

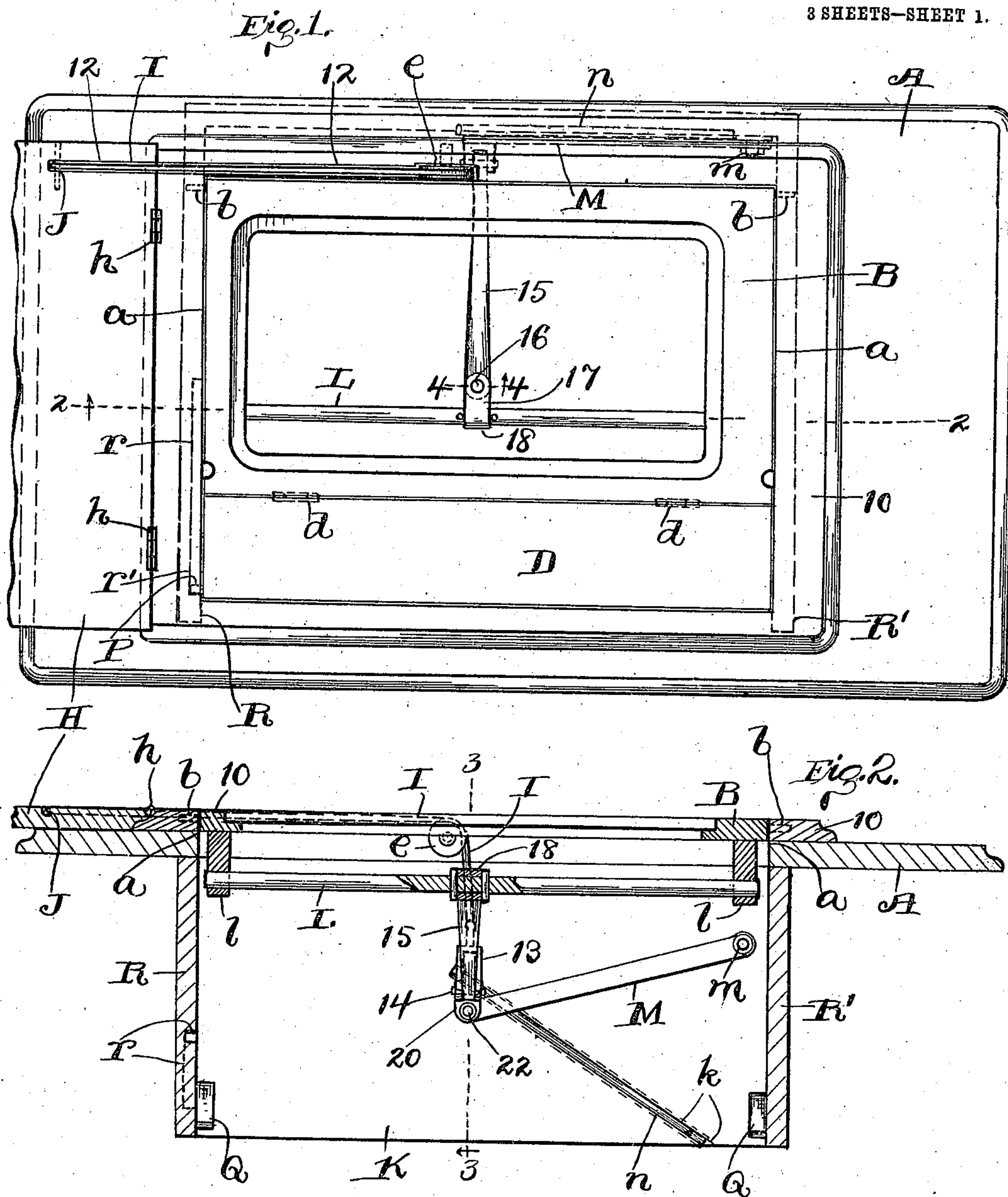
No. 847,483.

PATENTED MAR. 19, 1907.

T. KUNDTZ & J. REHOR.
SEWING MACHINE CABINET.

APPLICATION FILED DEC. 27, 1904.

