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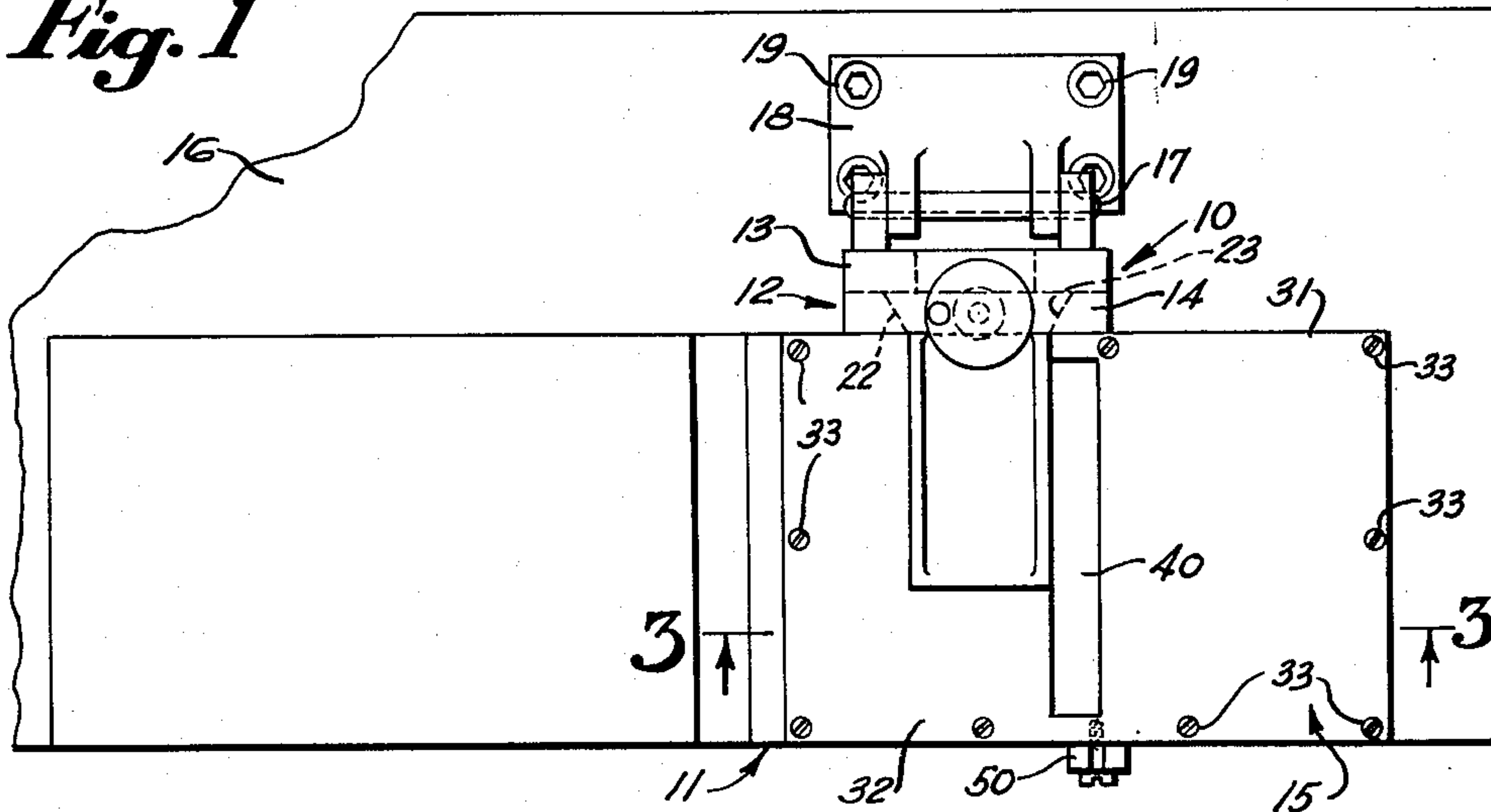
H. T. MOORE  
AUXILIARY PLANER

