

April 25, 1950

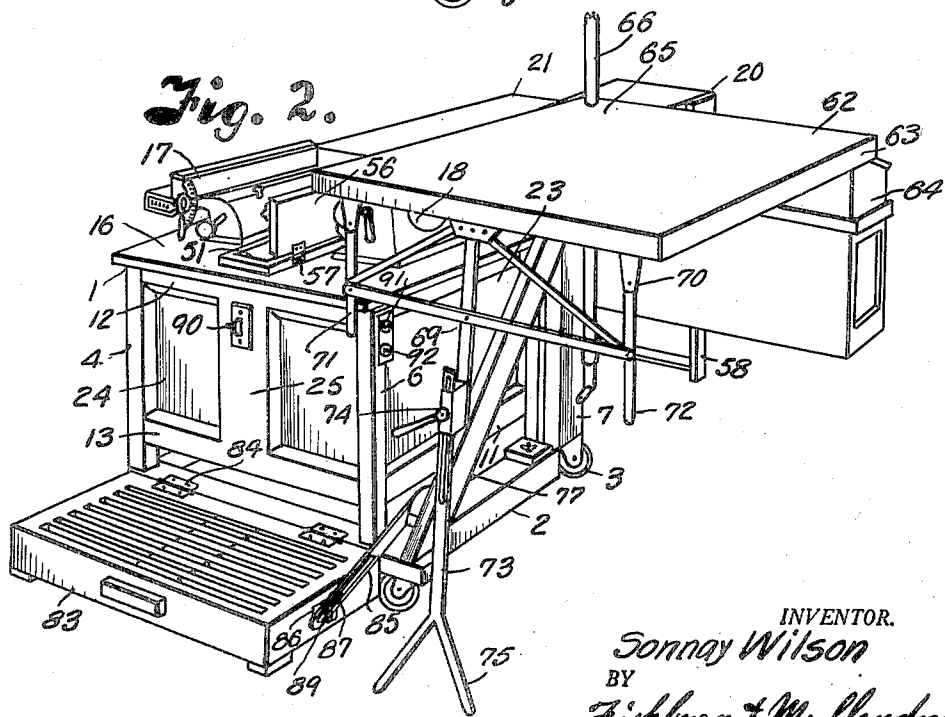
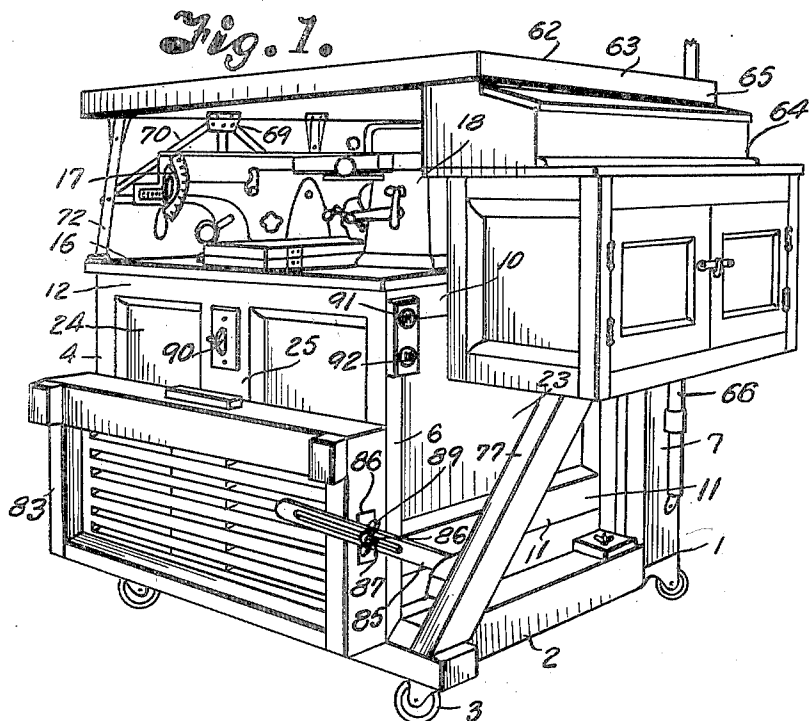
S. WILSON

