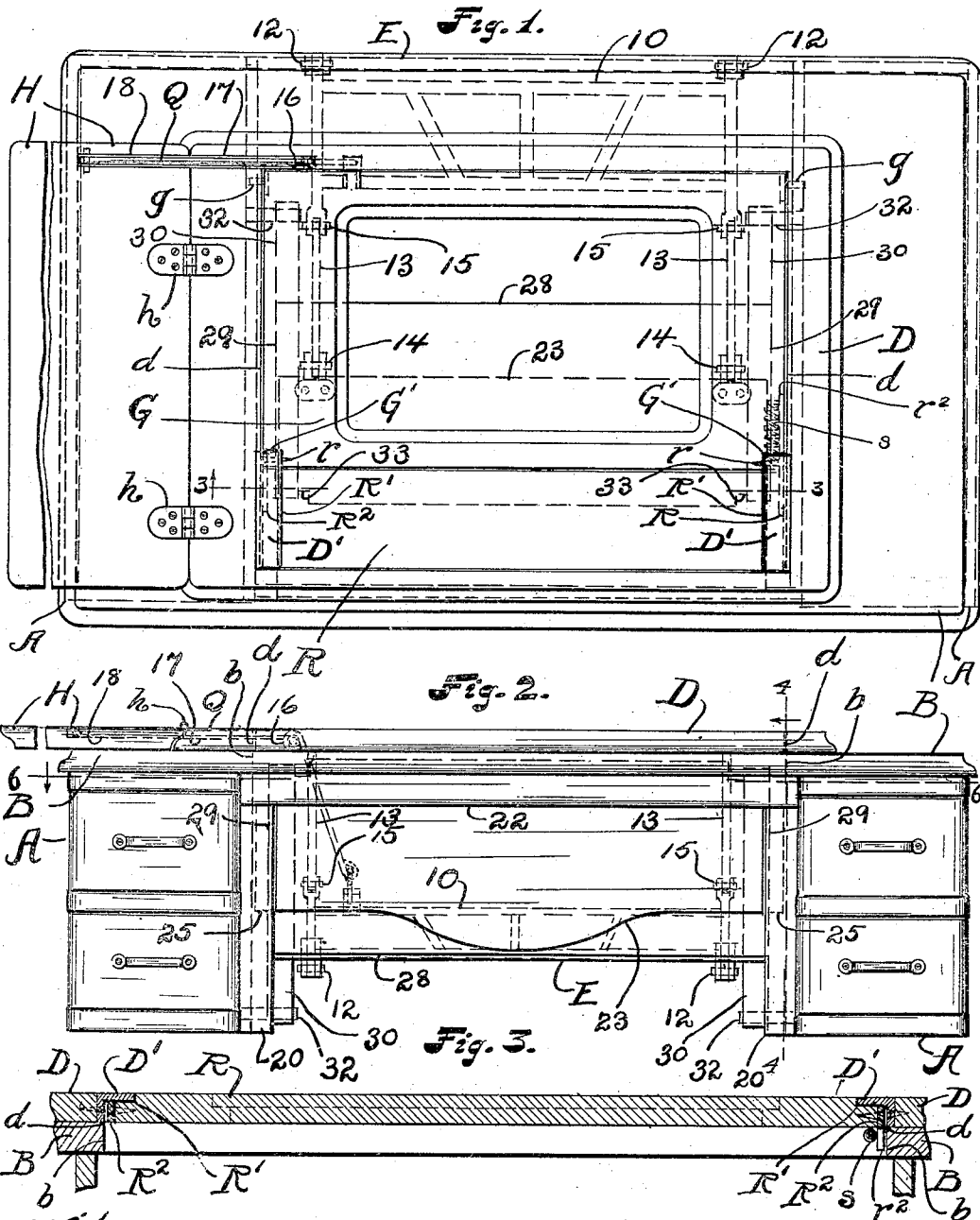


T. KUNDTZ & J. REHOR.  
SEWING MACHINE CABINET.  
APPLICATION FILED NOV. 9, 1908.

946,876.