3 SHEETS—SHEET 1.



WITNESSES:
Daniel E. Haly.
Bell G. Brown

INVENTORS
Theodor Kundtz
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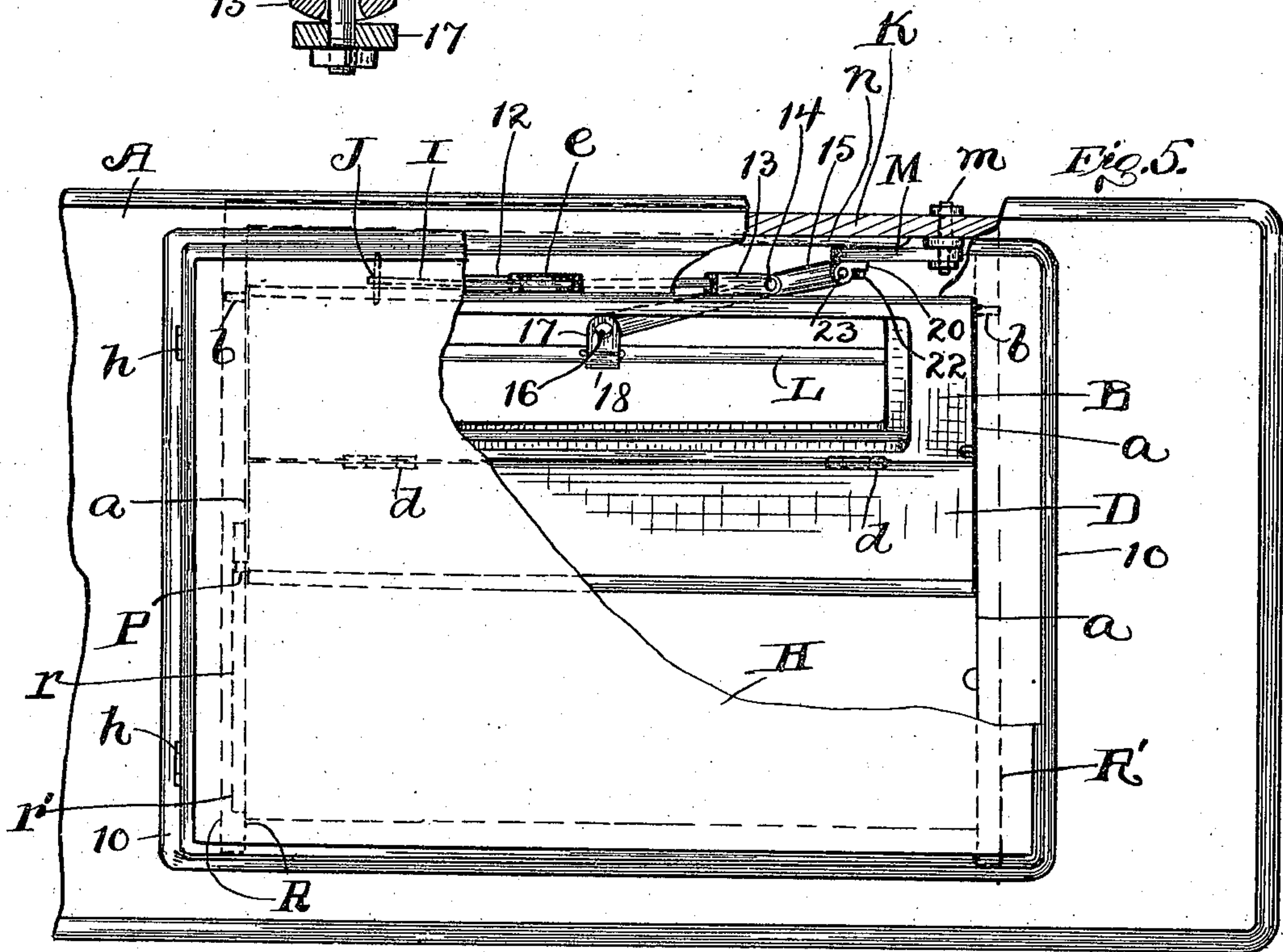
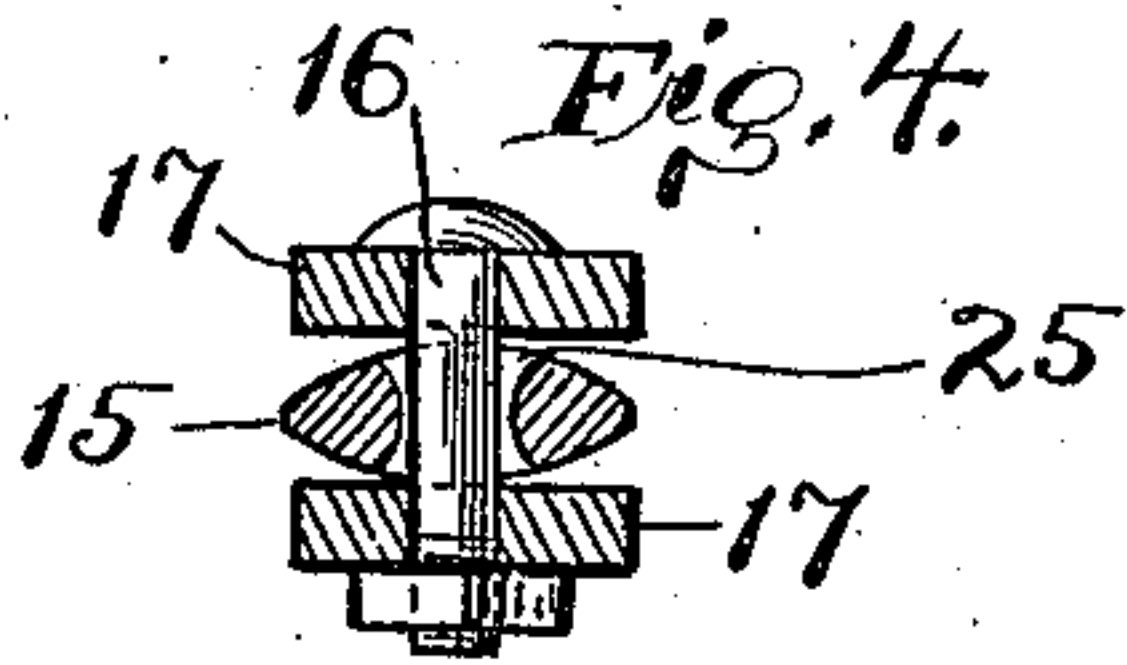
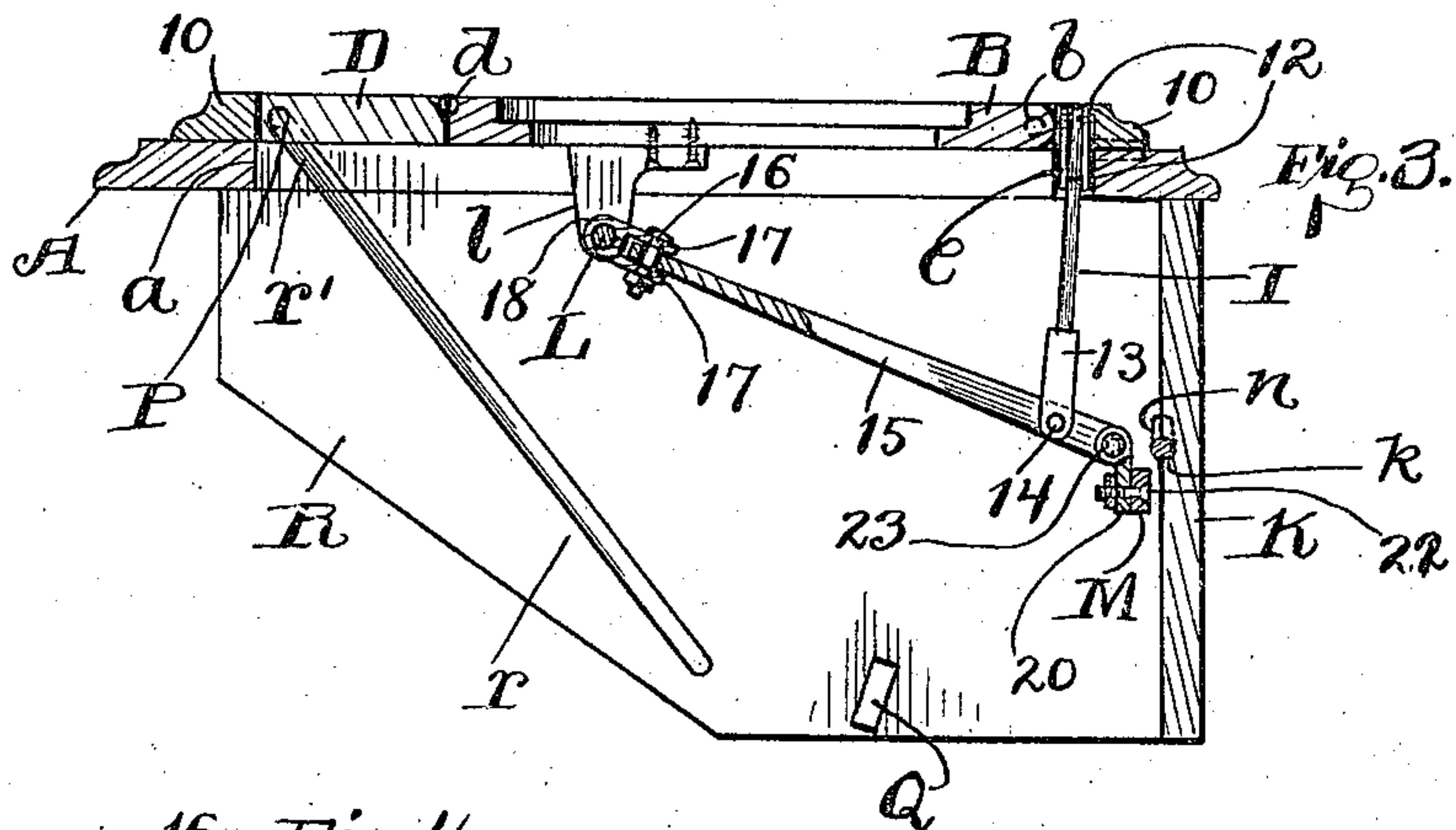