2,505,658

COMBINED WORKBENCH, CABINET, AND TOOL SUPPORT

Filed Dec. 15, 1945

3 Sheets-Sheet 1



INVENTOR.  
*Sonny Wilson*  
BY  
*Fishburn & Mullendore*  
ATTORNEYS

April 25, 1950

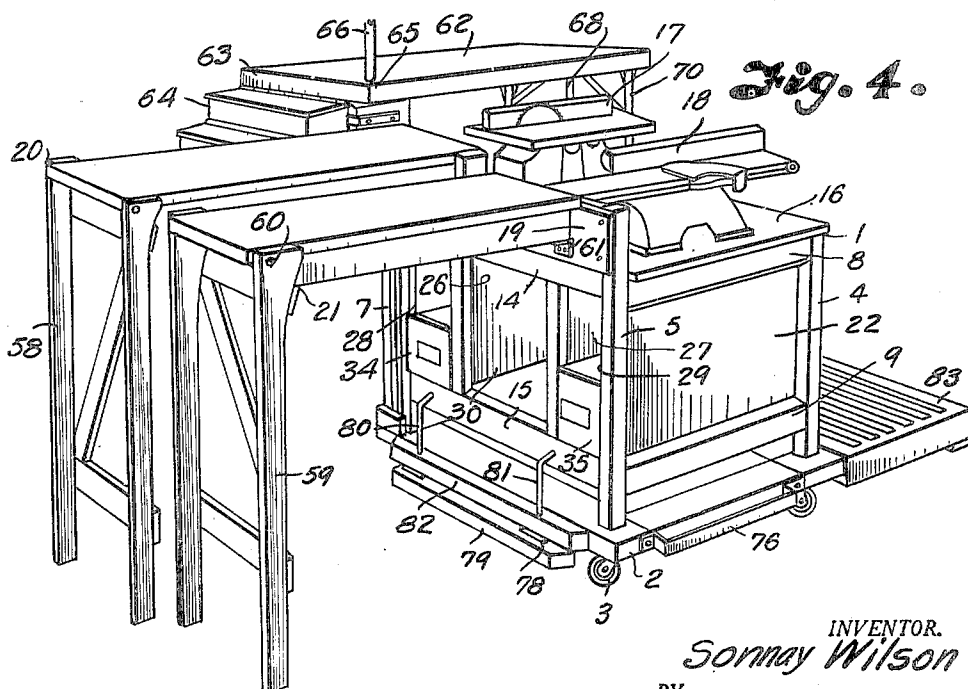
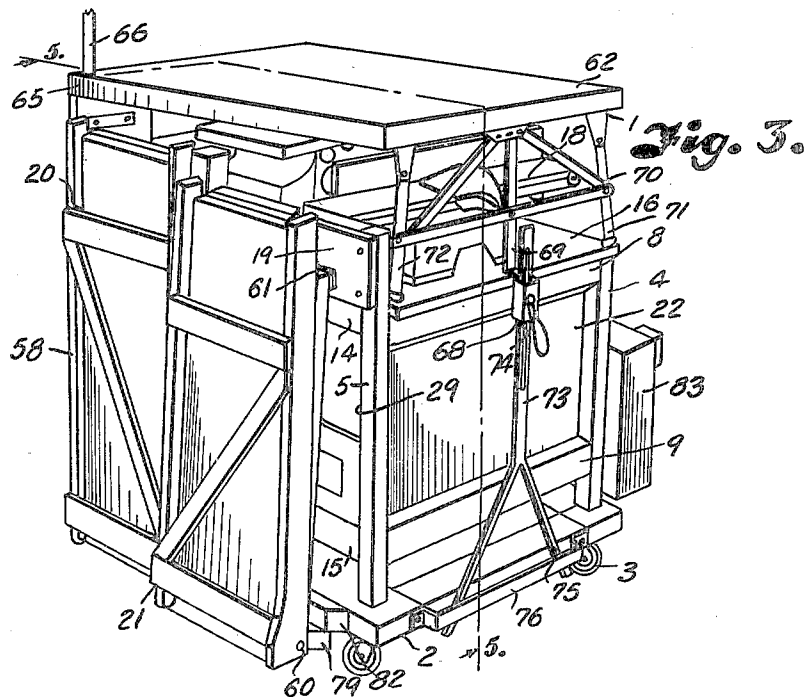
S. WILSON