Patented Jan. 18, 1910.

3 SHEETS—SHEET 1.



Witnesses:  
N. J. Gettine.  
B. C. Brown.

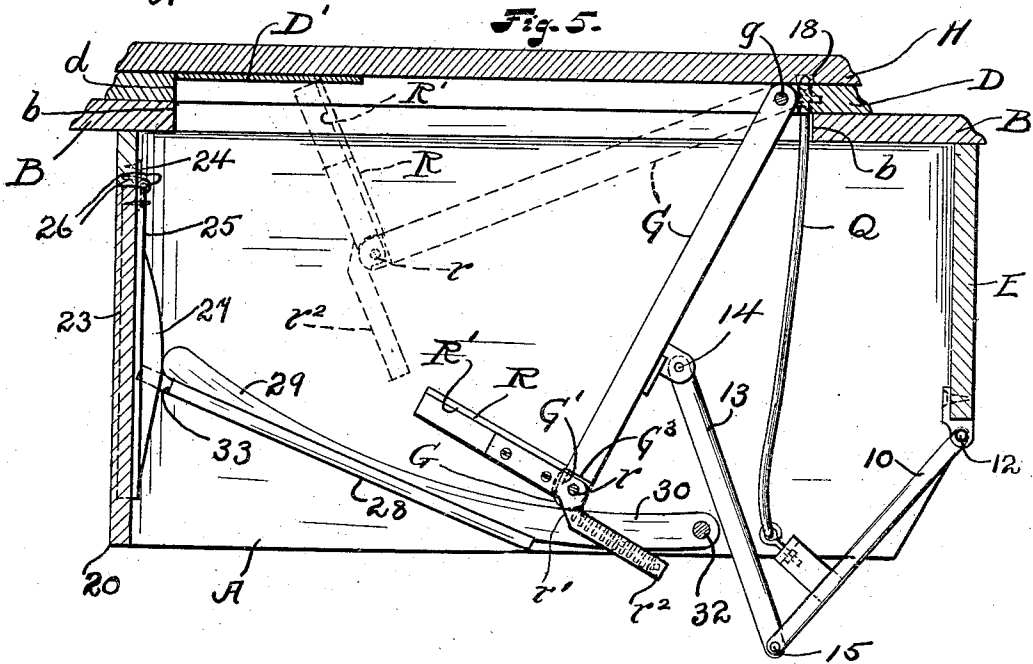
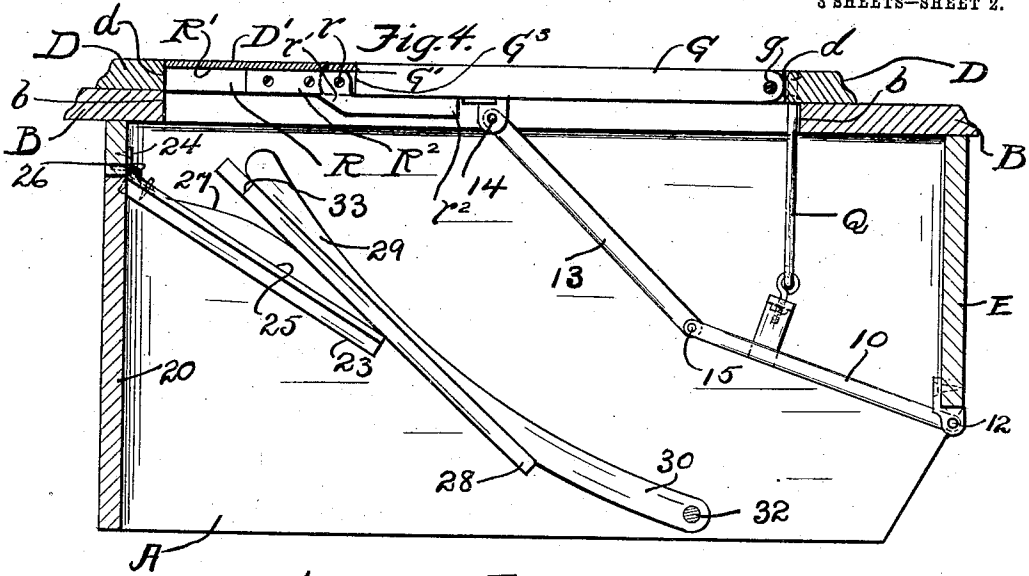
Inventors:  
Theodor Kundtz  
and Joseph Rehor  
By *[Signature]*  
Their Attorneys.

