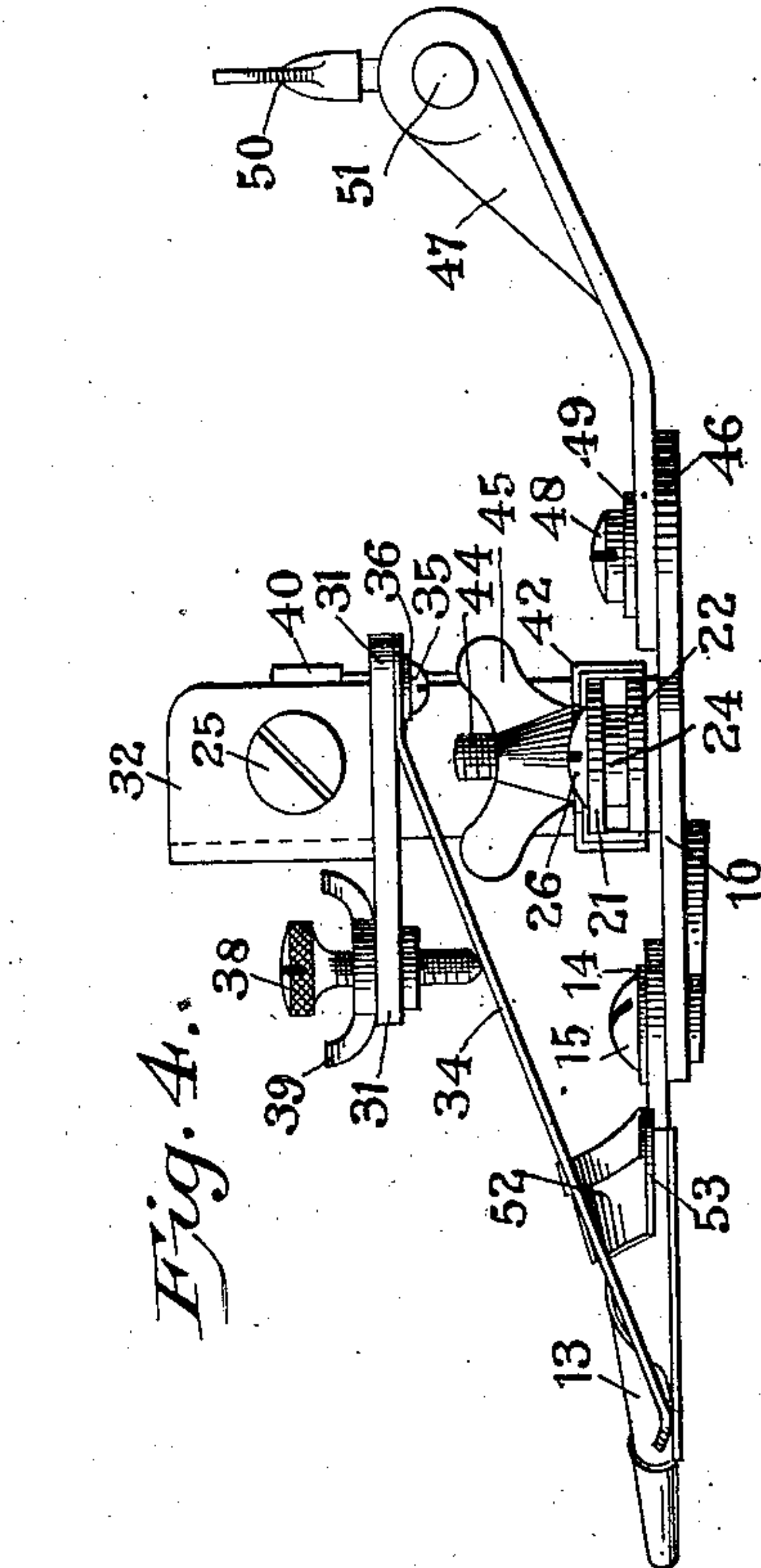


Fig. 4.