2,505,658

COMBINED WORKBENCH, CABINET, AND TOOL SUPPORT

Filed Dec. 15, 1945

3 Sheets-Sheet 2



INVENTOR.  
Sonmay Wilson  
BY  
Fishburn & Mulleberry  
ATTORNEYS

April 25, 1950

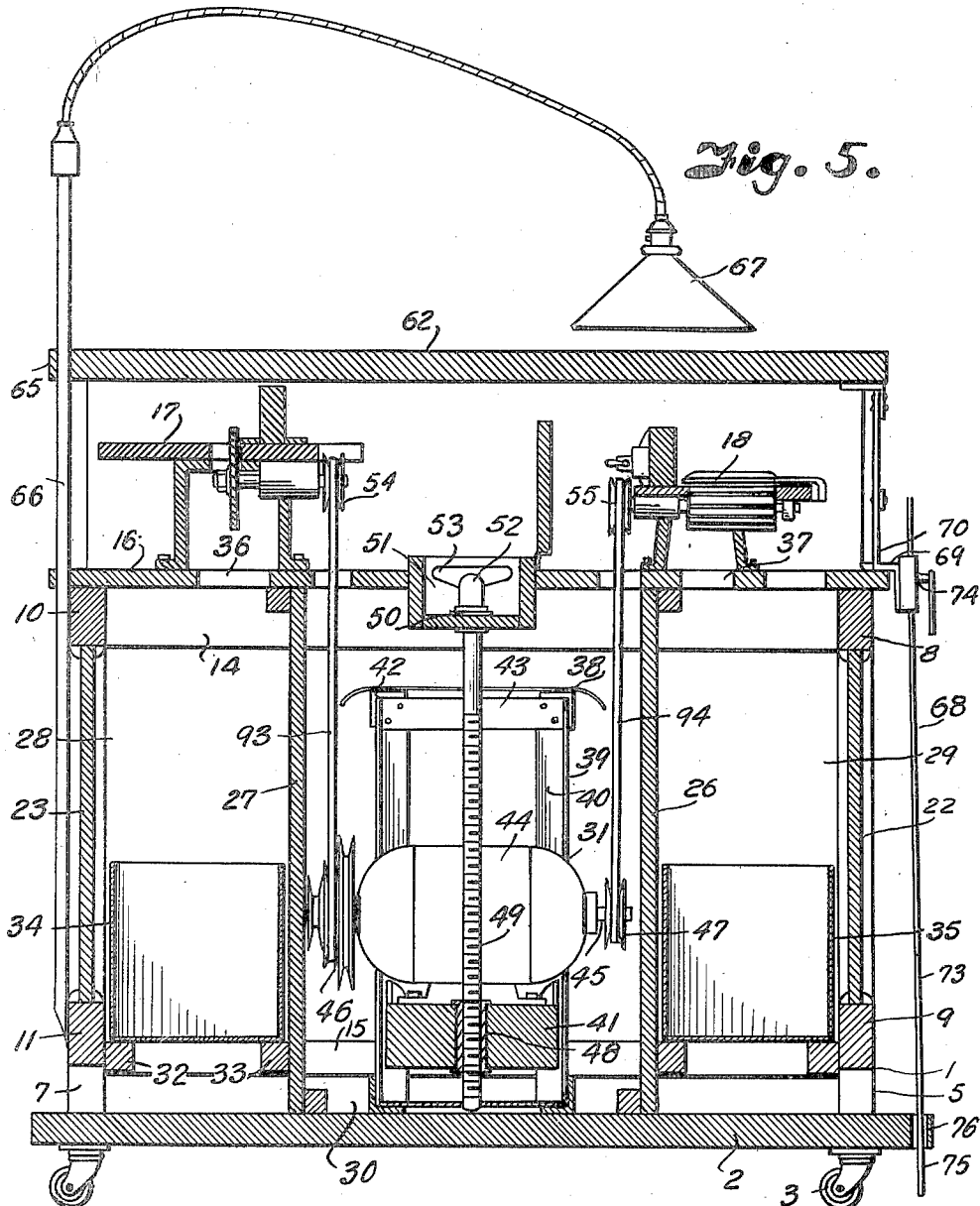
S. WILSON

2,505,658

COMBINED WORKBENCH, CABINET, AND TOOL SUPPORT

Filed Dec. 15, 1945

3 Sheets-Sheet 3



INVENTOR.  
*Sonray Wilson*  
BY  
*Fishburn & Mulleadore*  
ATTORNEYS

## UNITED STATES PATENT OFFICE

2,505,658

COMBINED WORKBENCH, CABINET, AND  
TOOL SUPPORT

Sonnay Wilson, Kansas City, Mo.

Application December 15, 1945, Serial No. 635,175

3 Claims. (Cl. 144-285)

1

This invention relates to work benches particularly adapted for mounting power tools and has for its principal objects to provide a portable work bench that is adapted to be contained in a compact unit when not in use and when in use to be extended to provide ample working space for facilitating use of the power tools; to provide a mounting for power tools which permits operation thereof by a single motor; to provide a work bench for power tools with a working top adapted to be moved into and out of covering relation with the power tools; to provide a work bench with a folding stand or platform to position the user of the tools so that the working top is at a convenient height; and to provide the work bench with collapsible extensions associated with the work tables of the power tools.

Other objects of the invention are to provide a work bench with sawdust and shaving collecting receptacles; to provide a work bench with a motor mounting adjustable for different length belts and to effect connection and disconnection of the power tools with the operating motor; and to provide a work bench with tool cabinets carried by the movable working top.

In accomplishing these and other objects of the invention hereinafter pointed out, I have provided improved structure, the preferred form of which is illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view of a work bench constructed in accordance with the present invention and showing the working top swung into position for covering the power tools.

Fig. 2 is a perspective view of the work bench showing the working top swung out of position to permit use of the power tools.

Fig. 3 is a perspective view of the work bench similar to Fig. 1 but viewed from the opposite side and showing the extension work supports in folded position.

Fig. 4 is a similar view but showing the working top swung out of position from over the power tools and the extension work supports in erected position.