T. KUNTZ & J. REHOR.  
SEWING MACHINE CABINET.  
APPLICATION FILED NOV. 9, 1908.

946,876.

Patented Jan. 18, 1910.

3 SHEETS—SHEET 2.



Witnesses:  
H. J. Gittins,  
P. C. Brown.

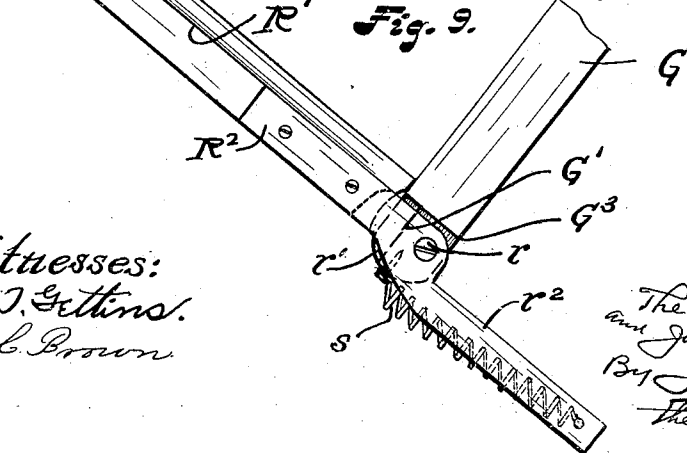
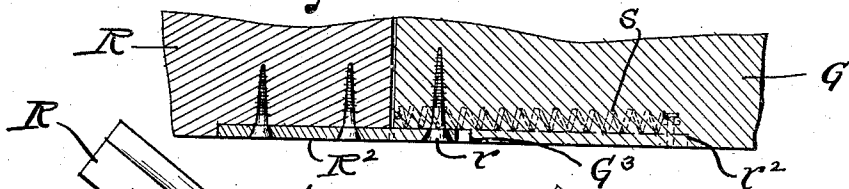
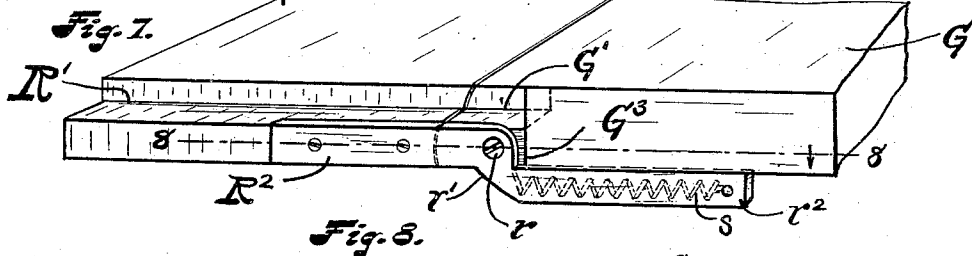
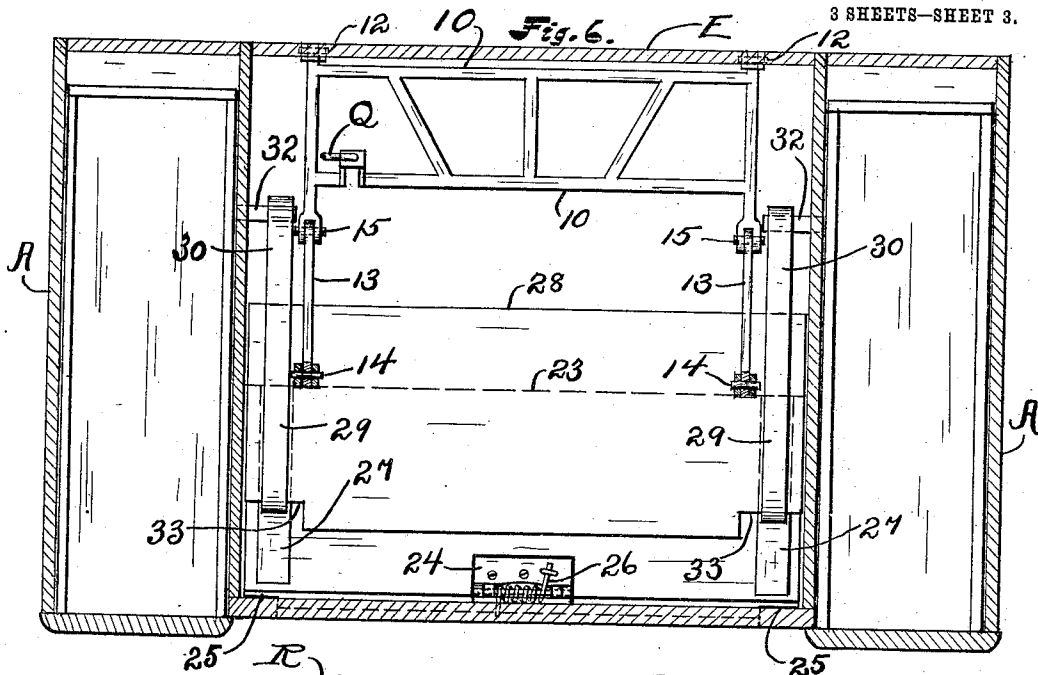
Inventors:  
Theodor Kuntz  
and Joseph Rehor  
By *[Signature]*  
their  
Attorneys.

