

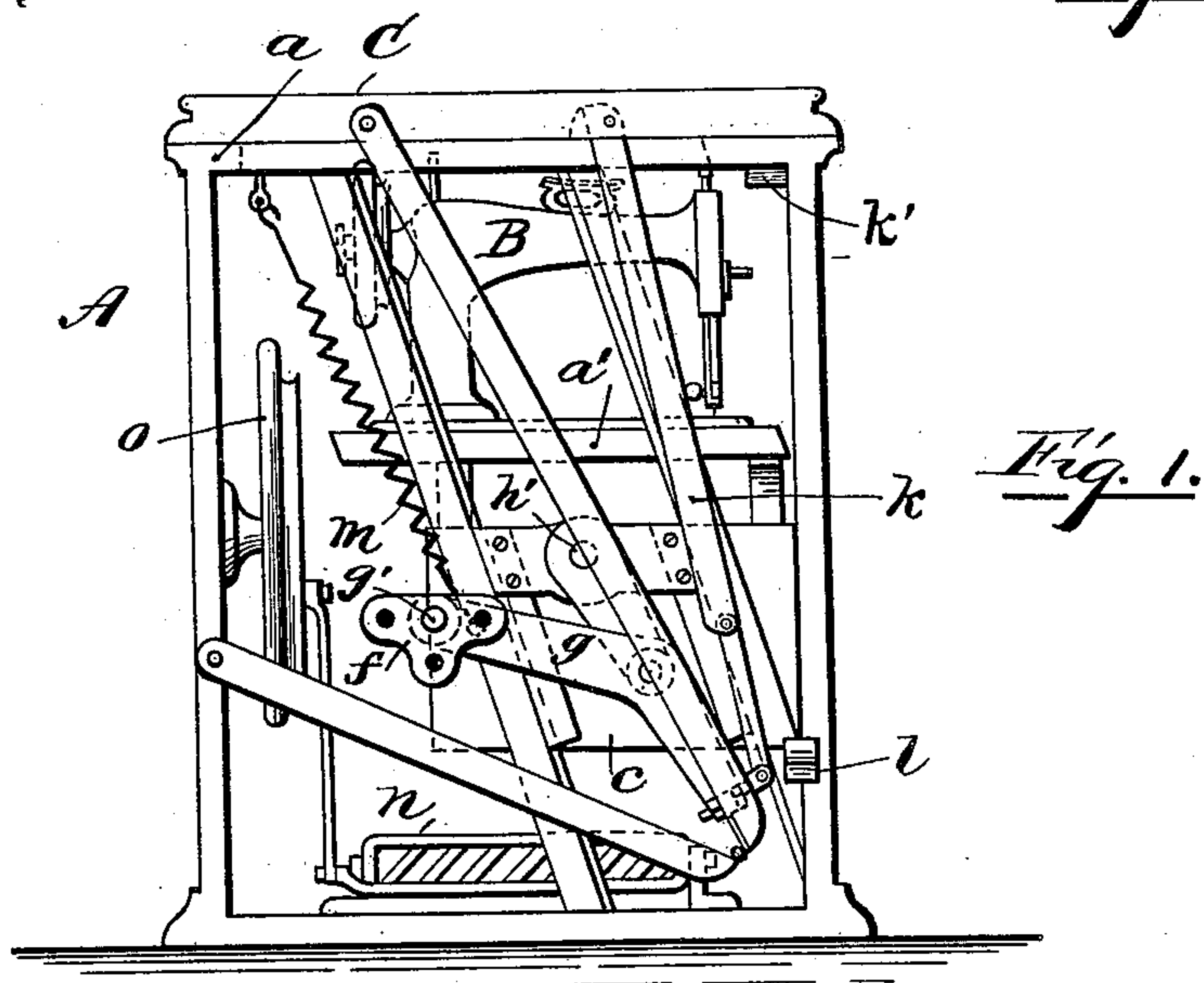
