

(No Model.)

4 Sheets—Sheet 1.

N. A. HULL.
SEWING MACHINE CABINET.

No. 457,968.

Patented Aug. 18, 1891.

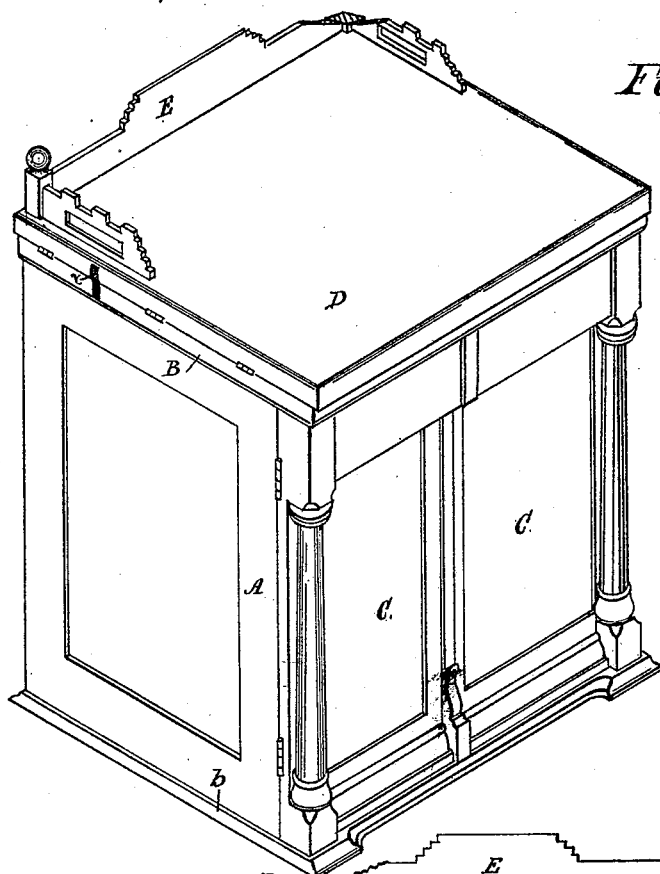


Fig. 1.

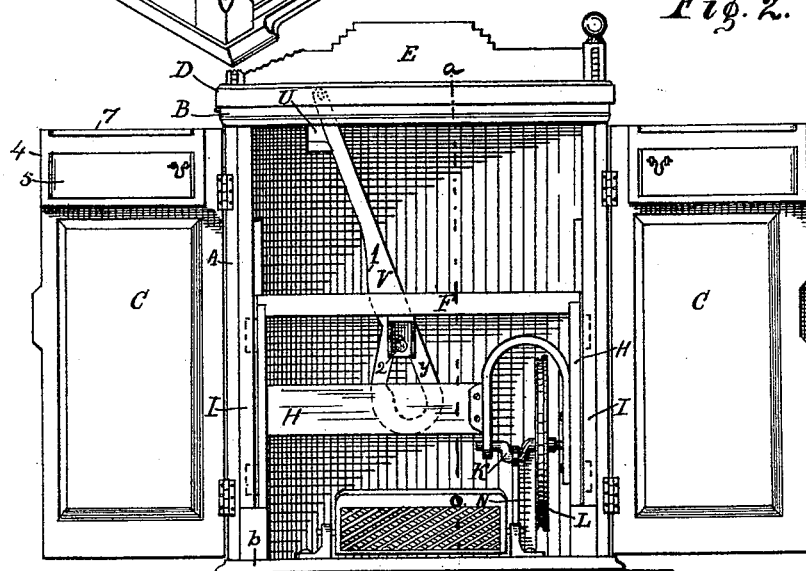


Fig. 2.

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Fig. 4.

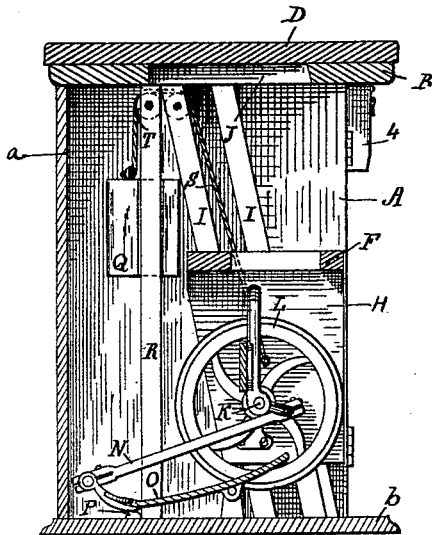


Fig. 5.