T. KUNDTZ & J. REHOR.  
SEWING MACHINE CABINET.  
APPLICATION FILED NOV. 9, 1908.

946,876.

Patented Jan. 18, 1910.

3 SHEETS—SHEET 3.



Witnesses:  
H. J. Gettins.  
B. C. Brown

Inventors:  
Theodor Kundtz  
and Joseph Rehor  
By Symonds & Sons  
Attorneys.

# UNITED STATES PATENT OFFICE.

THEODOR KUNDTZ, OF LAKEWOOD, AND JOSEPH REHOR, OF CLEVELAND, OHIO; SAID REHOR ASSIGNOR TO SAID KUNDTZ.

## SEWING-MACHINE CABINET.

946,876.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed November 9, 1908. Serial No. 461,595.

*To all whom it may concern:*

Be it known that we, THEODOR KUNDTZ, a citizen of the United States of America, and residing at Lakewood, in the county of Cuyahoga and State of Ohio, and JOSEPH REHOR, a citizen of the United States of America, and residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sewing-Machine Cabinets; 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.

This invention relates to improvements in sewing-machine cabinets.

This invention pertains more especially to a sewing-machine cabinet provided on top with a horizontally arranged quadrangular frame having an opening extending vertically through the frame for accommodating the operation of a pivotally supported platform employed in carrying the sewing-machine-head from above the cabinet downwardly through the said opening and vice versa, which opening, being large enough in dimensions forwardly and rearwardly of the cabinet to accommodate the passage through the opening of the said head, is only partially closed or occupied by the said platform in the upwardly swung and horizontal position of the platform which therefore is provided with a leaf employed to substantially complete the closure of the said opening in the horizontal and opening-closing position of the platform.

One object of this invention is to avoid the necessity of providing the stationary frame-work of the cabinet at one or both sides of the sweep of the platform with an inclined guide or guides for guiding the aforesaid leaf, and to avoid the provision of a rest on the said stationary frame-work for the said leaf in the opening-closing position of the platform and attached leaf, and hence to materially reduce the cost and improve the appearance of the cabinet and attain and insure an easy movement of the platform and attached leaf.