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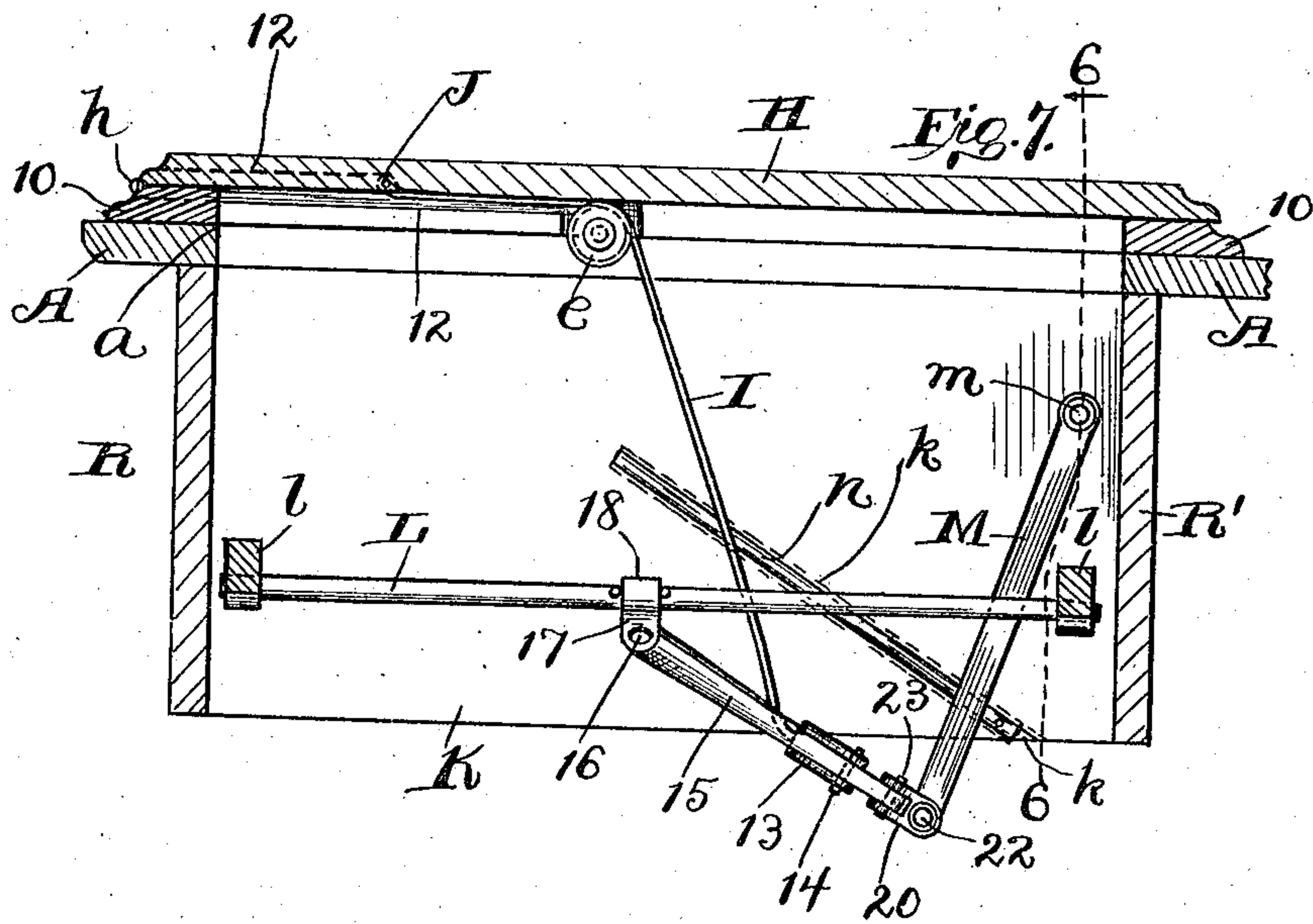
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3 SHEETS--SHEET 3.