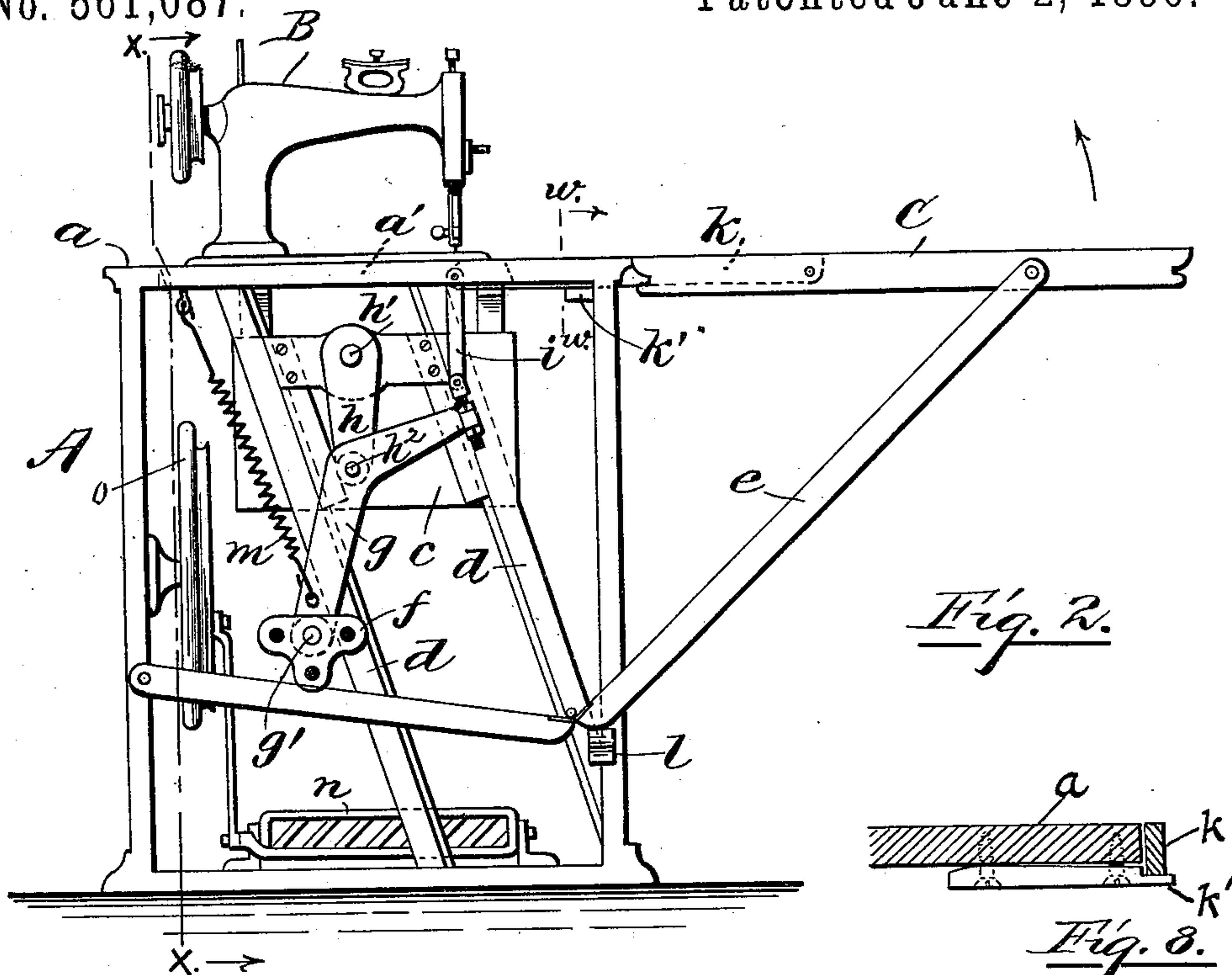
(No Model.)