Another object is to provide simple and efficient means for preventing oil or grease from dropping from the sewing-machine head or mechanism instrumental in establishing operative connection between the

platform and the leaf employed in fitting the said platform from its depending position into its opening-closing position onto the clothing of the operator sitting at the cabinet during the operation of the sewing-machine, and to prevent the clothing of the operator from coming in contact with any member carried by the sewing-machine head or with any portion of the mechanism establishing operative connection between the platform and the said leaf.

Another object is to render the platform and mechanism operatively connecting the platform with the platform-lifting leaf substantially invisible from the front of the cabinet in the depending position of the platform and to largely form the said front by a hinged leaf which in the depending position of the platform substantially closes an opening formed in the said front and is arranged to swing upwardly and rearwardly and swung rearwardly by a suitably applied spring during the movement of the platform from its depending into its opening-closing position and in its rearwardly swung position affords bearing to the under side of a pivotally supported apron which is arranged to swing in a vertical plane under the platform and during the movement of the platform from its opening-closing into its depending position actuates the said leaf into its opening-closing position against the action of the spring.

With these objects in view, and to the end of realizing any other advantages herein-after appearing, this invention consists in certain features of construction, and combinations of parts, hereinafter described, pointed out in the claim and illustrated in the accompanying drawings.

In the said drawings, Figure 1 is a top plan of a sewing-machine cabinet embodying our invention. Fig. 2 is a front view of the upper portion of the cabinet. Fig. 3 is a front view in vertical section on line 3--3, Fig. 1. Fig. 4 is a vertical section on line 4--4, Fig. 2, looking in the direction indicated by the arrow. Fig. 5 is a vertical section corresponding with Fig. 4, except that in Fig. 5 the platform is shown in its downwardly swung or depending position, whereas in Fig. 4 the platform is in its upper and opening-closing position. Figs. 3, 4 and 5 are drawn on a larger scale than Figs. 1 and 2, and portions are broken away in Figs. 1

and 2 to reduce the size of the drawings. Fig. 6 is a horizontal section on line 6—6, Fig. 2, looking downwardly. Fig. 7 is a view in perspective of adjacent portions of the platform and attached leaf in their horizontal position. Fig. 8 is a horizontal section on line 8—8, Fig. 7, looking downwardly. Fig. 9 is a side view of the adjacent portions of the platform and attached leaf and illustrates the position in which the leaf is held relative to the platform by a suitably applied spring in the depending position of the platform. Figs. 7, 8 and 9 are drawn on a larger scale than Figs. 3, 4 and 5.

The stationary portion of our improved cabinet comprises two laterally spaced drawer-cases A which are arranged under opposite ends respectively of and support a horizontally arranged oblong table-top B which rests upon and is suitably secured to the drawer-cases. The table-top B is provided centrally with an opening *b* extending vertically therethrough. The opening *b* is rectangular and arranged longitudinally of the table-top.

A rectangular frame D rests upon the table-top B externally of and extends around the opening *b*, and the said frame is glued or otherwise attached to the table-top. The frame D has the opening *d* therein extending vertically through the frame and is arranged in registry with the openings *b* in the table-top.

G represents a pivotally supported load-carrying platform which is arranged to swing in a vertical plane and is within the opening *d* of the frame D of the table-top, as shown in Figs. 1 and 4, or depends below the table-top as shown in Fig. 5, according as the said leaf is at the one or the other extremity of its range of movement. The openings *b* and *d* are large enough in dimensions to accommodate a reception thereby of the platform G and a leaf R which is pivotally supported from the platform. Preferably the platform G is pivoted at its side edges in suitable proximity to the forwardly facing rear wall of the opening *d*, as at *g*, to the side walls of the said opening horizontally and longitudinally of the cabinet to render the platform capable of swinging downwardly from within the said opening or upwardly into the opening. The leaf R is pivotally secured at the ends by means of pivotal screws or members *r* to the platform G near the forward longitudinal edge of the leaf G and arranged to swing upwardly independently of the platform during the lowering of the platform into its depending position. The axes of the leaf R and the platform G are parallel. The platform G is designed to bear the sewing-machine head (not shown), which head is usually of such dimensions that it will not swing through an opening which is not larger than the plat-

form, and the platform if it were made large enough to occupy an opening of the size necessary to accommodate the passage of the sewing-machine head therethrough would in swinging from its horizontal and opening-closing position into its downwardly swung or depending position strike the fly-wheel (not shown) of the sewing-machine. Consequently the openings *b* and *d* are made large enough to accommodate a swinging of the sewing-machine head through the opening *b* into or from within the opening *d* and the platform is adapted to only partially close the opening *d* and the leaf R is employed to substantially complete the closure of the opening *d* in the opening-closing position of the platform.

