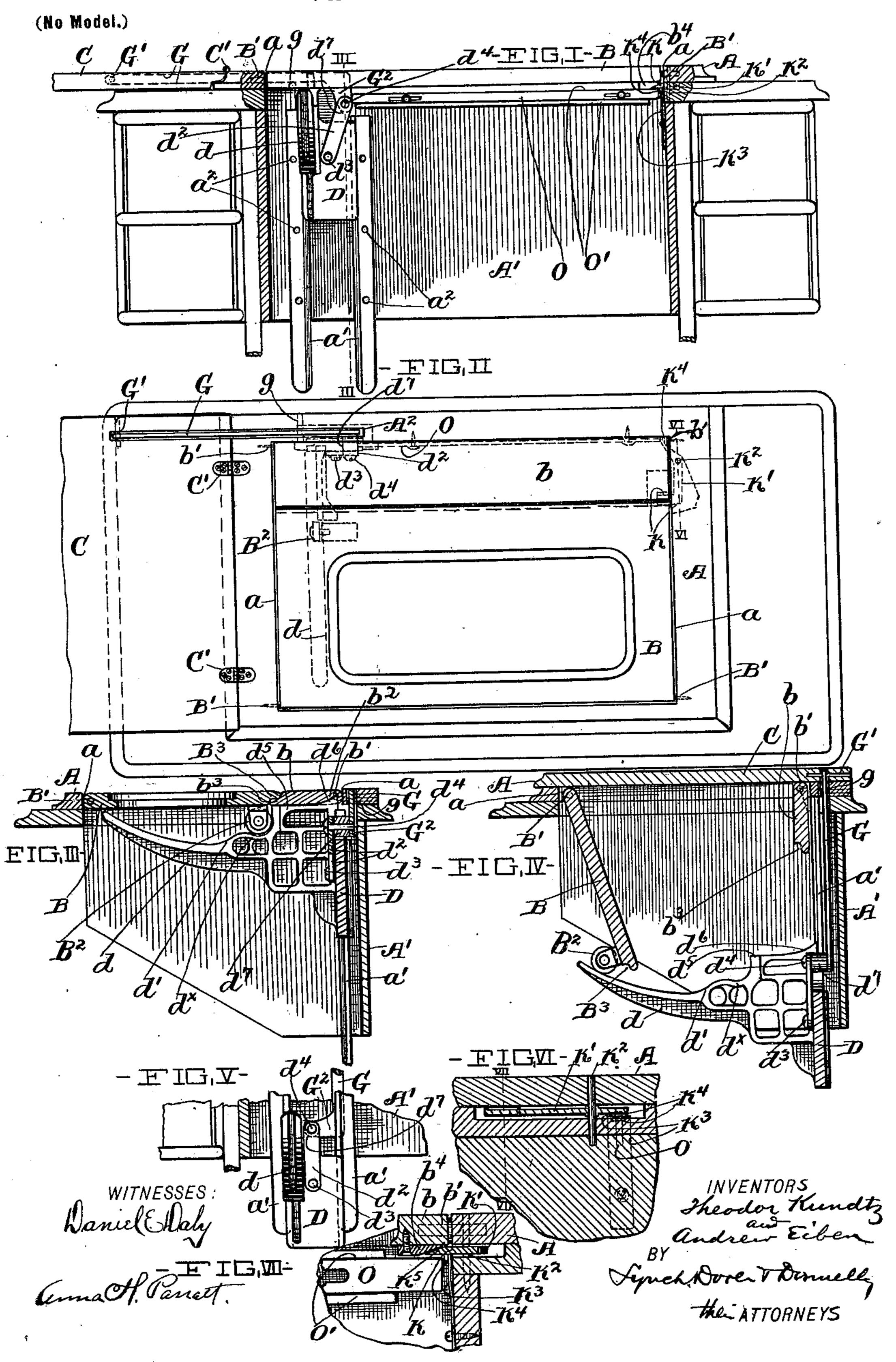
T. KUNDTZ & A. EIBEN. CABINET FOR SEWING MACHINES.

(Application filed Aug. 20, 1898.)



United States Patent Office.

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CABINET FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 675,283, dated May 28, 1901.

Application filed August 20, 1898. Serial No. 689,142. (No model.)

To all whom it may concern:

Be it known that we, THEODOR KUNDTZ and ANDREW EIBEN, of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Cabinets for Sewing-Machines, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

Our invention relates to improvements in tables or cabinets for sewing-machines, &c.

This invention pertains more especially to mechanism for actuating and supporting the tilting leaf that carries the sewing-machine head or other machine; and the invention consists in certain features of construction and combinations and arrangements of parts hereinafter described, and pointed out in the claim, and constituting an improvement of the subject-matter disclosed in United States Letters Patent No. 607,862, granted July 26, 1898.