2,624,382

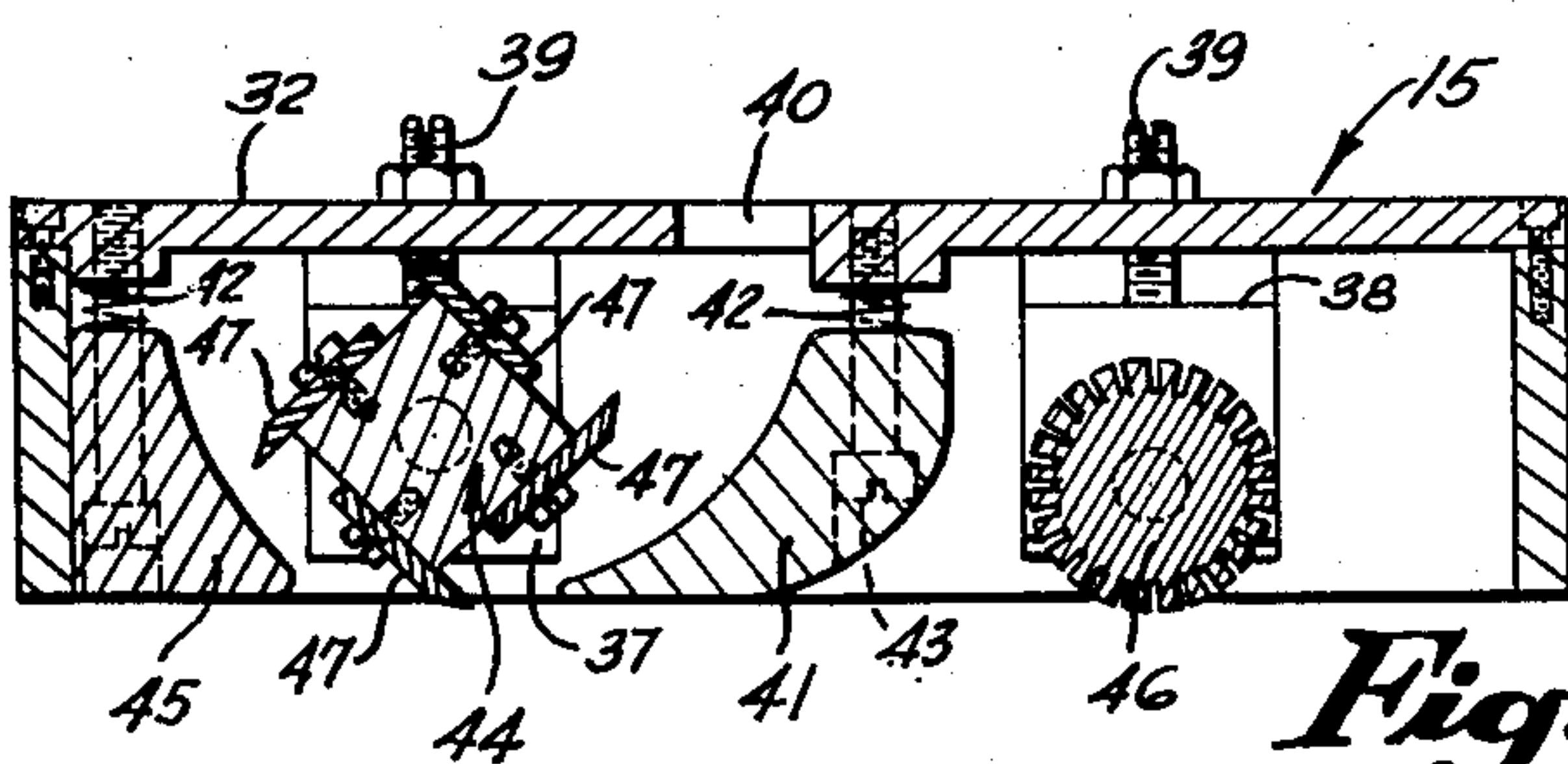
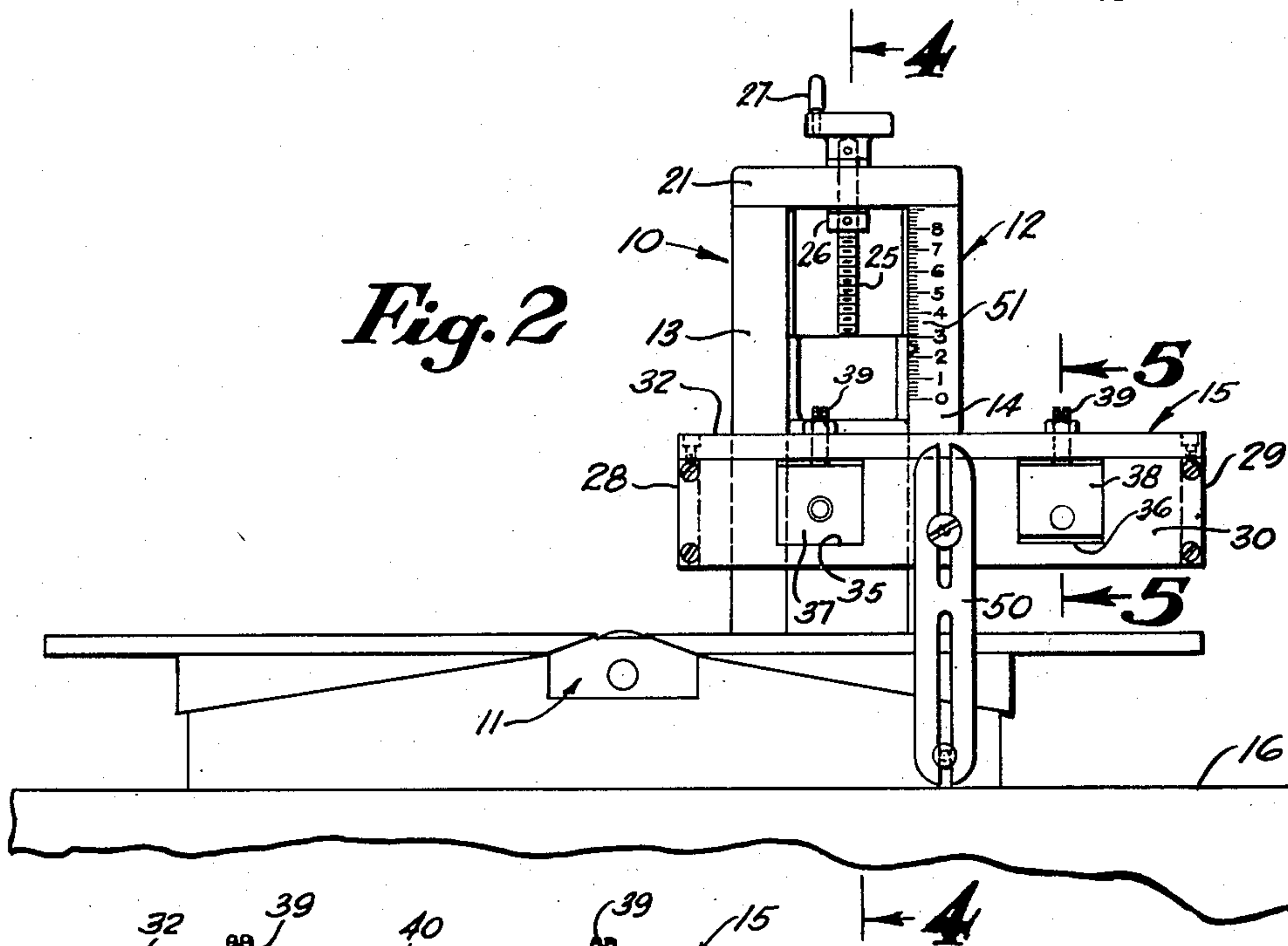
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2 SHEETS—SHEET 1