2 Sheets—Sheet 1.

D. W. BROWN.
SEWING MACHINE CABINET.

No. 561,087.

Patented June 2, 1896.



Witnesses.

Charles L. Hannigan.
J. Murphy.

Inventor.

Daniel W. Brown

By Wilmarth C. Thurston
Att'y.

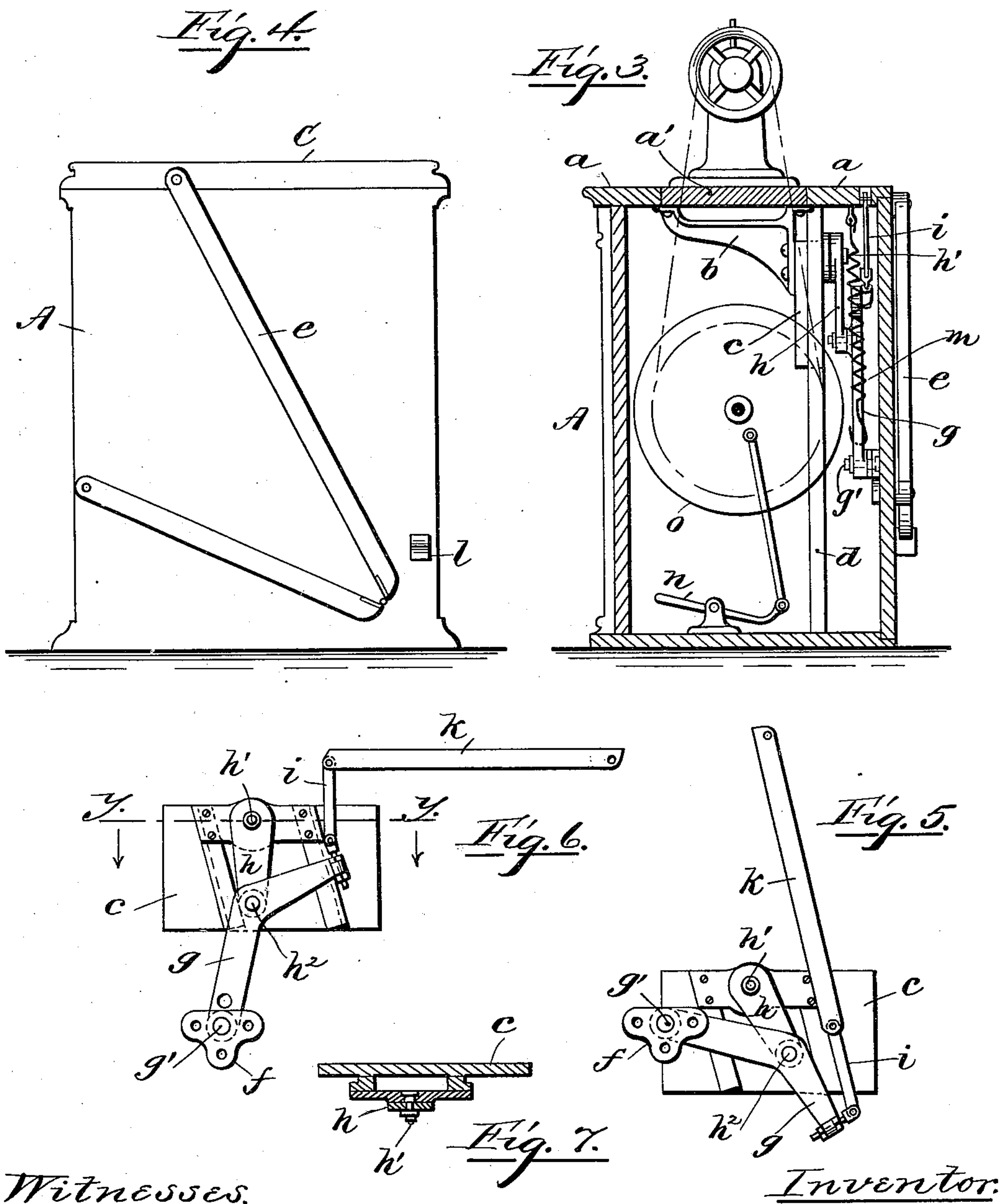
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UNITED STATES PATENT OFFICE.

DANIEL W. BROWN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE
HOUSEHOLD SEWING MACHINE COMPANY, OF SAME PLACE.

SEWING-MACHINE CABINET.

SPECIFICATION forming part of Letters Patent No. 561,087, dated June 2, 1896.

Application filed December 22, 1893. Serial No. 494,388. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. BROWN, of the city and county of Providence, in the State of Rhode Island, have invented certain new and useful Improvements in Sewing-Machine Cabinets; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a full, clear, and exact description thereof.

The invention relates to cabinets for sewing-machines of that class in which the machine may, when not required for use, be lowered from its operative position and housed within the cabinet, and when it is to be used may be raised into operative position and there supported for use.

The object of the invention is to provide a cabinet which will be simple in construction, convenient, and easy of operation, and in which the machine when raised into position for use will be held in such position without the aid of locking devices.

To that end the invention consists in the combinations and arrangements of parts hereinafter described.