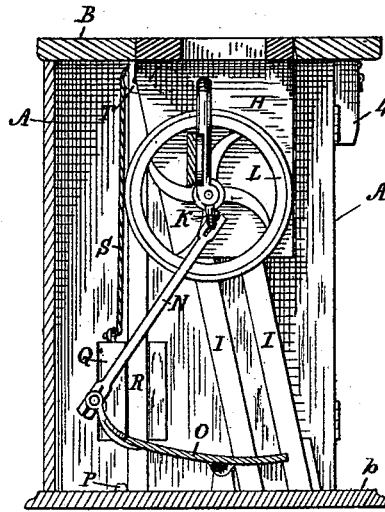
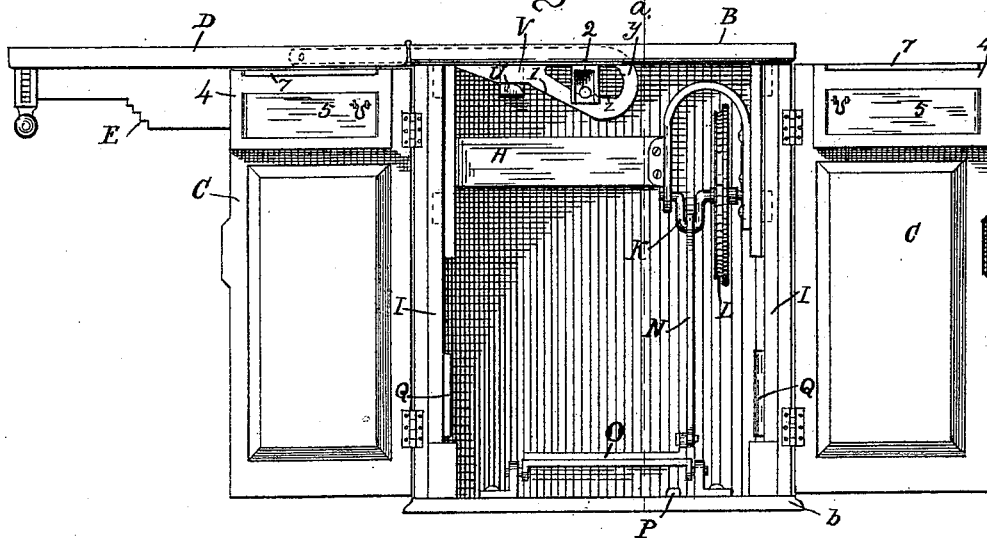


Fig. 3.



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4 Sheets—Sheet 3.

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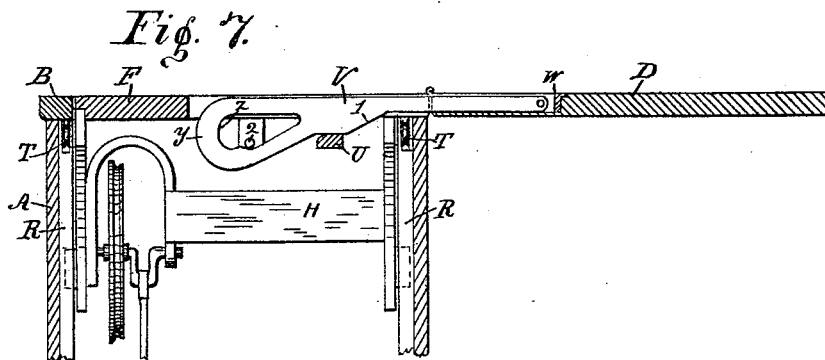
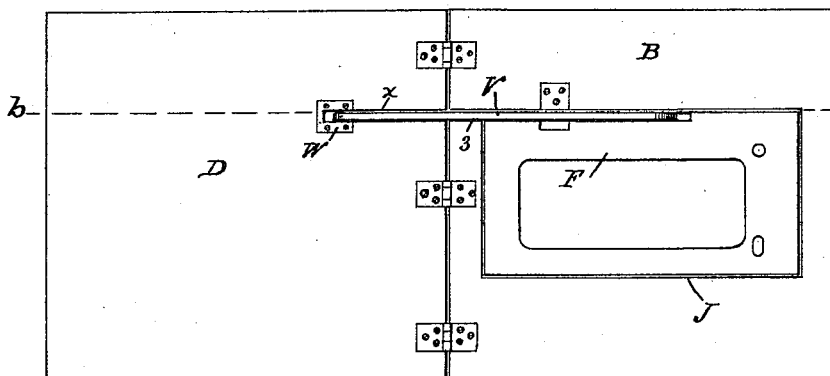


Fig. 6.