*Fig. 1*



*Fig. 2*



*Fig. 3*

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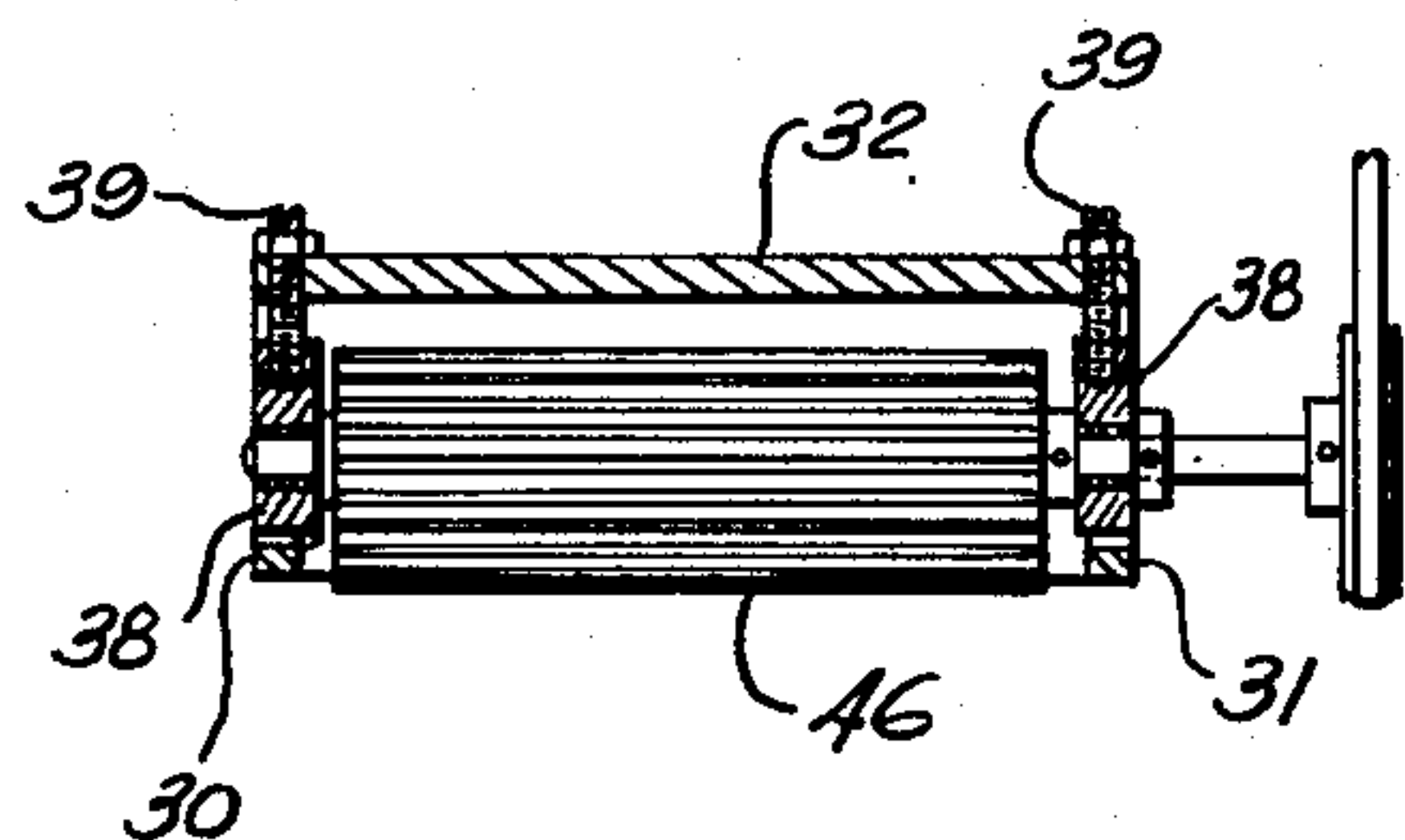
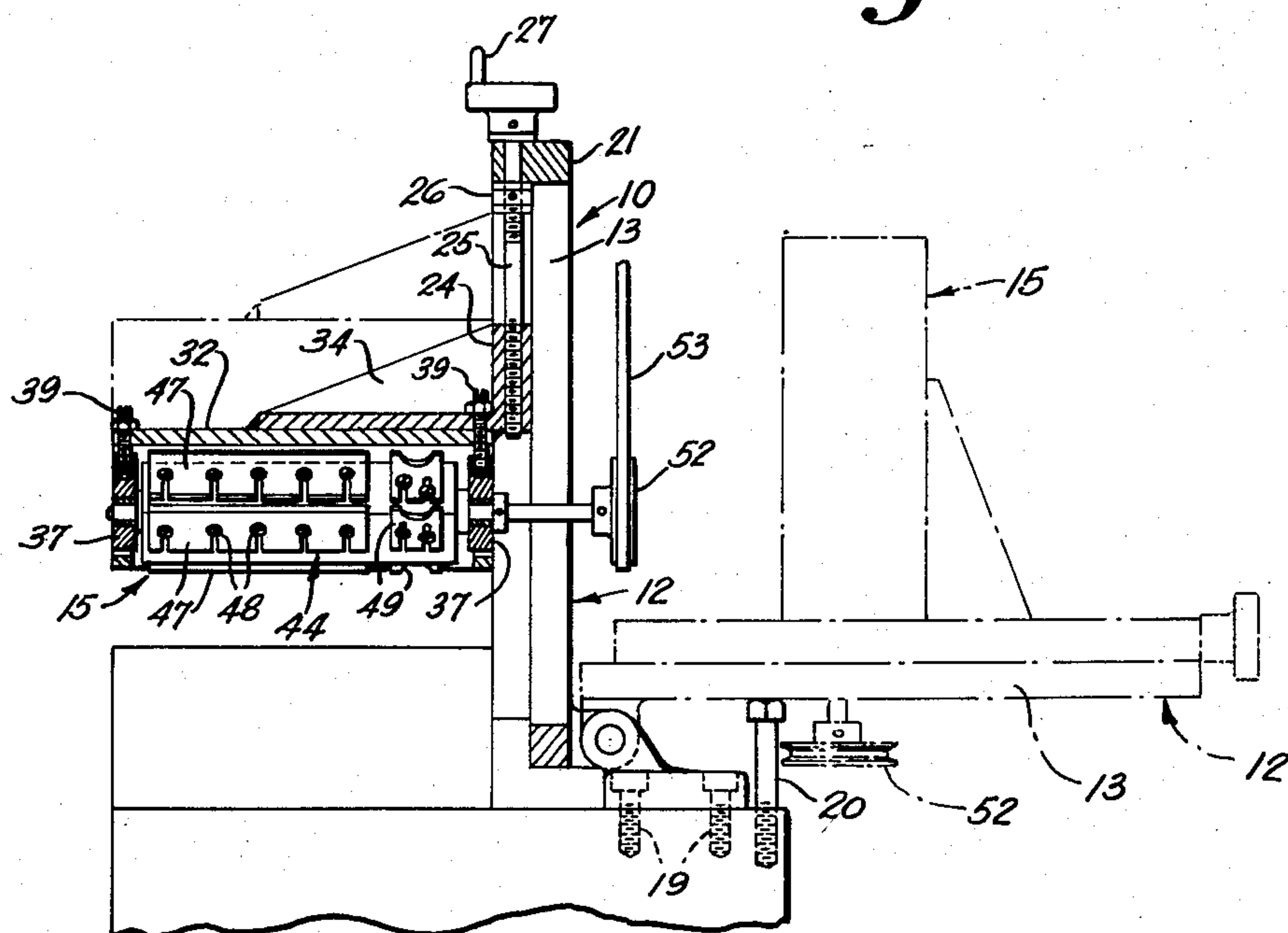
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2 SHEETS—SHEET 2