Means for actuating the platform G are provided and comprise a cover-forming leaf H which is hinged, as at *h*, to the frame D at the left-hand end of the frame. The leaf H is arranged with its axis at a right angle to the axis of the platform G and is employed in lifting the latter from its downwardly swung or depending position into its horizontal or opening-closing position. The cover-forming leaf H is operatively connected with the platform G, and the mechanism establishing operative connection between the platform and the said leaf is as follows:—The cabinet is provided with a vertically arranged stationary back E which extends longitudinally of the table-top at the rear longitudinal edge of the said top and between the drawer-cases. A frame 10 is pivotally supported from the back E, as at 12, and arranged to swing in a vertical plane and has its axis parallel with the axis of the platform G. Two forwardly and rearwardly extending links 13 are arranged below opposite ends respectively of the platform G. The links 13 are pivoted to the platform G, as at 14, horizontally and longitudinally of the platform, and to the frame 10, as at 15, and the axis of the pivotal connection between each link and the platform and the axis of the pivotal connection between each link and the frame 10 are parallel with the pivots *g* and 12.

The arrangement of the parts is preferably such that when the platform G is in its upwardly swung and opening-closing position the frame 10 extends upwardly as well as forwardly from the back or supporting wall E and effectively braces the said platform from below, as shown in Fig. 4.

To actuate the platform G from its downwardly swung position (shown in Fig. 5) into its upwardly swung position (shown in Figs. 1 and 4) power is applied to the frame 10.

A cable Q is operatively connected at one end with the frame 10, thence leads upwardly to and over a guide-sheave 16 borne by the table-top A rearward of the plat-

form G and thence leads to the leaf H to which it is attached at its opposite end a suitable distance from the hinged end of the leaf. The frame D is slotted, recessed, or cut away, as at 17, (see Fig. 1) to accommodate the location of the sheave 16 and the cable Q. The leaf H is slotted or recessed, as at 18 (see Fig. 1) to accommodate the location of the cable Q and the attachment of the said cable to the said leaf.

The leaf H covers the opening  $d$  in the frame D, as shown in Fig. 5, or projects laterally of the left-hand end of the table-top B, as shown in Figs. 1 and 2, according as the platform G is in its depending position or in its upwardly swung and opening-closing position.

The frame D is provided at the top and at each side of the forward portion of the opening  $d$  with a plate or member D' which overhangs the adjacent end of the opening  $b$  in the table-top B and extends from the forward wall of the opening  $d$  rearwardly a suitable distance. The plates D' are arranged flush with the top surface of the frame D and suitably attached to the said frame.

The platform G is provided at the top and side edges thereof with rabbets G' which are engaged by the plates or members D' of the frame D in the opening-closing position of the platform. Obviously therefore the members D' of the frame D and the upwardly facing bottoms of the rabbets G' of the platform G constitute stops for limiting the upward movement of the platform in actuating the latter into the opening  $d$  in the frame and preventing movement of the platform above the said opening.

The leaf R is provided at the top and side edges thereof with rabbets R' which extend transversely of the leaf from the rear to the forward longitudinal edge of the leaf and are arranged to be engaged by the plates or members D' of the frame D in the horizontal and opening-closing position of the leaf. Obviously therefore the plates or members D' of the frame D and the upwardly facing bottoms of the rabbets R' of the leaf R form stops for preventing upward tilting of the said leaf in its horizontal and opening-closing position.

