B. H. AYERS.

WORK BOX.

APPLICATION FILED AUG. 20, 1917.

1,284,979.

Patented Nov. 19, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

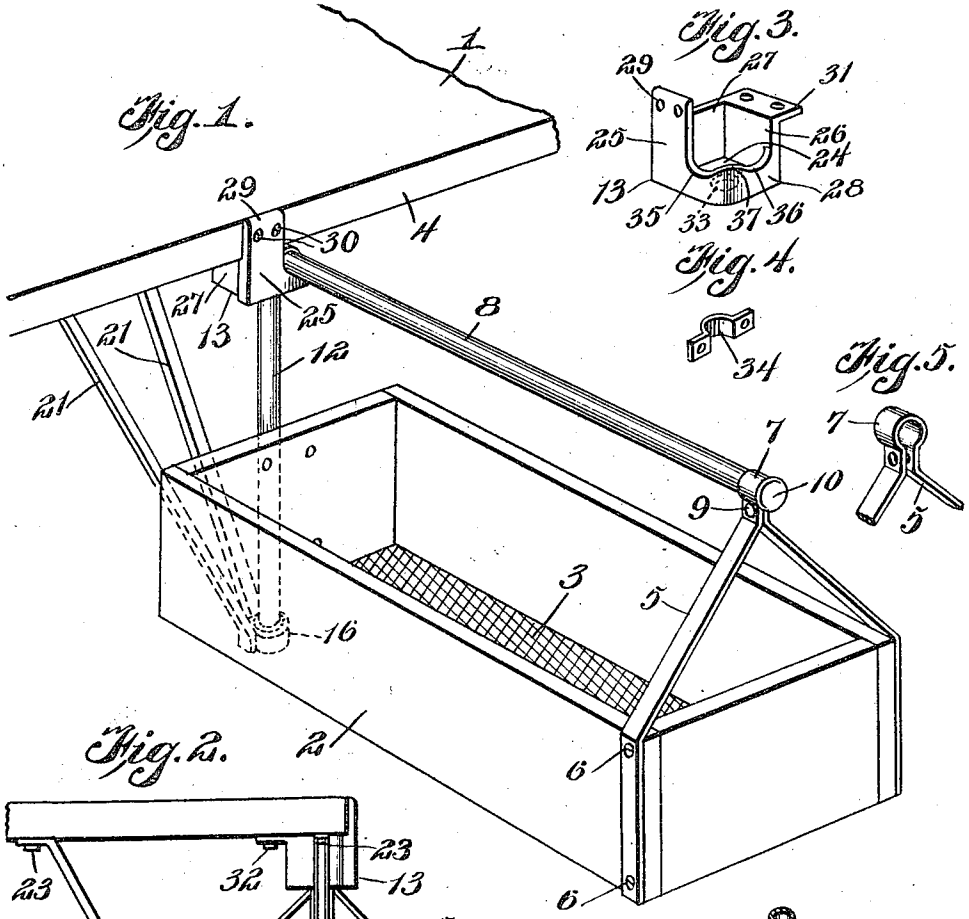
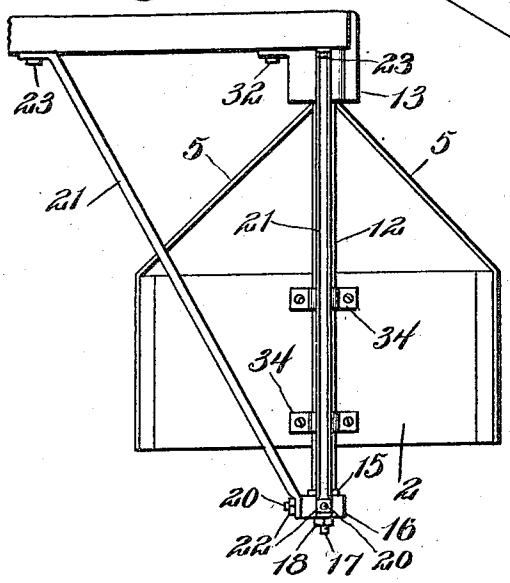


Fig. 3.

Fig. 4.

Fig. 5.

Fig. 2.



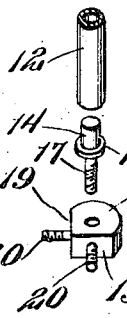


Fig. 6.

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2 SHEETS—SHEET 2.

Fig. 7.