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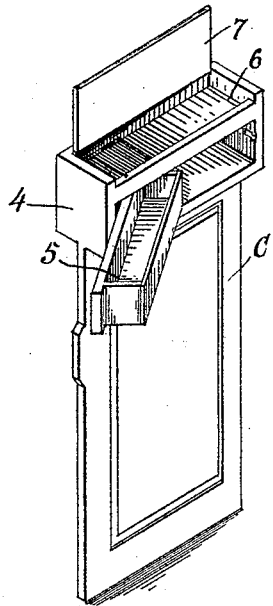


Fig. 9.

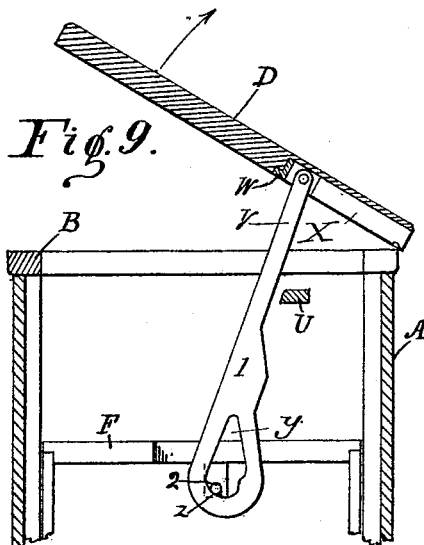
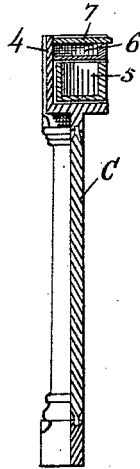


Fig. 8.

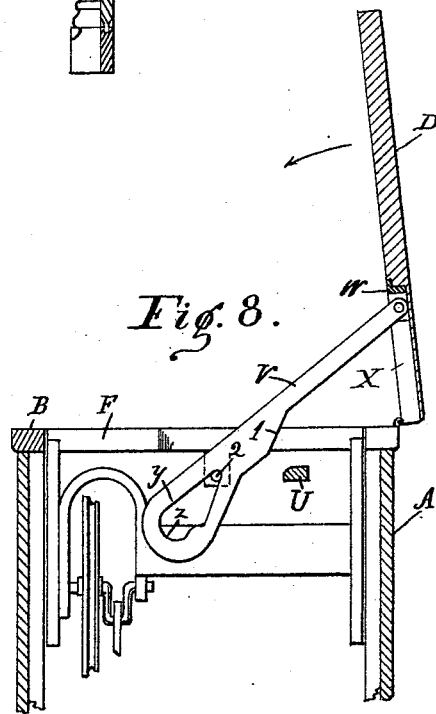


Fig. 9.

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UNITED STATES PATENT OFFICE.

NICHOLAS A. HULL, OF PERU, INDIANA.

SEWING-MACHINE CABINET.

SPECIFICATION forming part of Letters Patent No. 457,968, dated August 18, 1891.

Application filed February 11, 1891. Serial No. 381,112. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS A. HULL, a citizen of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented a new and useful Improvement in Sewing-Machine Cabinets, of which the following is a specification.

My invention relates to an improved cabinet for inclosing a sewing-machine and its driving mechanism.

The objects of my improvement are, first, to provide an inclosing cabinet for a sewing-machine which shall form when closed a neat piece of furniture which is not in appearance suggestive of a sewing-machine; second, to provide a vertically-movable platform adapted to support the machine, and improved means for connecting the cover of the cabinet and said platform, whereby the platform is automatically raised and lowered by the opening and closing of the cover, all as hereinafter fully set forth.

The accompanying drawings illustrate my invention.

Figure 1 represents a view in perspective, showing the cabinet closed. Fig. 2 represents a front elevation, having the front doors of the cabinet open, the top cover closed, and the machine-platform lowered. Fig. 3 represents a front elevation, having the front doors and the top cover open and the machine-platform raised. Fig. 4 represents a vertical section at *a*, Fig. 2, looking toward the right. Fig. 5 represents a vertical section at *a*, Fig. 3. Fig. 6 is a plan of the top when open. Fig. 7 represents a rear view of a vertical section at *b*, Fig. 6. Fig. 8 represents a section on the same line as Fig. 7, showing the position of the parts at the commencement of the downward movement of the machine-platform. Fig. 9 represents a section on the same line, showing the position of the parts at the commencement of the upward movement of the machine-platform. Fig. 10 represents a view in perspective and a vertical section of one of the front doors.