WITNESSES:

Witnessed:
 Samuel E. Raly
 Bell G. Brown

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UNITED STATES PATENT OFFICE.

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

SEWING-MACHINE CABINET.

No. 847,483.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed December 27, 1904. Serial No. 238,411.

To all whom it may concern:

Be it known that we, THEODOR KUNDTZ and JOSEPH REHOR, both citizens 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 tables or cabinets.

One object of this invention is to provide improved means for guiding the narrow leaf hinged to and extending longitudinally of the vertically-swinging platform designed to bear the sewing-machine head and to reduce the cost of the said means to a minimum.

Another object of this invention is to provide an improved simple and inexpensive and efficient operative connection between the aforesaid platform and the leaf hinged to the left-hand end portion of the top of the table or cabinet.

With these objects in view this invention consists in certain features of construction and combinations of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan of a sewing-machine table or cabinet embodying our invention, and a portion is broken away in this figure to reduce the size of the drawing. In this figure the load-bearing platform of the table or cabinet is in its upwardly-swung and horizontal position. Fig. 2 is a front side elevation of the upper portion of the table or cabinet, largely in section, on line 2 2, Fig. 1. Fig. 3 is a right-hand side elevation, largely in section, on line 3 3, Fig. 2. Fig. 4 is an enlarged view in detail and largely in section on line 4 4, Fig. 1, looking in the direction indicated by the arrow. Fig. 5 is a top plan illustrating the load-bearing leaf in its downwardly-swung position, and in this figure portions are broken away and in section to more clearly show the construction. Fig. 6 is a transverse vertical section on line 6 6, Fig. 7, looking in the direction indicated by the arrow. Fig. 7 is a section on line 7 7, Fig. 6, looking in the direction indicated by the arrow.

Referring to the drawings, A indicates the table-top of a sewing-machine table or cabinet, which top is provided centrally with an opening *a*, extending vertically through the top. The opening *a* is quadrangular and large enough in dimensions to accommodate the reception thereby of a load-bearing platform B and the comparatively narrow leaf D, hinged to and arranged forward of the said platform. The table-top A is provided with a raised portion 10 around the opening *a*. The platform B is hinged or pivoted at its side edges in suitable proximity to the rear edge of the platform, as at *b*, to the side walls of the opening *a* horizontally and longitudinally of the platform to render the platform capable of swinging downwardly from within the said opening or upwardly into the said opening.

The leaf D is hinged to the platform B at the forward edge and at the top of the said platform, as at *d*, horizontally and longitudinally of the platform. The axis of the hinge connection between the leaf D and the platform B and the axis of the pivotal connection of the platform B to the table-top A are parallel.

The platform B is designed to bear the sewing-machine head (not shown) and is known in the art as the load-bearing leaf or platform, and the said head is usually of such dimensions that it will not swing in actuating the platform B downwardly into its depending position through an opening not larger than the said platform, and the platform B, if it were made large enough to occupy an opening having the dimensions required to accommodate the passage of the sewing-machine head therethrough, would in swinging from its horizontal and opening-closing position into its downwardly-swung and depending position strike the fly-wheel (not shown) of the sewing-machine. Consequently the opening *a* in the table-top A is made large enough to accommodate the swinging of the sewing-machine head through the said opening. The platform B is adapted to only partially close the opening *a*, and the leaf D is provided to complete the closure of the said opening forwardly of the platform B in the opening-closing position of the platform.

A leaf H, which is hinged, as at *h*, to the raised portion 10 of the table-top A at the

left-hand end of the said raised portion horizontally and transversely of the sewing-machine table or cabinet, is employed in lifting the platform B from its lower and depending position into its horizontal and opening-closing position. The leaf H when the platform B is in its upwardly-swung and horizontal position rests upon the left-hand end of the table-top A, as shown in Figs. 1 and 2.

An improved operative connection between the leaf H and the platform B is provided and comprises a flexible connection—such, for instance, as a cable I, suitably attached, as at J, to the said leaf near the rear edge and a suitable distance from the hinged end of the leaf. Thence the cable I leads inwardly over and longitudinally of the leaf H and over and longitudinally of the raised portion 10 of the table-top rearwardly of the opening *a* to and over a vertically-arranged guide-sheave *e*, which is supported from the table-top, and the latter and the leaf H are cut away, as at 12, to accommodate the location and operation of the cable. The sheave *e* is arranged approximately centrally between the ends of the opening *a*. The cable I leads from over the sheave *e* downwardly and is suitably attached, at its lower end, to a clevis 13, which straddles and is pivoted, as at 14, to a bar 15, which extends from in under the platform B centrally between the ends of the platform rearwardly and downwardly into close proximity to the inner side of the wooden back K, with which the sewing-machine table or cabinet is provided next below the rear portion of the table-top A rearwardly of the opening *a*, which back is rendered rigid with the said top in any approved manner.