Referring to the drawings, Figure 1 is a rear elevation of my improved cabinet with the back of the casing removed to show the construction and showing the sewing-machine in its housed position. Fig. 2 is a corresponding rear elevation showing the sewing-machine in its elevated position for use. Fig. 3 is a vertical tranverse section on the line *xx*, Fig. 1. Fig. 4 is a rear elevation showing the cabinet closed. Figs. 5 and 6 are details of parts of the operating mechanism and showing said parts in different positions. Fig. 7 is a section on the line *yy*, Fig. 6; and Fig. 8 is an enlarged section on the line *ww*, Fig. 1.

The cabinet consists of an inclosing case A, in the top *a* of which is an opening through which the sewing-machine B may be raised or lowered. Said sewing-machine is mounted upon and secured to a movable platform *a'*, which said platform is supported by brackets *b*, said brackets being in turn secured to a slide *c*, fitted to slide in the inclined ways *d*, as shown in the drawings.

The mechanism for raising and lowering the

sewing-machine is as follows: To the case A is hinged a swinging cover C. Secured to the rear of the case A is a bracket *f*, to which bracket is pivoted at *g'* one end of a bell-crank lever *g*. One end of a link *h* is pivoted at *h'* to the slide *c*, and the other end of said link is pivoted at *h''* to the bell-crank lever *g*, thereby connecting said slide with said lever and forming a toggle between the case A and the platform *a'*. To the free end of the bell-crank lever *g* one end of a link *i* is pivotally connected, the other end of said link being pivoted to one end of a lever *k*, the other end of said lever *k* being pivoted to the cover C. A slot is cut in the top *a* and in the cover C to receive the lever *k* when said cover is open, as shown in Fig. 2. A block *k'* is preferably secured to the case, as shown in Fig. 2, to serve as a fulcrum for the lever *k*, although, if desired, said lever may fulcrum upon the top of the adjacent side wall of the case. This block *k'*, when employed, may be rigidly secured in place; but I prefer to make it vertically adjustable at the point where the lever *k* bears upon it, as shown in Fig. 8, and so that the upper edge of said lever, when the cover C is open, may be made to come flush with the upper surface of the top *a*. For the purpose of adjustment the link *i* is preferably connected to the bell-crank lever *g* by an adjustable connection, as shown in the drawings. If desired, a spring *m*, attached at one end to the case A and at the other end to the bell-crank lever *g*, may be employed to assist or make easy the first movement of the cover C in opening; but said spring is not necessary. To support the cover C in its open position a hinged or jointed lever *e* is pivoted at one end to the cover C and at the other end to the side of the case A, the end of one leg of said hinged lever resting, when the cover is open, upon the block *l*, secured to the case, as shown in Fig. 2. The treadle *n* and fly-wheel *o* may be secured to the bottom and side of the case A, respectively, and an opening is to be provided in the front of the case to afford access to the treadle.

The operation of the parts above described is as follows: With the sewing-machine lowered and housed in the cabinet the parts are

in the position shown in Fig. 1, the cover C being closed. If it be desired to elevate the machine into position for use, all that is necessary to be done is simply to take hold of the cover C and turn it over into the position shown in Fig. 2. By this movement of the cover and by means of the lever-and-link connection between said cover and the slide *c* said slide will be moved up the ways *d*, thereby raising the sewing-machine up through the opening in the top *a* and bringing the supporting-platform *a'* up into a position flush with the top *a* and so as to occupy the opening therein, the parts being then all in the position shown in Fig. 2. It will be observed that with the parts in this position the toggle formed by the lever *g* and the link *h* is straightened and the three pivots *g'*, *h'*, and *h*² of said toggle are brought into nearly a straight line. By this arrangement the sewing-machine will be sufficiently supported in its elevated position without the employment of any bolts or other locking devices for the purpose. To lower and house the machine, all that is required is simply to return the cover C to its closed position, the return movement of the cover permitting the slide *c* to slide down the inclined ways, thereby lowering the machine and its supporting-platform, the inclination of the ways serving to carry the machine in its descent clear of the fly-wheel *o*. By adjusting the connection between the link *i* and bell-crank lever *g* the upward movement of the platform *a'* may be readily adjusted so as to bring the top of said platform up flush with the top of the case, and by constructing the brackets *b* so as to project front and rear somewhat beyond the platform *a'* the projecting portions of said brackets will serve as stops to limit the upward movement of the platform, as shown in Fig. 3.