In the accompanying drawings, Figure I is 25 a front side elevation of the upper portion of a table or cabinet embodying our invention, and in this figure portions are broken away and in section to more clearly show the construction. Fig. II is a top plan. Fig. III is 30 an end elevation, mostly in vertical section on line III III, Fig. I. Fig. IV corresponds with Fig. III, except that in this figure the load-carrying leaf is in its downwardly-tilted position and the mechanism instrumental in 35 the elevation or actuation of the said leaf is in a corresponding position. Fig. V is a front side elevation of the slide D and connected parts in the slide's lower position. Fig. VI is an enlarged section on line VI VI, Fig. II. 40 Fig. VII is a section on line VII VII, Fig. VI.

Referring to the drawings, A designates the top of the table or cabinet. Top A is provided centrally with a rectangular opening a, that extends through the top. A vertically-tilting leaf B is arranged to enter and occupy the said opening and is horizontally hinged or pivoted at its forward end at B' to and longitudinally of top A at the forward end of opening a. Member B is known as the "load-bearing" leaf, that carries the sewing-machine head or other machine (not shown) of

the table or cabinet. When the machine is not in use, leaf B is tilted downwardly below top A, as shown in Fig. IV, and the said leaf is again tilted upwardly or elevated into open- 55 ing a when the machine is required for use. The said leaf B is operatively connected with the lifting leaf C, that is horizontally hinged at one end, as at C', to and transversely of the left-hand end of top A, and the arrangement 60 of parts is such that when said leaf C is in a horizontal position and forms a leftward extension of top A leaf B is in its upwardlytilted or elevated position, and when leaf C closes opening a and rests upon top A leaf B 65 is in its downwardly-tilted position, and the said leaf B is elevated or lowered according as the lifting leaf C is tilted to the left or right.

The improved mechanism employed in establishing operative connection between leaf 70 B and leaf C comprises, preferably, the following: The cabinet or table at the rear is provided with a back A', that at its inner or forward side and at or near the left-hand end is provided with a vertical or upright slide- 75 way formed, preferably, by two vertical metallic bars a', arranged a suitable distance apart and removably secured by means of screws a^2 to the inner or forward side of the back. A metallic slide D engages and is 80 adapted to reciprocate endwise of (up and down) the said slideway. Slide D at its lefthand edge is provided with a forwardly-projecting arm d, that extends in under and transversely of the left-hand portion of the 85 load-carrying leaf B. Slide D is provided at the top with an upright link d^2 , that has its lower end pivoted, as at d^3 , to the slide horizontally and transversely of the cabinet. The upper end of link d^2 is pivoted, as at d^4 , hori- 90 zontally and transversely of the cabinet to an inwardly-projecting short arm G2, formed upon one end of the rod or lever G, that has its opposite end pivoted horizontally to and transversely of leaf C, as at G'. Lever or 95 rod G constitutes the slide-lifting device and during its operation slidably works upon a fulcrum formed by a horizontally-arranged pin or rounded member g, that is supported from and within the top A above and at the 100 left of the path of slide D. Top A is slotted or cut away, as at A2, Fig. II, to accommo-

date the location and operation of the said rod or lever G and the operative connection between the said member G and the slide. The load-carrying leaf B is provided upon 5 the under side of its left-hand end, at or near its rear edge, with a roller B2, that rests upon arm d, and it is obvious that the said leaf is lowered or tilted upwardly according as the slide D and its lifting-arm d are lowered or 10 elevated. In Figs. I and III the said slide is shown in its upper position, and in Figs. IV and V the slide is shown in its lower position. The arrangement of the operative connection between the said slide and leaf C is 15 such that the slide and its arm d and the engaging load-carrying leaf are in their elevated positions when the said leaf C is in its open position, wherein it forms, as already indicated, an extension of the top of the table or cabinet, 20 and the said slide and load-carrying leaf lower by gravity when the lifting leaf is tilted from its open position to the right and over the opening in the aforesaid top. The trend of the lifting lever G is such that the lever will 25 perform its function efficiently and easily. The slide-arm d, at the forward side of and near the slide, is provided with an upwardly and rearwardly extending incline d', that has the arrangement required to render it capable 30 of lifting roller B² and the connected leaf B into their extreme upper position, and the said arm, at the rear of the said incline, is provided with a rest d^{\times} , upon which the roller, and consequently the lifting leaf, have bear-35 ing when the said leaf is in its upwardly-tilted position. Leaf B, when the same is in its upwardlytilted position, does not entirely close the rear portion of the opening a in the top of the ta-40 ble or cabinet, and the said rear portion of the said opening is closed by a supplementary leaf b, that is arranged to enter and occupy the rear portion of the said opening at the rear of leaf B and is horizontally hinged or 45 pivoted at its ends, as at b', to and longitu-