The bar 15 is pivoted vertically at its forward end, as at 16, to and between two lugs 17, which are formed and project rearwardly from a collar 18, with which a rod L, which is arranged below and extends longitudinally of the forward portion of the platform B, is provided, which rod is supported at the ends by brackets *l*, suitably secured to and depending from the said platform. The bar 15 is operatively connected at its rear and lower end with the free end of a lever M, which is fulcrumed, as at *m*, horizontally and at a right angle to the axis of the platform B to the back K near the right-hand end of the said back and arranged to operate at the inner side and in close proximity to the said back.

The operative connection between the bar 15 and the lever M preferably comprises a short link 20, which is pivoted at its lower end, as at 22, to the said lever horizontally and parallelly with the axis of the lever and pivoted at its opposite or upper end, as at 23, to the said bar rearwardly of the clevis 13 and transversely of the axis of the pivotal connection of the said link to the lever.

A not unimportant feature of our inven-

tion consists in so connecting the bar 15 to the rod L as to render the said bar capable of turning laterally during the actuation of the platform B from the one to the other of its extreme positions. For instance, the hole 25, through which extends the pivot 16, which forms the pivotal connection between the bar 15 and the collar 18, flares upwardly and downwardly, as shown very clearly in Fig. 4, and the bar is rounded at the top and bottom and arranged loosely between the lugs 17 of the aforesaid collar.

By the operative connection hereinbefore described between the platform B and the leaf H it is obvious that the said platform will lower by gravity when the leaf H is swung over the opening *a* in the table-top A; that the leaf H rests upon the raised portion 10 of the table-top and covers the opening *a* when the platform B is in its downwardly-swung or depending position, as shown in Figs. 5 and 6, and that the said platform is swung upwardly into its horizontal and opening-closing position, as shown in Figs. 1, 2, and 3, during the actuation of the leaf H to uncover the opening *a*.

To avoid friction between the lever M and the back K and to render the said lever capable of operating with facility, a round rod *n* is arranged transversely of the sweep of the said lever next rearwardly of the said sweep and is slid endwise into a groove *k*, formed in the inner side of the back K, which rod is fixed in place in any approved manner, and the arrangement of the parts is such that the groove *k* is open at the said side of the said back, and the forward side of the rod *n* protrudes or projects forwardly of the back, so that the lever M has bearing upon the said rod during the actuation of the lever in operating the leaf H, as required, to swing or actuate the platform B from the one to the other of its extreme positions.

It will be observed that the operative connection between the leaf H and the platform B is simple in construction and practically-inexpensive and readily applied and operates with facility.

The sewing-machine table or cabinet comprises two stationary preferably wooden side pieces R and R', arranged vertically at opposite sides, respectively, of the sweep of the platform B and connected leaf D'. The said side pieces extend from the back K forwardly to and beyond the forward side wall of the opening *a* in the table-top A and are secured to and connect together the said top and the said back. The side pieces R and R' are provided near their lower edges and rear ends with blocks Q, which are fastened in any approved manner to the said side pieces and arranged to limit the movement of the platform B when the said platform swings downwardly from its horizontal and opening-clos-

ing position into its depending position between the side pieces. The side piece R is provided in its inner side with a straight groove *r*, which extends downwardly and rearwardly from the upper edge of the said member R adjacent the upper edge of the sweep or travel of the leaf D and a short distance rearwardly of the forward side wall of the opening *a*, and the table-top A is provided in the left-hand side wall of the opening *a* with a straight groove *r'*, which communicates and is arranged exactly in line with and forms an upward extension of the groove *r*. The groove *r'* therefore extends upwardly and forwardly from the groove *r*.

The leaf D is provided at its left-hand end with a cylindrical pin P, which is inserted within and projects from the left-hand edge of the said leaf near the free longitudinal edge of the leaf. The pin P is arranged to travel along and within the grooves *r* and *r'* during the movements of the platform B. The arrangement of the parts is such that when the platform B is in its horizontal and opening-closing position, as shown in Figs. 1, 2, and 3, the pin P engages the upper end of the groove *r'*, and the said leaf is swung upwardly during the swinging of the said platform B downwardly and projects upwardly from the said platform in the downwardly-swung position of the platform, as shown in Figs. 5 and 6, and is held in the said upwardly-swung position of the platform by the engagement of the pin P with the groove *r*.