*Fig. 4*



*Fig. 5*

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## UNITED STATES PATENT OFFICE

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## AUXILIARY PLANER

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Application December 16, 1948, Serial No. 65,610

5 Claims. (Cl. 144—116)

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This invention relates to a planer, and more particularly to an auxiliary wood planer adapted for use with a cabinet maker's buzz planer.

It is an object of the instant invention to provide an auxiliary planer for use with a cabinet maker's buzz planer that will permit dressing two sides of a piece of wood simultaneously.

It is also an object to provide a device for automatically feeding wood to either the auxiliary planer or to both the auxiliary planer and the buzz planer.

Another object is to provide an auxiliary planer that may be turned back out of the way when not in use.

A further object is to provide an auxiliary planer having a tool block to which any kind of molding knife may be quickly attached.

Still another object is to provide an auxiliary planer in which the knife block can be readily removed for the alignment of the knives or for other purposes.

Other objects of the instant invention will become apparent in the course of the following specification.

In the accomplishment of these objectives, the auxiliary planer is formed with two spaced vertical supports hingedly attached at the bottom to a bench supporting the buzz planer and at the back. Slidably disposed between the vertical supports is a tool carrier extending forwardly over the table of the buzz planer. The tool carrier is a hollow container with open base for the rotatable insertion of a knife block for planing the wood as well as a feeder roller, the axis of each being disposed transversely of the wood and designed for adjustable contact with the top surface portion thereof. The interior of the carrier is partitioned by an especially designed wood shaving deflector so arranged relative to an opening in the top of the carrier that the wood shavings separated during the planing operation are directed through the opening and out of the carrier. The method of mounting the knife block and feeder roller in the carrier is such that both are readily serviced and molding knives may be added to the knife block as desired. Of course, the auxiliary planer could be used independently without the buzz planer, and the feeder roller could be used for either or both the auxiliary and buzz planer.

The invention will appear more clearly from the following detailed description when taken in connection with the accompanying drawing showing by way of example a preferred embodiment of the inventive idea.