dinally of top A. During the lowering of leaf B the supplementary leaf tilts downwardly by gravity, as shown in Fig. IV, and the rear end of slide-arm d, rearward of the rest d^4 , is en-50 larged upwardly, as at d^5 , that has the arrangement required to render it capable during the elevation of the slide to engage the aforesaid supplementary leaf and tilt the said leaf upwardly into the leaf's horizontal posi-55 tion, wherein the said leaf, as already indicated, closes the rear portion of the aforesaid opening a. The slide-arm's portion d^5 , to facilitate its operation of lifting leaf b, has a rearwardly and upwardly extending incline 60 d^6 arranged to engage the leaf when the latter is in its depending position at the junction of the forward edge and under side of the leaf. The said leaf b is cut away on its under side, as at b^2 , to accommodate the location of the 65 incline d^6 of the slide-arm's portion d^5 when the slide is in its elevated position.

free end rabbeted upon its under side, as at B³, and leaf b has its forward or free end rabbeted upon its upper side, as at b^3 , and the 70 rabbeted end of leaf B rests upon the rabbeted end of leaf b in the upwardly-tilted position of the said leaves, and consequently the arrangement of parts is such as to accommodate the rabbeted construction of the afore-75 said leaves. The leaf B and the supplementary leaf b are thus adequately supported at their left-hand ends in their elevated position. The right-hand ends of the said leaves should also be adequately supported. The support 80 for the right-hand ends of leaves B and b comprises, preferably, a sliding shelf that is rigidly formed upon a horizontally-arranged and horizontally-swinging bar K', that extends forwardly and rearwardly of and within the 85 right-hand end of the cabinet's top and is pivoted vertically, as at K², to the top. In its normal and inoperative position bar K has its shelf-forming end within the cabinet-top and in its operative position has the said 90 end extending in under the right-hand ends of the leaves B and b. A suitably-applied spring K³ acts to retain bar K in the latter's normal or inoperative position and engages the outer side of a lug or flange K4, 95 formed upon and depending from the rear end of bar K'. The means for actuating bar K from the latter's inoperative into an operative position comprises, preferably, a longitudinally-sliding bar O, that is arranged hori- 100 zontally and longitudinally of the cabinet and engages a correspondingly-arranged groove or slideway O', formed at the upper end of back A'. Bar O is arranged to be engaged at its left-hand end during the actuation of 105 the load-carrying leaf from the latter's downwardly-tilted position into its elevated position by a roller d^7 , that is mounted upon a pin d^4 , that forms the pivotal connection between link d^2 and the lifting-lever G, between 110 the lever and the link, and bar O has its right-hand end arranged to engage the inner side of lug or flange K4 of bar K during the said actuation of the said leaf. The arrangement of parts is such, therefore, that when 115 the load-carrying leaf in tilting the latter upwardly has been actuated into its elevated and horizontal position roller d⁷ shall have actuated bar O to the right and bar O shall in turn have shifted bar K into the latter's 120 operative position against the action of the spring K3, that acts also to retain the said bar O in its normal or inoperative position. Our improved mechanism for actuating and

supporting the load-carrying leaf is merito- 125 rious in that it is simple, convenient, and out of the way.

The cabinet-top is of course suitably recessed to accommodate the location and operation of bar K'.

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The lifting end of bar K is beveled, as at K⁵, as shown very clearly in Fig. VII, and engages the undercut or beveled portion of The load-carrying leaf B has its rear and I the undercut metallic plate b4, that is secured

to the under side of leaf b. The bevel on the shelf causes the latter to lift the leaf b, and consequently the leaf B, into an exactly horizontal position when the said leaves have been tilted upwardly by the lifting mechanism connected with the leaf C. The plate b^4 prevents wearing away of the leaf b, that is made of wood, by the bar K.

What we claim is—

In a table or cabinet of the character indicated, the combination, with the top having an opening therethrough, and the vertically-tilting load-carrying leaf hinged or pivoted to the top, of a movable shelf-forming device arranged to be moved into the position required to afford a support for the said leaf, a suitably-supported sliding bar arranged to ac-

tuate the shelf-forming device into the latter's operative position, means acting to retain the shelf-forming bar and the aforesaid 20 sliding bar in their inoperative position, and mechanism for lifting the aforesaid leaf from the latter's lower position and provided with a roller arranged to operate the aforesaid sliding bar during the operation of the lifting 25 mechanism, substantially as set forth.

Signed by us at Cleveland, Ohio, this 8th

day of August, 1898.

THEODOR KUNDTZ. ANDREW EIBEN.

Witnesses:
C. H. Dorer,
ANNA H. PARRETT.