Preferably the leaf R is provided with two plates R<sup>2</sup> arranged at opposite side edges respectively of the leaf, as shown in dotted lines, Fig. 1. Each plate R<sup>2</sup> is pivoted to the platform G, as at  $r$ , horizontally and parallel with the axis of the platform (see Figs. 7, 8 and 9) to render the leaf tiltable upwardly independently of the platform during the movement of the platform into its depending position, and as shown in Figs. 7 and 8 the said plate is preferably sunk into the leaf R flush with the adjacent side edge of the leaf, and the adjacent portion of the

platform is recessed or cut away, as at G<sup>3</sup>, to accommodate the location and operation of the said plates. The leaf R is provided with an arm  $r^2$  which is formed on one of the plates R<sup>2</sup>. Preferably the plate R<sup>2</sup> which has the arm  $r^2$  is enlarged downwardly, as at  $r'$ , below the pivot  $r$  of the said plate and the said arm  $r^2$  is formed on and projects from the said downward enlargement  $r'$  of the said plate rearwardly or toward the axis of and under the platform G in the opening-closing position of the platform. A spiral spring  $s$  arranged below the axis of the leaf R and longitudinally of the inner side of the arm  $r^2$  is attached at one end to the platform adjacent the inner end of the arm and at its other end to the arm at the outer end of the arm. The spring  $s$  is under tension in the opening-closing position of the platform and attached leaf. During the movement of the platform from its depending into its opening-closing position the bottoms of the rabbets R' of the leaf R come into engagement with the lower sides of the plates or members D' of the frame D, as shown in dotted lines, Fig. 5, whereupon the said members D' guide and thereby swing the leaf into line horizontally with the platform, and we would here remark that the arrangement of the parts is such that when the leaf R, during the actuation of the platform into its opening-closing position, has come into the position shown in dotted lines Fig. 5 the point of contact between the bottom of each rabbet R' of the said leaf and the engaging plate or member D' of the frame D is enough farther than the axis of the leaf from the axis of the platform to freely accommodate the guiding of the leaf by the plates or members D' of the said frame into its opening-closing position. The arm  $r^2$  of the leaf R engages the under side of the platform in the opening-closing position of the leaf and prevents the leaf from tilting downwardly independently of the platform in the opening-closing position of the platform and attached leaf.

As already indicated, the bottoms of the rabbets G' of the platform G abut against the under side of the plates or members D' of the frame D in the opening-closing position of the platform and attached leaf, and obviously the engagement of the bottoms of the rabbets G' of the platform and the bottoms of the rabbets R' of the attached leaf with the under side of the plates or members D' of the frame D and the engagement of the arm  $r^2$  of the leaf with the under side of the platform in the opening-closing position of the platform and attached leaf constitute means whereby the platform and attached leaf are not only alined by their actuation into their opening-closing position but maintained in line horizontally in their opening-closing position.

It will be observed that by the construction hereinbefore described the leaf R is guided into its opening-closing position with facility during the actuation of the platform into its opening-closing position; that the said leaf, when in position to be guided into its opening-closing position, as shown in dotted lines, Fig. 5, projects upwardly from the platform and forwardly relative to the cabinet, and that the adjacent longitudinal edges of the platform and attached leaf are curved concentrically of the axis of the leaf.

The front of the cabinet between the two drawer-cases is formed by two vertically arranged wooden bars 20 and 20, a horizontally arranged wooden bar 22 and a hinged wooden leaf 23. The horizontal bar 22 is arranged next below and glued or otherwise attached to the table-top B forwardly of the opening b in the said top and extends between the upper ends of the drawer-cases at the fronts of the drawer-cases, and the bars 20 and 20 are arranged next below opposite ends respectively of the horizontal bar 22 and glued or otherwise attached to the drawer-cases.