In the drawings:

Figure 1 is a plan view of the auxiliary planer mounted on a bench in back of a buzz planer and constructed in accordance with the principles of this invention.

Figure 2 is a side elevational view of the planer shown in Figure 1.

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Figure 3 is a sectional view along the line 3—3 of Figure 1, enlarged.

Figure 4 is a sectional view along the line 4—4 of Figure 2.

Figure 5 is a sectional view along the line 5—5 of Figure 2, and enlarged.

Referring now in greater detail to the drawings in which like reference numerals indicate like parts, reference numeral 10 indicates the auxiliary planer, and 11 any known cabinet maker's buzz planer.

The auxiliary plane 10 comprises a hinged support 12 formed with the spaced parallel members 13 and 14 between which is slidably disposed a tool carrier 15. At the bottom, the spaced parallel members 13 and 14 are secured to a bench 16 which also serves as a support for the buzz planer 11 by any suitable hinged mounting means 17 along one edge of the plate 18 which is held in place by the screws 19 as shown in Figures 1 and 4. To prevent undue strain on the hinged mounting means 17, one or more stop screws 20 (Fig. 4) may be threaded into the bench 16 with the top thereof protruding sufficiently above to contact either or both of the spaced parallel members 13 and 14 when the same are rotated by the hinged mounting means 17 to the horizontal position shown by the dot and dash lines in Figure 4. At the top of the spaced parallel members 13 and 14 is the horizontal member 21 (Figs. 2 and 4) which is secured thereto by any suitable means. In each of the spaced parallel members 13 and 14 and in opposed relationship are the slideways 22 and 23 (Fig. 1). As illustrated, the slideways are formed of two superposed members, the outer of which have inclined surface portions as shown in Figure 1 and then the two superposed members are joined by any suitable means. Of course, the same result could be attained with other types of construction. A slide 24 (Fig. 4) is disposed in the slideways 22 and 23 and is designed, as later shown, for the adjustable support of the tool carrier 15. A screw 25 (Fig. 2) is rotatably passed through the horizontal member 21, being held by the collar 26, and thence threaded into the slide 24 (Fig. 4) in such a manner that as the screw 25 is rotated by a handle member 27, keyed at the top of the screw 25, the slide 24 is moved up and down in the slideways 22 and 23 in accordance with the direction of rotation of the screw 25 by the handle member 27.

The hollow tool carrier 15 is formed with the opposed end members 28 and 29 (Fig. 2); the opposed front and back members 30 and 31 (Fig. 1), respectively, which are secured along corresponding edges or otherwise as desired; an open base through which the bottom portions of the knife block 44 and feeder roller 46, later described, protrude; and a removable cover member 32. The removable cover member 32 is secured to the top surface portions of the opposed front and back members 30 and 31 of the tool carrier 15 by the



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screws 33, and to the slide 24 by the support 34 (Fig. 4) which support may be formed integral with the cover member 32 and the slide 24 or otherwise as desired.

In the opposed front and back members 30 and 31 of the tool carrier 15 are the rectangular openings 35 and 36 (Fig. 2) and aligned therewith in the back member 31 are similar openings. Along the vertical edges of the openings 35 and 36 are slideways of any suitable design and in which are the rotor slides 37 and 38, respectively, similar slides being disposed in the aligned openings in the opposed back member 31. Coacting with said rotor slides are screws 39 rotatably passed through the removable cover member 32 and acting against the top surface portion of said rotor slides when the screw is being turned downwardly to permit the adjustment of the knife block 44 and feeder roller 46, later described, which are rotatably disposed therein. Obviously, an arrangement could be used whereby the screws 39 would actuate the rotor slides both up and down in the manner of the first mentioned slide 24.

In the removable cover member 32 is a transverse slot 40 (Fig. 1) for the elimination of the wood shavings as later shown.

On the inside, the hollow tool carrier 15 is divided into two compartments by the wood shaving deflector 41 (Fig. 3) which may be attached under the downwardly exerting tension of similar spring members 42 to the inside surface portion of the top cover member 32 along the edge of the slot 40 by the screw 43 as shown in Figure 3. In opposed relationship, on the opposite side of the later described knife block 44 is a second deflector 45 similarly mounted to the cover 32 and designed to coact with the deflector 41 in the ejection of the wood shavings through the opening 40 under the rotary action from the knife block 44.