Fig. 5 is a vertical section through the work bench on the line 5-5 of Fig. 3.

Referring more in detail to the drawings:

1 designates a work bench constructed in accordance with the present invention and which includes a base 2 of rectangular shape and mounted adjacent the corners thereof on casters 3. Projecting upwardly from ends of the base are corner posts 4-5 and 6-7. The posts 4 and 5 and 6 and 7 are interconnected by upper and lower cross rails 8-9 and 10-11 and the

2

posts 4 and 6 and 5 and 7 are connected by upper and lower rails 12-13 and 14-15 respectively. The upper rails 8, 10, 12 and 14 support a table top 16 for mounting power tools indicated 17 and 18 such as a planer, saw or the like. The rear posts 5 and 7 extend above the table top 16 and carry a horizontal rail 19 having the upper edge located at a height for mounting extension work supports 20 and 21 later described. The sides of the bench are closed between the rails and posts by panels 22 and 23 while the front of the bench is closed by panels 24 on the respective sides of a central vertical member 25. Spaced inwardly of the side panels 22 and 23 are vertical partitions 26 and 27 extending parallel therewith to provide compartments 28 and 29 therebetween and located under the power machines and an intermediate compartment 30 for containing a motor unit 31 adapted for actuating the power tools. Slidably mounted in the compartments 28 and 29 on longitudinal pairs of rails 32 and 33 and removable from the rear of the bench are drawers 34 and 35 adapted to catch sawdust and shavings that are discharged from the power machines through openings 36 and 37 formed in the table top 16. Fixed to the base 2 within the intermediate compartment 30 is a motor supporting frame 38. The frame 38 includes uprights 39 preferably of angle cross section whereby the flanges 40 form guides for a motor carrier 41. The upper and lower ends of the uprights are connected by longitudinal and transverse members 42 and 43 to rigidly support the uprights. The motor carrier 41 is preferably of block-like form and is of a size to slide freely within the flanges of the uprights and carries an electric motor 44 fixed thereto. The motor has a power shaft 45 with pulleys 46 and 47 on the respective ends thereof. In Fig. 5 the pulley 46 is illustrated as a multi-groove pulley and the pulley 46 a single groove; however, they may be of a size and type to drive the power tools at the speed required.