It will be seen that by the arrangement of parts above described there is a direct mechanical connection between the hinged cover of the cabinet and the sewing-machine and that this connection is composed entirely of a series of levers and links, forming a continuous lever-and-link connection, and that the arrangement and organization are such that there is no lost motion whatever, but each and every part of the movement of the cover is accompanied by a corresponding movement of the machine. It will also be observed that the only manipulation required is the simple opening and closing of the cover and that the opening of said cover not only serves to raise the machine into position for use, but causes it to be held in such operative position as against any pressure that will be brought upon it in use.

The cabinet above described, while especially designed for a sewing-machine, may be employed for any machine—such as a typewriter, for instance—which it is desired to have at times supported in operative position and at other times housed within the cabinet.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a sewing-machine cabinet the combination of a case having an opening in the top, a movable platform for supporting the machine, a cover hinged to said case, and a continuous lever-and-link connection pivoted to said platform, said cover, and said case whereby the opening and closing of said cover will serve to raise and lower said platform without lost motion and without turning it from a horizontal position substantially as described.

2. In a sewing-machine cabinet the combination of a case having an opening in the top, a movable platform for supporting the machine, said platform being arranged to slide in suitable ways, a cover hinged to said case, and a continuous lever-and-link connection pivoted to said platform, said cover, and said case whereby the opening and closing of said cover will serve to raise and lower said platform without lost motion and without turning it from a horizontal position substantially as described.

3. In a sewing-machine cabinet the combination with a case having an opening in its top, a movable platform for supporting the machine, connections between said case and said platform comprising a toggle, a cover hinged to said case and connected to said toggle, whereby the lifting of said cover straightens the toggle to raise and support said platform substantially as described.

4. In a sewing-machine cabinet the combination of a case having an opening in the top, a movable platform for supporting the machine, a cover hinged to said case, and a continuous lever-and-link connection pivoted to said platform said cover and said case, and means for regulating the upward movement of said platform substantially as described.

5. In a sewing-machine cabinet the combination of a case having an opening in the top, a movable platform for supporting the machine, a cover hinged to said case, and a continuous lever-and-link connection pivoted to said platform said cover and said case, and suitable stops for limiting the upward movement of said platform substantially as described.

6. In a sewing-machine cabinet the combination of a case having an opening in the top, a movable platform for supporting the machine, a cover hinged to said case, and a continuous lever-and-link connection pivoted to said platform, said cover and said case, and a spring connected to said lever-and-link connection arranged to assist the first movement in opening, substantially as described.

7. In a sewing-machine cabinet the combination of a case having an opening in its top, a movable platform for supporting the machine, said platform being arranged to move in suitable ways, a cover hinged to said case, a continuous link-and-lever connection between said cover and said platform, and means

independent of said lever-and-link connection for supporting said cover in its open position, substantially as described.

8. In a sewing-machine cabinet the combination of a case having an opening in its top, a movable platform for supporting the machine, a cover hinged to said case, a bell-crank lever pivotally connected to said case, a lever pivotally connected to said cover and to said bell-crank lever, and a link pivoted to said bell-crank lever and said platform substantially as described.

9. In a sewing-machine cabinet the combination of a case having an opening in its top, a movable platform for supporting the machine, said platform being provided with a slide arranged to move in suitable ways, a cover hinged to said case, a bell-crank lever pivotally connected to said case, a lever pivotally connected to said cover and to said bell-crank lever, a link connecting said bell-crank lever with said slide, and a spring connected to said bell-crank lever and to a fixed support, substantially as described.

10. In a sewing-machine cabinet the combination of a case having an opening in its top, a movable platform for supporting the machine, a cover hinged to said case, a lever pivotally connected to said cover, a fixed support arranged to form a fulcrum for said lever, a continuous lever-and-link connection pivoted to said lever and said platform, whereby the platform is raised and lowered without lost motion, substantially as described.

11. In a sewing-machine cabinet the combination of a case having an opening in its top, a movable platform for supporting the machine, a cover hinged to said case, a lever pivotally connected to said cover, a continuous lever-and-link connection pivoted to said lever and said platform, and an adjustable fulcrum for said lever, substantially as described.

DANIEL W. BROWN.

Witnesses:

W. H. THURSTON,
S. J. MURPHY.