In the compartment at the right of the deflector 41 (Fig. 3) is a feeder roller 46 rotatably disposed in the previously mentioned slide 38 in the opposed front member 30 and a similar slide in the back member 31 adjustable by the screws 39 as previously mentioned to move the slides downwardly or to permit the same to be moved upwardly as desired.

Parallel to the feeder roller 46 but in the left compartment as viewed in Figure 3 and between the shaving deflectors 41 and 45 is a rotatably mounted tool block 44 mounted in a manner similar to that described for the feeder roller 46 and along the edges of which are the knives 47 adjustably secured by the screws 48 (Fig. 4) threaded into the tool block 44. If desired, a molding cutter 49 (Fig. 4) may also be attached to the knife block 44. Obviously, the knife block could have the square cross section shown in Figure 3 or could be otherwise constructed.

At the front of the auxiliary planer 10 is an adjustable guide 50 providing a means for attaching the front of the auxiliary planer 10 to the buzz planer 11.

The operation is as follows: The hinged support 12 of the auxiliary planer 10 is moved to the upright position and secured to the buzz planer by the guide 50. A board is placed upon the table of the buzz planer and the tool carrier 15 lowered by the handle member 27 until the bottom of the feeder roller 46 is in contact with the top surface portion of a piece of wood. The screws 39 are then manipulated for the desired cut by the knives 47 on the tool block 44 which may be

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determined by the scale 51 (Fig. 2) on the spaced parallel member 14. A pulley 52 (Fig. 4) keyed to the shaft of the knife block 44 is then set in motion by any suitable belt drive 53 and angular velocity similarly applied to the feeder roller 46 but in a direction adapted to move the wood toward the knife block 44. The buzz planer 11 is then set in motion and the board fed between the two planers which permits dressing both surfaces of the wood at the same time and to the depth desired. Obviously, the auxiliary planer 10 could be used independently of the buzz planer 11 or the feeder roller 46 of the auxiliary planer 10 could be used to feed the wood over the buzz planer 11. In addition, the knife block 47 is easily removed by first removing the cover member 32 and the knives trued on any suitable device while when out of use, the auxiliary planer 10 can be readily rotated out of the way.

It is apparent that the specific illustrations shown have been given by way of illustration and not by way of limitation and that the structures above described are subject to wide variations and modifications without departing from the scope or intent of the present invention.

What is claimed is:

1. An auxiliary planer in combination with a cabinet maker's buzz planer for dressing wood, the auxiliary planer comprising a tool block and a feeder roller, at least one cutting edge for the tool block, a hollow carrier with open base for the tool block and feeder roller, means for rotatably securing the knife block and feeder roller in the carrier with the cutting edge of the tool block and the bottom of the roller protruding through the open base of the carrier, and means for vertically adjusting the knife block and feeder roller in the carrier coacting with the rotatable mounting means; the auxiliary planer further comprising a support for the carrier, means for adjustably securing the carrier in the support and extending forwardly thereof with the plane of the carrier at right angles to the plane of the support, means for hingedly mounting the support at the back of the buzz planer and adapted to horizontally position the carrier over the buzz planer when said support is upright, and means for applying rotary motion to the knife block and feeder roller, the direction of rotation of the knife block and cutting edge of the buzz planer being the same, and the direction of rotation of the feeder roller being such as to move the wood between the cutting edges of the feeder roller and buzz planer.

2. An auxiliary planer in combination with a cabinet maker's buzz planer for dressing wood, the auxiliary planer comprising at least one tool block, at least one planing knife for the tool block, at least one feeder roller coacting with the tool block, a hollow carrier with open base for the tool block and feeder roller, means for rotatably mounting the knife block and feeder roller in the carrier with the cutting edge of the planing knife and the bottom of the roller protruding through the open base of the carrier, and means for varying the vertical position of the rotatable mounting means of the knife block and feeder roller in the carrier; the auxiliary planer further comprising at least two spaced apart parallel supports, a horizontal member disposed at the top of the supports, the supports having a slideway extending longitudinally therealong, hinge mounting means for the bottom of each support at the back of the buzz planer rotating the supports through 90°, a slide in the slideway,



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means for securing the carrier to the slide in a plane perpendicular to the plane of the supports, and means for varying the position of the slide in the slideway; the auxiliary planer further comprising means for applying rotary motion to the tool block in the direction of the rotary motion of the cutting edge of the buzz planer, and means for applying rotary motion to the feeder roller and adapted to move the wood between the cutting edges of the block and buzz planer.