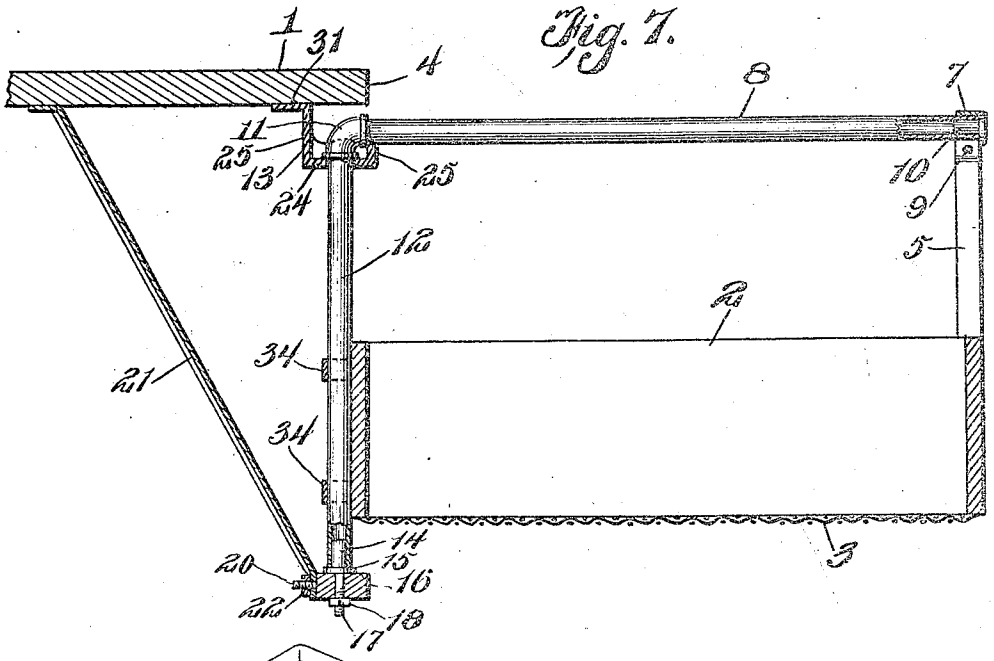


Fig. 8.

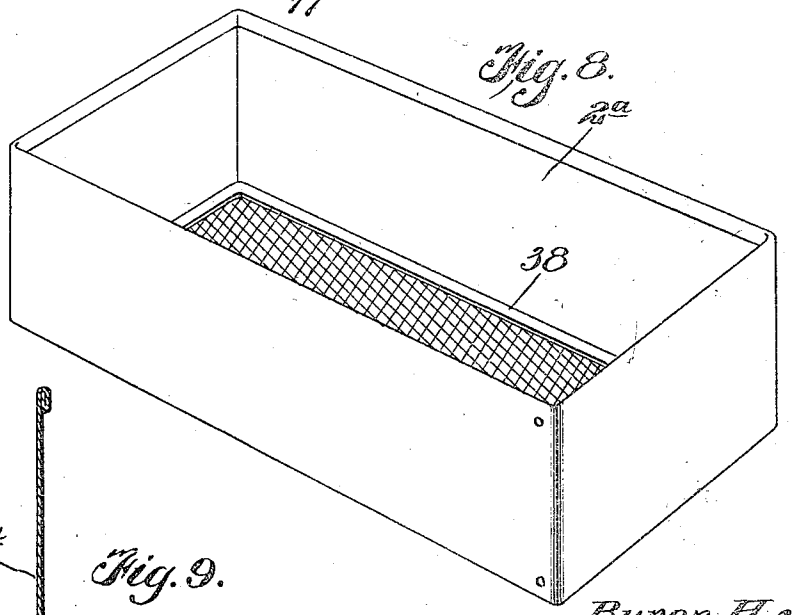
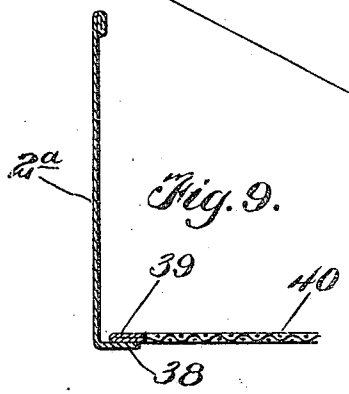


Fig. 9.



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UNITED STATES PATENT OFFICE.

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WORK-BOX.

1,284,979. Specification of Letters Patent. Patented Nov. 19, 1918.

Application filed August 20, 1917. Serial No. 187,314.

To all whom it may concern:

Be it known that I, BYRON H. AYERS, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Work-Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to work boxes designed particularly for use in garment factories and in other places where it is desired to keep work materials in order and compact shape and in a cleanly and sanitary condition, the primary object of the invention being to provide a work box which may be mounted upon a work table in such a manner as to be swung outwardly for use and swung inwardly beneath the table when not in use.