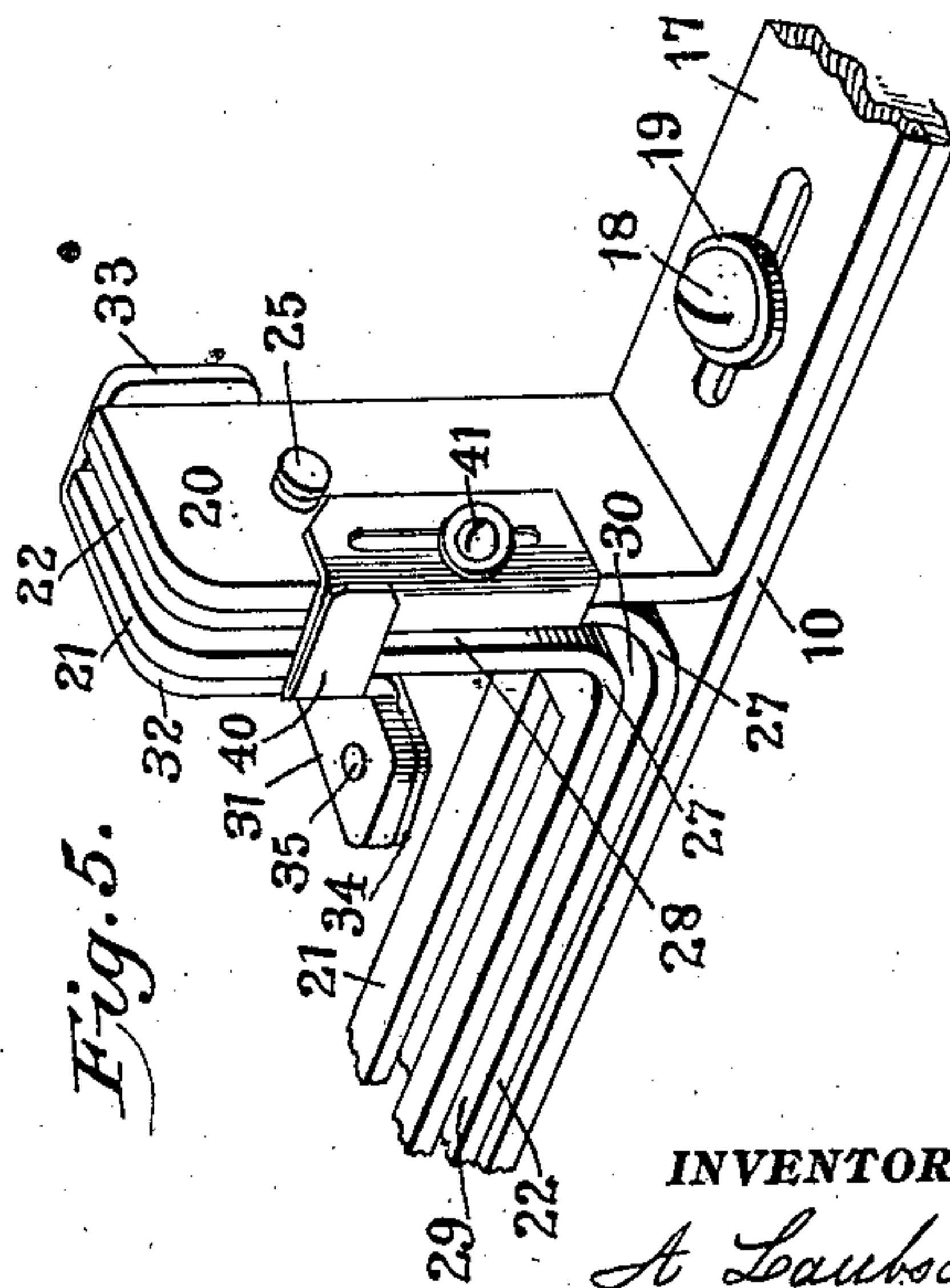


Fig. 5.

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UNITED STATES PATENT OFFICE.

ALEXANDER LAUBSCHER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

GUIDE FOR SEWING-MACHINE EDGE-FOLDERS.

No. 859,953.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed October 8, 1906. Serial No. 337,854.

To all whom it may concern:

Be it known that I, ALEXANDER LAUBSCHER, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Guides for Sewing-Machine Edge-Folders, of which the following is a specification.

This invention relates to improvements in edge or hem folding attachments for sewing machines, and has for its object to effect a semi-automatic control of the feed of the material by the employment of an adjustably mounted guide-rod, making it convenient for the operator to attend to the running of two or more sewing machines, dependent upon the nature of the production. If, as in some instances, the production comprises the hemming or edge folding of substantially long strips, the operator can conveniently look after the production of three or four machines.

In the hemming or edge turning of comparatively long strips of material to be used as trimmings in the manufacture of various garments, such strips are sometimes cut lengthwise of the material, sometimes bias, and at other times in the direction of the width of the material; and for this reason, and for the reason that the material may vary from the sheerest cottons and silks to the heavier materials for outer garments, the means commonly employed for guiding the material have been unsatisfactory, due mainly to the demand of the operator's almost constant attention to overcome the tendency of the material to feed out from under the needle, or in a direction to crowd the hem folder, edge turner, or whatever attachment may be employed in connection with the production; and it is the purpose of the adjustable rod or guide-bar to overcome this difficulty, and to such an extent as makes it practical to increase from two to four-fold the production of a single operator.

Referring to the drawings, in the several figures of which like parts are similarly designated, Figure 1 is a front end elevation of a Wheeler & Wilson sewing machine, provided with a hemmer equipped with my improved means for guiding the material to the action of the scroll-guide; Fig. 2 is a plan view of the hem folding and guiding device shown in Fig. 1; Fig. 3 is a front side elevation of Fig. 2; Fig. 4 is a front end elevation of Fig. 2, and Fig. 5 a section in perspective, later to be referred to.

In describing my improvements, only such limited reference will be made to the usual well-known parts of the sewing machine as is deemed necessary for a proper understanding of the invention.