It will be observed that the side piece R and the left-hand side wall of the opening *a* form the left-hand side wall of the space in which the platform B has its sweep, and the slots *r* and *r'*, being straight from end to end, are readily made practically without expense; that the said grooves form a straight way formed in the last-mentioned wall and extending from a point at one side of the upper end of the travel or sweep of the leaf D downwardly and in the direction in which the platform B swings during the lowering of the platform; that the use of guide-strips or guide-irons for guiding the leaf D are dispensed with; that the aforesaid way has two parallel straight side walls extending along opposite sides, respectively, of the travel of the pin P; that opposite side walls of the said way limit the swinging of the leaf D in opposite directions, respectively, independently of the platform; that the side wall of the said way which limits the swinging of the leaf D in the direction of the upper side of the platform B positively insures the swinging of the said leaf in line horizontally with the platform B upon actuating the platform from its depending position into its opening-closing and horizontal position; that the sweep of the platform B extends across the said way centrally between the ends of the way, and the impor-

tance of the formation of the said way outside of the sweep of the platform is therefore obvious. It will be observed that during the actuation of the platform B from its depending position into its horizontal and opening-closing position through the medium of the leaf H and connected cable I and lever M the bar 15 is actuated forwardly and endwise and through the medium of the rod L pushes upwardly upon the platform from below, and the arrangement of the parts is such that the platform in its horizontal and opening-closing position is braced from below by the said bar.

What we claim is—

1. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a stationary back arranged vertically at and extending below the rear portion of the table-top rearward of the aforesaid opening, and a rod arranged in under and extending longitudinally of and supported from the platform, of a laterally-turnable bar connected with and extending rearwardly and downwardly from the rod centrally between the ends of the platform and pivotally mounted thereon to swing in a vertical plane; a lever arranged at and longitudinally of the inner side of the back and fulcrumed to the back near the right-hand end of the back horizontally and at a right angle to the axis of the platform; an upright link pivoted at its lower end to the free end of the lever parallelly with the axis of the lever and pivoted at its upper end and transversely of its axis to the aforesaid bar; a clevis straddling the said bar forward of but near the link, and a suitably-guided flexible connection between the clevis and the aforesaid leaf.

2. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a stationary back arranged at and extending below the rear portion of the table-top rearward of the aforesaid opening, and a rod arranged in under and extending longitudinally of and supported from the platform, of a laterally-turnable bar connected with and extending rearwardly and downwardly from the rod centrally between the ends of the platform and pivotally mounted thereon to swing in a vertical plane; a lever arranged at and longitudinally of the inner side of the back and fulcrumed to the back near the right-hand end of the back horizontally and at a

right angle to the axis of the platform; a connection between the free end of the lever and the aforesaid bar; a clevis straddling the said bar forward of the said connection, and a suitably-guided flexible connection between the clevis and the aforesaid leaf.

3. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a stationary back arranged at and extending below the rear portion of the table-top rearward of the aforesaid opening, and a rod arranged in under and extending longitudinally of and supported from the platform, of a laterally-turnable bar connected with and extending rearwardly and downwardly from the rod centrally between the ends of the platform and pivotally mounted thereon to swing in a vertical plane; a lever arranged at and longitudinally of the inner side of the back and fulcrumed to the back near the right-hand end of the back horizontally and at a right angle to the axis of the platform; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening.

4. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a stationary back arranged vertically at and extending below the rear portion of the table-top rearward of the aforesaid opening, and a rod arranged in under and extending longitudinally of and supported from the platform, of a laterally-turnable bar connected with and extending rearwardly and downwardly from the rod centrally between the ends of the platform and pivotally mounted thereon to swing in a vertical plane; a lever fulcrumed to the back and arranged to swing in a vertical plane; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening.

5. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a stationary back arranged at and ex-

tending below the rear portion of the table-top rearward of the aforesaid opening, and a rod arranged in under and extending longitudinally of and supported from the platform, of a laterally-turnable bar connected with and extending rearwardly and downwardly from the rod and pivotally mounted thereon to swing in a vertical plane; a lever fulcrumed to the back and arranged to swing in a vertical plane; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening.

6. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening, and a stationary back arranged vertically at and extending below the rear portion of the table-top rearward of the aforesaid opening, of a laterally-turnable bar pivotally connected with the platform to render the bar capable of swinging in a vertical plane and extending rearwardly and downwardly from the platform centrally between the ends of the platform; a lever fulcrumed to the back and arranged to swing in a vertical plane; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening.

7. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening, and a stationary back arranged at and extending below the rear portion of the table-top rearward of the aforesaid opening, with the arrangement of the parts such that the platform is in its depending position when the aforesaid opening is covered by the aforesaid leaf, of a laterally-turnable bar pivotally connected with the platform to render the bar capable of swinging in a vertical plane and extending rearwardly and downwardly from the platform; a lever fulcrumed to the back; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever and the bar are actuated to swing the platform upwardly when the aforesaid leaf is actuated to uncover the aforesaid opening.