Rotatably mounted alongside of the motor 44 and extending through an internally threaded bushing 48 anchored in the motor carrier 41 is a threaded shaft 49. The upper end of the shaft is rotatably supported in a bearing 50 that is carried in a box-like compartment or recess 51 in the table top 16 as best shown in Fig. 5. The shaft projects within the compartment 51 and carries a head 52 having laterally extending arms 53 by which the shaft may be rotated to raise and lower the motor carrier 41 so as to adjust the pulleys of the motor relatively to the drive pulleys 54 and 55 of the respective power tools 17

and 18. The compartment 51 is preferably closed by a cover 56 hinged to one side thereof as indicated at 57.

The cross rail 19 carries the extension work supports 20 and 21, the upper surfaces of which are adapted to substantially register with the tables of the power tools 17 and 18 respectively as best shown in Fig. 4. The outer ends are supported by legs 58 and 59 that are suitably hinged thereto as indicated at 60. The extension work supports are adapted to be folded downwardly on the hinge connections 61 which connect the forward ends to the rail 19.

In order to provide a working top for the use of small tools and to provide a cover for the power tools, I provide the work bench with a working top 62 that substantially conforms in width to the width of the bench but is of slightly longer length so that one end 63 projects beyond the table top 16 to suspendingly support a tool cabinet 64 thereunder for containing small tools, screws, nails and like articles.

The working top is mounted at a corner 65 thereof for swinging movement on a post 66, the post being attached to the corner post 7 of the bench. The post preferably projects above the table and carries a light fixture 67 as best shown in Fig. 5. The opposite end of the working top is adapted to be supported in firm position on a leg 68 including a section 69 that is fixed to a frame 70 having feet 71 and 72 adapted to seat upon the corners of the table top 16 when the working top is moved thereover as shown in Fig. 1. The leg 68 also includes a section 73 that is adjustable relative to the section 69 by means of a clamp 74 so that the lower end 75 may be adjusted to rest on the floor when the working top is swung to the position shown in Fig. 2 and be raised to engage in a slot-like pocket 76 fixed to the end of the base 2 as best shown in Fig. 3 when the working top is in covering relation with the power tools.

The post 66 in addition to being attached to the post 7 may be suitably braced by a member 77 having its upper end connected to the post 67 directly below the working top and having its other end fixed to the base 2 as best shown in Figs. 1 and 2.

Since the work bench is mounted on rollers for portability, I provide a brake 78 including a bar 79 adapted to be moved to and from contact with the floor by screws 80 and 81 journaled in a cross bar 82 carried by the edge of the base on the side of the bench carrying the extension work supports 20 and 21 as best shown in Fig. 4.

When the table is of a height to support the power tools at the desired working level, the working top is too high for convenient use and to overcome this difficulty, the work bench is provided with a stand 83 hinged to the front edge of the base 2 as indicated at 84 and which is adapted to be swung upwardly to out-of-way position parallel with the front of the work bench as shown in Fig. 1. The stand is retained in position by a bar 85 pivoted to a bracket 86 on the base and which has a slotted end 87 extending alongside the end of the stand to be clamped thereto by a fastening device 88, the threaded shank of which extends through the slot and carries a wing nut 89. Thus, when the stand is swung to the position shown in Fig. 1, the thumb nut may be tightened to hold the stand against the front of the bench.

The bench may be provided with a switch 90 located on the vertical member 25 for controlling the motor circuit and the motor circuit may be

connected with a current source by connecting an extension cord with a socket 91 and the bench may also have a socket 92 (Fig. 1) for connecting auxiliary lamps, soldering irons or motor driven devices.