3. An auxiliary planer in combination with a cabinet maker's buzz planer for dressing wood, the auxiliary planer comprising a tool block, at least one planing knife adjustably disposed along an edge of the block, a feeder roller coacting with the tool block, a carrier for the tool block and feeder roller, the carrier comprising opposed end members, opposed front and back members, means for securing said members along corresponding edges, the carrier further having an open base and a cover member, means for releasably securing the cover member over the opposed front and back members, the opposed front and back members having aligned rectangular openings at either end, said openings extending from the top edge toward the base with a slideway along the vertical edges of each opening, a slide in each slideway, the knife block and feeder roller being rotatably mounted in the slides, and means for adjusting the slides in the slideways; the auxiliary planer further comprising two spaced apart vertical supports, said supports having a longitudinal slideway substantially at the front thereof, a horizontal member disposed over the top of the supports, a slide in the slideway, means for securing the cover of the carrier to the slide and adapted to extend forwardly thereof, means for vertically adjusting the slide in the slideway, means for hingedly supporting the bottoms of the spaced apart vertical supports in back of the buzz planer and adapted to rotate the carrier from a horizontal position over the buzz planer to a vertical position in back thereof, and means for releasably securing the front of the carrier of the auxiliary planer to the front of the buzz planer when the supports are upright; the auxiliary planer further comprising means for imparting rotary motion to the knife block in the direction of the rotary motion of the buzz planer, and means for imparting rotary motion to the feeder roller in a direction adapted to feed the wood between said planers.

4. An auxiliary planer in combination with a cabinet maker's buzz planer for dressing wood, the auxiliary planer comprising a knife block, at least one planing and one molding cutting edge adjustably disposed along one edge of the knife block, a feeder roller coacting with the knife block, the surface of the roller being roughened and adapted to frictionally engage the wood, a carrier for the knife block and feeder roller; the carrier comprising opposed end members, opposed front and back members, means for securing said members along adjoining edges, the opposed front member having a rectangular opening at either end, said openings extending from the upper edge downwardly, and the opposed back member having a rectangular opening at either end aligned with the openings in the opposed front member, said openings being provided with vertical slideways; the carrier further comprising a cover member, means for releasably securing the cover member along the top edges of the opposed front

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and back members, the cover member having a transverse slot formed therein substantially at the center, a slide in each slideway of the opposed front and back members, and a screw threaded through the cover member over each rectangular opening coacting with the top edge of the slide and adapted to vary the position thereof in the openings, the knife block and feeder roller being rotatably secured in the slides; a shaving deflector disposed in the carrier parallel to the axis of the knife block on the inside surface portion of the cover under downwardly exerted tension and coacting with the transverse slot and adapted to deflect wood particles out of the carrier, and a second wood shaving deflector disposed on the inside surface portion of the cover under downwardly exerted tension on the opposite side of the knife block coacting with said block and first mentioned deflector; the auxiliary planer further comprising two spaced apart parallel supports, a horizontal member disposed at the top of the supports, the spaced parallel supports being provided with a slideway, a slide in the slideway, a screw rotatably passed through the horizontal member and threaded into the slide, a collar releasably disposed on the screw under the horizontal member, a handle member keyed to the screw at the top of the horizontal support and adapted to vary the position of the slide in the slideway, means for securing the cover member of the carrier to the slide and adapted to extend forwardly thereof, means for hingedly mounting the bottoms of the spaced apart parallel supports at the back of the buzz planer and adapted to rotate the carrier from a position parallel to and over the buzz planer through 90° to a vertical position, means for applying rotary motion to the knife block in the direction of the rotary motion of the buzz planer, and means for applying rotary motion to the feeder roller in a direction adapted to move the wood between the cutting edges of the knife block and the buzz planer.

5. A manually fed wood planer in combination with a cabinet maker's buzz planer, the manually fed wood planer comprising a tool block and at least one feeder roller, means for rotatably mounting the tool block and the feeder roller above the buzz planer, the tool block being adapted to coact with the buzz planer and the feeder roller being adapted to coact with the tool block and the buzz planer, means for vertically adjusting the tool block and the feeder roller relative to the buzz planer, and means for applying rotary motion to the tool block and the feeder roller to coact with the rotary motion of the buzz planer.

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