A further object of the invention is to provide a work box in which the work materials may be kept in a sanitary condition and prevented from being lost or scattered and in which the box when swung beneath the table will be arranged in an out of the way position, leaving the adjacent aisle of the work room free from projecting obstructions.

A still further object of the invention is to provide simple, reliable and efficient means for pivotally mounting the work box upon the underside of a work table, and for holding the work box securely in projected and retracted positions.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a perspective view of a work table and a work box embodying my invention, showing the work box swung outwardly beyond the adjacent edge of the table for use.

Fig. 2 is an end view of the table showing the work box retracted or swung to a position partially beneath and parallel with the adjacent edge of the table, as when not in use.

Fig. 3 is a perspective view of the bracket box.

Fig. 4 is a similar view of one of the clips.

Fig. 5 is a similar view of the upper portion of the suspension bracket.

Fig. 6 is a view of the lower end of the vertical shaft and coöperating parts for pivotally mounting the same, said shaft and parts being disconnected and arranged in proper relative positions.

Fig. 7 is a vertical longitudinal section through the table and work box with the parts arranged as shown in Fig. 1.

Fig. 8 is a perspective view of a modified construction of work box.

Fig. 9 is a sectional view through a portion of the same.

Referring to Figs. 1 to 7, inclusive, of the drawings, 1 designates a work table and 2 a work box, which box, as shown, is of oblong rectangular form and comprises a body of wood or other suitable material having a screen bottom 3 of screen wire or other reticulated material, such material allowing all particles of lint or other waste or foreign substances to fall out or to be readily discharged from the work box. The box may be provided, if desired, with any suitable type of top or cover, not shown, and is pivotally mounted so as to be projected or swung outwardly at right angles beyond the adjacent side edge 4 of the table 1, in which position it is freely accessible for use, or to be swung backwardly partially beneath the table and parallel with the edge 4 thereof, as shown in Fig. 2, so as to be disposed in a non-obstructing or non-interfering position when not in use.

The means for pivotally mounting the box comprises a suspension bracket 5 made of strap metal bent to provide a pair of arms secured to opposite sides of the outer end of the work box as shown at 6, the upper portions of said arms extending upwardly in convergent relation and being united by a folded intermediate portion of the strip forming a clasp or eye 7 which engages the outer end of a horizontal supporting arm 8, the portions of the arms immediately below the clasp being united by a pin or rivet 9 to properly hold the bracket in connection with the horizontal arm.

The arm 8 preferably comprises a tube or pipe closed at its outer end by a flanged plug 10, the flange of which holds the clasp 7 from outward displacement. This arm 9 is connected at its opposite or inner end by a flanged elbow 11 with a vertically disposed shaft 12, also preferably composed of a tube or pipe, said shaft being pivotally mounted at its upper end in a bracket box 13 and having its lower end closed by a

plug 14 formed with a seat flange 15 resting upon a bearing block 16, said plug being provided with a downwardly extending threaded fastening stem 17 projecting through an opening extending through the bearing block and provided with a retaining nut 18 to hold it from displacement. The flange 15 forms a base for the lower end of the shaft 12 which is mounted to turn or swing upon the plug 14, which forms a pivot pintle therefor. The bearing block 16 is of segmental form and is provided with two angular sides 19 arranged at right angles to each other and from which project threaded pins or stems 20 passing through openings in the lower ends of metallic strips 21, forming a brace for the lower end of the shaft and support for the block 16, said stems being provided with retaining nuts 22 to secure the bracing strips in position, the upper ends of said bracing strips being secured to the underside of the table, as indicated at 23.

The bracket block 13 comprises a hollow rectangular body open at the top and having a bottom wall 24, front and rear walls 25 and 26 and side walls 27 and 28. The top of this box is disposed immediately beneath the table, and the wall 25 is provided with an upstanding flange 29, secured by fastenings 30 to the edge 4 of the table, while the wall 26 is provided with a horizontal flange 31 which is secured by suitable fastenings 32 to the underside of the table. The upper end of the vertical shaft 12 passes through and is journaled in a bearing opening 33 in the wall 24, and the elbow or coupling member 11, which joins the adjacent ends of the pipes 8 and 12, is mounted to swing in the socket formed by the bracket box, its terminal flanges engaging the bottom wall 24 and the inner surfaces of the walls 25 and 28, respectively, of the box and holding the shaft 12 from downward movement and the arm 8 from outward movement. As shown, the inner end wall of the work box 2 is suitably secured to the shaft 12 as by means of clasps 34.