Assuming that the work bench is constructed and assembled as described and the parts in folded position to form a compact unit, the unit is trundled to a convenient position for use and the base secured against movement by turning the screw shafts 80 and 81 to move the bar 79 into contact with the floor. The adjustable leg section 73 is raised by loosening the clamp 74 to lift the foot 75 out of the pocket 76. The working top 62 is then free to be swung from covering relation with the power tools so that it projects from the bench at one end or side thereof as shown in Figs. 2 and 4. The leg extension 73 is then moved to position so that the foot 75 engages the floor and the clamp 74 is tightened. The table extensions may then be raised to the position shown in Fig. 4 and the power tool to be used is connected through its belt 93 or 94 with the corresponding pulley 46 or 47 on the motor. This is readily effected by raising the motor carrier 41 by means of the screw shaft 49 until the belt passes over the pulley and then the motor carrier is lowered until the belt has the required tension.

In using the power tools, the work is moved across the table thereof in the convenient manner and out upon the corresponding extension work support so that the power machine is better adapted for supporting long work pieces. Consequently, the power tools may be used with greater accuracy and safety. If it is desired to use the working top 62, it may be returned to its original position over the table top of the work bench. Upon re-engagement of the supporting leg in the pocket 76 and engagement of the foot 71 with the table top, the working top is supported firmly in position.

As above stated, the working top is relatively high and to facilitate working thereon, the stand 83 is released and swung into position so that it is supported on the floor. This raises the user so that the working top 62 is at a convenient height. The electric circuit for supplying the motor and electric equipment may then be plugged into the socket 91.

The sawdust discharged from the power tools drops into the drawers 34 and 35 which may be removed and emptied from time to time.

From the foregoing it is obvious that I have provided a compact and convenient work bench for mounting tools and which is also adapted for use as an ordinary work bench when operating hand tools.

What I claim and desire to secure by Letters Patent is:

1. A device of the character described including a work bench having a top adapted for supporting power tools, a working top, means hinging one corner of the working top to a corner of the work bench for movement from a position over the power tools to a lateral position relative to the work bench, and means for maintaining stability of the working top including a support carried by the working top adapted to engage the work bench top when the working top is in position over the power tools and having an adjustable portion for engaging a floor when the working top is in said lateral position relative to the work bench.

2. A device of the character described includ-

5

ing a work bench having a table top adapted for supporting power tools and having a pocket near the base thereof, a mobile base for the work bench, a working top, means hinging one corner of the working top to a corner of the work bench for movement from a position over the power tools to a lateral position relative to the work bench, means for maintaining stability of the working top including an adjustable support carried by the working top and adapted to respectively engage in said pocket when the working top is in said position over the power tools and a floor when the working top is in said lateral position relative to the work bench, and feet on the support for engaging the table top when the working top is positioned over the power tools.

3. A device of the character described including a work bench having a table top adapted for supporting power tools, a working top, means hinging one corner of the working top to a corner of the work bench for support of the working top in upwardly spaced relation with the table top to accommodate the power tools therebetween and for movement from a position over the power tools to a lateral position relative to the work bench, means for maintaining stability of the working top including a leg carried by the working top and adapted to respectively engage a part of the work bench and a floor when the working top is in said lateral position relative to the work bench, said means also having laterally

6

spaced portions adapted for engaging the top of the work bench when the working top is in its position over said power tools.

SONNAY WILSON.

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

| Number    | Name       | Date           |
|-----------|------------|----------------|
| 300,178   | Williams   | June 10, 1884  |
| 365,744   | Heyer      | June 28, 1887  |
| 410,398   | Bogardus   | Sept. 3, 1889  |
| 581,829   | Pecoy      | May 4, 1897    |
| 583,752   | Johnston   | June 1, 1897   |
| 729,374   | Marsh      | May 26, 1903   |
| 828,083   | Beswick    | Aug. 7, 1906   |
| 1,272,587 | Wells      | July 16, 1918  |
| 1,326,809 | Twiss      | Dec. 30, 1919  |
| 1,353,986 | Bergendorf | Sept. 28, 1920 |
| 1,459,930 | Riehle     | June 26, 1923  |
| 1,860,071 | Bodkin     | May 24, 1932   |
| 1,884,412 | Virchow    | Oct. 25, 1932  |
| 2,169,753 | Altorfer   | Aug. 15, 1939  |

#### FOREIGN PATENTS

| Number  | Country     | Date          |
|---------|-------------|---------------|
| 58,799  | Austria     | Apr. 25, 1913 |
| 72,468  | Switzerland | June 2, 1916  |
| 427,500 | Germany     | Apr. 7, 1926  |