The leaf 23 is hinged at the top, as at 24, to the horizontal bar 22 and is arranged to swing in a vertical plane, having its axis parallel with the axis of the platform G. The leaf 23 at one extremity of its range of movement is in position substantially closing the opening formed below the horizontal bar 22 and between the upright bars 20. The leaf 23 in its said opening-closing position is arranged vertically, as shown in Fig. 5, and has portions 25 overlapping and abutting against the inner sides of the upright bars 20 which form stops for limiting the forward or outward movement of the said leaf. The leaf 23 at the opposite extremity of its range of movement, as shown in Figs. 1, 2, 4 and 6, projects rearwardly, and a suitably applied torsional spring 26 is attached at one end to the leaf and at the other end to the horizontal bar 22 and acts to retain the said leaf in its rearwardly swung position. The leaf 23 is provided at its inner side with two laterally spaced cleats 27 which extend up and down or transversely of the leaf and are engaged by an apron 28 which is pivotally supported from the drawer-cases and arranged to swing in a vertical plane. The apron 28 has its axis arranged a suitable distance below and parallel with the axis of the platform G and preferably lower than the sweep of the leaf 23. The apron 28 is preferably provided with two laterally spaced rearwardly projecting arms 30, and pins 32 which are arranged horizontally and in line endwise and parallel with the axes of the platform G and leaf 23 pivot the said arms at their rear or free ends to the drawer-cases. The arms 30 are preferably formed by rearward extensions of two cleats 29 with

which the apron 28 is provided at its inner side, said cleats being spaced laterally and extending transversely of the apron. The apron 28 is cut away, as at 33, to accommodate the location of the cleats 27 of the leaf 23 in the opening-closing or vertical position of the said leaf. In the upwardly swung and opening-closing position of the platform G the apron 28 is in its upwardly swung position and the leaf 23 is in its rearwardly swung position, as shown in Figs. 4 and 6, and the relative arrangement of the parts is such that the platform G during its movement from its opening-closing position into its depending position comes in contact with the cleats 29 of the apron 28 and thereupon swings the said apron downwardly, and the apron during its downward movement by the platform actuates the leaf 23 against the action of the spring 26 into its vertical and opening-closing position, as shown in Fig. 5, and retains the said leaf in its said opening-closing position in the depending position of the platform, and the downward movement of the platform is limited by the arms 30 of the said apron, the said platform in the opening-closing position of the leaf 23 resting upon the said arms forwardly of the axes of the arms. It will be observed that the leaf 23 in its forwardly swung and vertical position renders the apron 28 and platform G and its leaf R substantially invisible from the front of the cabinet, and that in the upwardly swung and opening-closing position of the platform the leaf 23 and the apron 28 prevent the clothing of the person sitting at the cabinet during the operation of the sewing-machine from coming in contact with, or from being exposed to any drip of lubricant from, any member of the sewing-machine head or any member of the operative connection between the platform G and the platform-lifting leaf H.

What we claim is:—

In a sewing-machine cabinet, the combination, with the front of the cabinet, which front has an opening extending there-through, and a platform pivotally supported in suitable proximity to its rear edge and arranged to swing in a vertical plane, said platform being arranged in a horizontal plane at the top and rearward of the front of the cabinet or being in a depending position according as the platform is at the one or the other extremity of its range of movement, of a movable leaf substantially closing the aforesaid opening or projecting rearwardly of the opening according as the leaf is at the one or the other extremity of its range of movement, said leaf being hinged at the top and having its axis parallel with the axis of the platform; means acting to retain the said leaf in its rearwardly swung position, and an apron pivotally supported a suitable distance below the axis

of the platform and arranged to swing in a vertical plane and having rearwardly projecting laterally spaced arms which are pivotally supported at their rear ends and have  
5 their axes arranged in line horizontally and parallel with the axis of the platform, said apron being held in its upwardly swung position by the aforesaid leaf in the upwardly swung position of the platform and being in  
10 position to be lowered by the said platform during the movement of the platform from its upwardly swung into its depending posi-

tion, and the platform in the opening-closing position of the said leaf resting upon the aforesaid arms forwardly of the axes of the  
15 said arms.

Signed by us at Cleveland, Ohio this 5th day of November, 1908.

THEODOR KUNDTZ.  
JOSEPH REHOR.

Witnesses:

VICTOR C. LYNCH,  
B. C. BROWN.