8. In a sewing-machine table or cabinet, the combination, with the stationary portion comprising a table-top having an opening

therethrough; a platform hinged or pivotally supported from the stationary portion and arranged to be instrumental in closing the opening in its upwardly-swung position; a hinged leaf adapted to cover the opening; and a rod arranged in under and extending longitudinally of and supported from the platform, which rod is provided, centrally between the side edges of the platform, with a collar capable of turning movement about the same and having two vertically-spaced rearwardly-projecting lugs, of a laterally-turnable bar extending from between the lugs rearwardly and downwardly; such a connection between the bar and the lugs as to accommodate a turning of the bar between the lugs and comprising a pin extending through the bar and through the lugs, with the bar rounded at its upper and lower sides between the lugs and with the hole through which the pin extends in the bar flaring upwardly and downwardly; a lever arranged to swing in a vertical plane and supported from the stationary portion of the table or cabinet; such a connection between the lever and the bar as to accommodate the aforesaid turning of the bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening.

9. In a sewing-machine table or cabinet, the combination, with the stationary portion comprising a table-top having an opening therethrough; a platform hinged or pivotally supported from the stationary portion and arranged to be instrumental in closing the opening in its upwardly-swung position; a hinged leaf adapted to cover the opening, with the arrangement of the parts such that the platform is in its depending position when the opening is covered by the leaf, and a rod arranged in under and extending longitudinally of and supported from the platform, which rod is provided, centrally between the side edges of the platform, with a collar capable of turning movement about the same and having two vertically-spaced rearwardly-projecting lugs, of a laterally-turnable bar extending from between the said lugs rearwardly and downwardly; a connection between the bar and the lugs to accommodate a turning of the bar between the lugs and comprising a pin extending through the bar and through the lugs, with the bar rounded at its upper and lower sides between the lugs and with a hole through which the pin extends in the bar flaring upwardly and downwardly; a lever supported from the stationary portion of the table or cabinet; such a connection between the lever and the bar as to accommodate the aforesaid turning of the bar, and means whereby the lever and the bar are actuated to swing the platform up-

wardly when the aforesaid leaf is actuated to uncover the aforesaid opening.

10. In a sewing-machine table or cabinet, the combination, with the stationary portion comprising a table-top having an opening therethrough; a platform hinged or pivotally supported from the stationary portion and arranged to be instrumental in closing the said opening in its upwardly-swung position; a hinged leaf adapted to cover the opening, with the arrangement of the parts such that the platform is in its depending position when the opening is covered by the leaf, of a laterally-turnable bar pivotally connected with the platform to render the bar capable of swinging in a vertical plane and extending from the platform rearwardly and downwardly; a lever supported from the stationary portion of the table or cabinet; a connection between the lever and the bar, and means whereby the lever and the bar are actuated to swing the platform upwardly when the aforesaid leaf is actuated to uncover the aforesaid opening.

11. In a sewing-machine table or cabinet, the combination, with a table-top having an opening therethrough; a hinged or pivotally-supported platform arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a wooden stationary back arranged vertically at and extending below the rear portion of the table-top rearward of the aforesaid opening; a laterally-turnable bar pivotally connected with the platform to render the bar capable of swinging in a vertical plane and extending rearwardly and downwardly from the platform; a lever fulcrumed to the back and arranged to swing in a vertical plane; a connection between the free end of the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid leaf is actuated to uncover or cover the aforesaid opening, of a metal rod partially embedded in and arranged diagonally of the inner side of the aforesaid back, which rod extends across the sweep of the aforesaid lever.

12. In a sewing-machine table or cabinet, the combination, with the stationary cabinet work comprising a table-top having an opening therethrough; a platform hinged or pivotally supported from the stationary cabinet work and arranged to swing in a vertical plane and instrumental in closing the said opening in its upper position; a hinged leaf adapted to cover the said opening; a laterally-turnable bar pivotally connected with the platform to render the bar capable of swinging in a vertical plane and extending rearwardly and downwardly from the platform; a lever arranged to swing in a vertical plane and supported from the stationary

cabinet work; an operative connection between the lever and the aforesaid bar, and means whereby the lever is swung upwardly or downwardly according as the aforesaid
5 leaf is actuated to uncover or cover the aforesaid opening, of a metal rod extending across the sweep of and arranged to afford bearing to the lever.

Signed by us at Cleveland, Ohio, this 19th day of December, 1904.

THEODOR KUNDTZ.
JOSEPH REHOR.

Witnesses:

FRANK FRIEDLE,
JOSEPH J. GEDEON.