The wall 28 and adjacent half of the wall 25 are cut away at their upper portions to form a slot or space in which the inner end of the arm 8 is free to move, said walls being provided with seat recesses 35 and 36 separated by an intermediate shoulder 37, the recesses being adapted to receive the inner end of the arm 8 to hold the work box in projected and retracted positions and the shoulder serving to hold the arm 8 against casual movement, as will be readily understood. It will thus be understood that by grasping and swinging the arm 8, or by grasping and swinging the work box itself, the box and its supporting shaft and supporting arm may be swung outwardly from a position parallel with the edge 4 and partially beneath the table, as shown in Fig. 2, to a position beyond and at right angles to such edge of the table, as shown in Fig. 1. In the first named position, the box will be disposed in a substantially out of the way position leaving the adjacent aisle of the work room free and clear for travel, while in the second named position the box will be disposed in a convenient position for use during the working period. When in the folded or retracted position it will be apparent that the work materials arranged in the box will be stored and kept separated from other boxes and in proper position for the use of the owner of such box when work is resumed after an inactive period, while when the box is in the position shown in Fig. 1 all of the work materials may be readily and conveniently arranged for use. When disposed as shown in Fig. 1, the box will be so arranged as to enable the floor or aisle of the work room to be swept or otherwise cleaned without interference, and by mounting all of the work boxes upon work tables in the manner described the necessity of moving the boxes from place to place will be avoided, the boxes will be kept in proper order according to particular use and ownership, and the work materials will be kept elevated from the floor and out of contact with dust and dirt thereon. It will of course, be understood that in swinging the box from one position to another the arm 8 is slightly elevated to clear the shoulder 37, said arm gravitating into one or the other of the recesses 35 or 36 to hold the box in one or the other of its positions by gravity. By this construction the box may be swung backward and forward in a ready and convenient manner and without material exertion on the part of the operator.

The box may be made, as described, of a body of wood with a wire bottom, or, as illustrated in the modified form of the invention shown in Fig. 8, the box body 2^a may be made of sheet metal and provided at its base with an inturned flange 38 to form a ledge or support for a marginal frame 39 of a wire bottom 40, the said marginal frame 39 being formed of a folded strip of sheet metal between the folds of which the wire is clamped, the parts being soldered or spot-welded together. If desired, the marginal frame 39 may be soldered or spot-welded or otherwise suitably fastened to the flange 38.

Having thus fully described my invention, I claim:

1. In a support for work boxes, the combination of a work table, a work box, a bearing bracket upon the work table comprising a rectangular box having two of its walls partially cut away and formed with seat recesses arranged at right angles to each other, a vertical shaft journaled at its up-

per end in the bottom wall of the bearing bracket, a horizontal supporting arm connected at one end to said shaft and extending outwardly through the box and adapted for engagement with said seat recesses, a bearing for the lower end of the shaft supported from the table, means connecting one end of the box with the shaft, and means connecting the outer end of the box with the horizontal arm.

2. In a support for work boxes, the combination of a work table, a bracket box comprising a hollow rectangular body having a bearing opening in its bottom and having vertical and horizontal flanges secured to an edge and the bottom surface of the top of the work table, one side and a portion of the front of said bracket box being cut away to form an opening and said walls of the box having sets of seat recesses, a bearing member supported from the table, a vertical shaft journaled at its upper end in the bearing opening in the bottom of the bracket box and at its lower end in said bearing member, a horizontal arm connected at one end with the upper end of the shaft and movable in said opening in the bracket box and adapted for engagement with said seat recesses, and a work box connected at one end with the vertical shaft and suspended at its opposite end from the free end of the horizontal arm.

3. In a support for work boxes, the combination of a work table, a bracket box comprising a hollow rectangular body having its front and rear walls provided with vertical and horizontal flanges secured respectively to a side edge and the underside of the table top, said box having a bearing opening in its bottom wall and having one of its side walls and the adjacent portion of the front wall cut away to form an opening, said walls being provided with said recesses at the base of said opening, a vertical shaft journaled at its upper end in said opening in the bottom of the bracket box, a bearing for the lower end of said shaft supported from the table, a horizontal arm extending at its inner end into the bracket box and movable in said opening in the walls thereof and adapted for engagement with said seat recesses, an angular coupling uniting the upper end of the shaft and the inner end of the horizontal arm, a work box secured at one end to the vertical shaft and a suspension bracket hung from the outer end of the horizontal arm and supporting the opposite end of the work box therefrom.

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

BYRON HUBBARD AYERS.

Witnesses:
H. T. PARK,
JENSINE MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."