1 is the bed-plate of the sewing machine, 2 the overhanging arm, 3 the needle-bar, 4 the needle, 5 the presser-bar, 6 the cloth-presser, 7 the feed-dog, 8 the loop-taker, and 9 the shuttle bobbin, all of which may

be as herein pointed out or of any other approved form of construction.

10 is the hemmer base-plate secured to the bed-plate of the sewing machine in any convenient manner, as by screws 11, one only of which is shown, see Fig. 1, passing through holes 12, 12 and threaded into the bed-plate.

13 is the commonly employed hem-folding scroll secured to the bracket 14 which, in turn, is adjustably secured to the base-plate 10 by the adjusting screw 15 and washer 16.

17 is a guide bracket adjustably secured, by screws 18, 18 and washers 19, 19, to the base-plate 10 and provided with an upright portion 20.

21 and 22 are guide-bars held in alinement by screws 25, 26 and slightly separated by washers 23, 24. The guide-bars 21, 22 are curved at 27, 27, thus forming a vertical opening 28 and a horizontal opening 29, connected by a curved portion 30, through which openings the material passes and is guided in its travel to the action of the stitch forming mechanism.

31 is a bracket formed with a lug 32, which lug at its rear side is bent at right angles, thus forming the lug 33, which latter rests against the rear vertical edges of the upright portions of the guide-bars 21 and 22 and against the rear edge of the upright portion 20. The screw 25 passes through suitable holes formed in the lug 32, upright portions 21, 22, and washer 23, and is then threaded into the upright portion 20, thus securing the bracket 31 and the several parts in proper relationship.

34 is a spring-finger secured, by screw 35 passing through washer 36, to the bracket 31, the free end of said finger 34 coacting with the spring-plate 37, which latter is formed integral with the scroll 13.

38 is an adjusting screw mounted in the bracket 31, and in such relationship that its lower or threaded end contacts with the upper surface of the spring-finger 34, making it convenient to vary the downward pressure of the free end of said finger, thus adapting the action of the finger 34 and plate 37 to varied tensions, to better meet the requirements of variations in production. 39 is a check-nut for securing screw 38 against accidental adjustment.

40 is an edge-guide overlapping the space 28 and adjustably secured by screw 41 to one side of the upright portion 20.

42 is a second edge-guide adjustably secured, through slot 43, slide-bolt 44 and nut 45, to the guide-bar 21, the edge-guide 42 overlapping the horizontal space 29.

46 is a lug formed integral with the base-plate 10. 47 is a bracket adjustably secured, by screw 48 and spring washer 49, to the upper surface of the lug 46. Into the free end of the bracket 47 is adjustably secured, by

screw 50, a guide-rod 51, which latter, through its convenient adjustment, enables the operator to instantly, and without interfering with the operation of the stitch forming mechanism, influence the lead of the material, between the guide-bars 21 and 22, in its travel to the action of the scroll-guide 13 by simply turning the bracket 47 on its pivot screw 48, thus swinging the guide-rod 51 to the desired adjustment.

In the practical application of my improved edge-folding device, the material is first passed over the guide-rod 51 and then through the guiding space comprising the vertical portion 28, horizontal portion 29 and the curved portion 30, then into the first section 52 of the scroll-guide 13, then between the free end of the spring-finger 34 and spring plate 37 and into scroll-guide 13. The edge-gages 40 and 42 are then adjusted at the opposite edges of the material and in such position as will cause the edge of the material to travel close to or substantially against the wall 53 of the circular end scroll slot 54 in the section 52 of the scroll-guide 13. While the guiding elements 13, 21, 22, 34, 37, 40, 42 and scroll-slot 54 are sufficient to control the travel of the material when receiving close attention from the operator, it is the employment of the guide-rod 51 adjustably mounted to change the angle of the lead of the material relatively to the line of its feed which gives to the device its superior utility, practically effecting an automatic control of the feed

of the material, and thus enabling the operator to attend to the running of multiple machines.

I claim:—

1. In an edge folding guide for sewing machines, an adjustably mounted scroll-guide, a support for said guide and a guide-rod or bar mounted capable of adjustment at an angle to a line transverse to the line of feed of the material, in combination with an intermediate guide provided with adjustably secured edge-guides.
2. In an edge folding guide for sewing machines, the combination of a scroll-guide provided with a spring-plate, a support for said guide, a spring-finger adjustably mounted to coact with said plate to friction the material as it is fed to the action of the stitch forming mechanism, and a guide-rod or bar mounted capable of adjustment at an angle to a line transverse to the line of feed of the material.
3. In an edge folding guide for sewing machines, the combination of a scroll-guide provided with a spring-plate, a support for said guide, a spring-finger adjustably mounted to coact with said plate to friction the material as it is fed to the action of the stitch forming mechanism, a guide provided with right angle guide slots and having adjustably secured edge-guides, and a guide-rod mounted capable of adjustment at an angle to a line transverse to the line of feed of the material.

Signed at Bridgeport, in the county of Fairfield, and State of Connecticut, this 4th day of October, A. D. 1906.

ALEXANDER LAUBSCHER.

Witnesses:

J. S. FINCH,
A. DONIHUE.