The body of the cabinet consists of a case A, inclosed on three sides and having a permanent top B and a bottom *b*. The front of said case is closed by a pair of doors C C, which are hinged to opposite sides of the body of the case. The upper part of each

of said doors is constructed so as to hold tools and machine attachments, as hereinafter described. To one edge of the permanent top B is hinged a swinging top or cover D. Cover D is furnished on its upper surface with an ornamental railing E, and is finished to represent a desk or table-top, so that when the cover and the doors are closed the cabinet has the general appearance of a desk. Cover D is hinged to the top B in such a manner that when open it forms an extension of said top.

F is a platform adapted to receive and support the sewing-machine. Platform F forms the upper side of a frame H, which is arranged to slide in inclined vertical ways I I, arranged on the opposite inner surfaces of the case, and the permanent top B is provided with a central rectangular opening J, which is adapted to receive the platform F and allow it to rise flush with the upper side of the top. The crank-shaft K, carrying the driving-pulley L, is mounted in bearings secured to frame H, and is connected by the pitman N with the treadle O, which is mounted on the bottom of the case. The relation of the ways I, frame H, shaft K, and treadle O is such that as the frame is lowered the treadle tilts backward until it comes in contact with a stop P on the bottom of the case. The pitman then swings on the treadle and folds forward thereon, as illustrated in Fig. 4.

For the purpose of balancing the weight of the platform and its frame and the parts mounted thereon, counterpoise-weights Q Q are arranged to slide on vertical ways R R, and are each connected with frame H by a cord S, passing over suitable guide-pulleys T, secured to the case.

For the purpose of raising and lowering the platform F by the opening and closing of the cover D, so as to present the machine above the permanent top of the case when the cover is open and to carry it within the case when the cover is closed, and at the same time furnishing a firm support for the extended cover when open, independently of the exterior of the case, I provide the following mechanism:

U is a bracket which is secured to and projects below the permanent top B so as to form a suspended fulcrum for a lever V, which is pivoted at one end to a pivot-plate W, which is mounted in the under side of the cover D,

the cover being provided with a groove x , adapted to receive the lever when it is extended parallel with the surface of the cover. The free end of lever V forms a loop y , whose outer upper edge is in line with the upper edge of the lever, and whose lower inner edge forms a curved cam-surface z . The lower edge of the lever forms near loop y an inclined surface 1 .

Platform F is connected with lever V by means of a stud 2 , secured to the under side of the platform so as to project laterally therefrom into loop y .

The operation of this mechanism is as follows: The cover D being closed and the machine-platform depressed, as in Fig. 2, the raising of the cover is without effect upon the machine-platform until the cover has reached the position shown in Fig. 9. At this point the stud 2 is engaged by the lower end of loop y and the lower edge of the lever engages the rounded corner of the bracket U , and the further raising of the platform as the cover is extended is accomplished by the combined action of the lever as such and the wedge-like action of the inclined surface 1 of the lower edge of the lever and the cam-surface z of loop y . When the cover is fully extended, the upper surface of the machine-platform has been raised flush with the permanent top, and the frame, of which the platform is a part, engages the under side of the top, the lever V is extended parallel with the surfaces of the top and the cover and lies in groove x in the cover, with its upper edge flush with those surfaces and its under edge resting on bracket U . In this position of the parts the cover and the machine-platform are suspended from opposite ends of the lever and mutually operate to firmly support each other. In closing the cover no effect is produced on the platform until the cover has reached the position shown in Fig. 8. The

lever then engages stud 2 at the upper end of loop y , and the platform is forced downward as the cover closes.

For the purpose of providing receptacles for the various tools and appliances used about a sewing-machine, I form in the upper part of each of the doors C a casing 4 , projecting about equally from the outer and inner sides of the door. The outer side of said casing forms an entablature or ornamental part of the front of the cabinet when closed. The inner side is open, and a swinging drawer 5 is mounted therein, and a shallow box 6 , closed by a cover 7 , is formed in the top. By this arrangement and construction all appearance of tool-drawers is avoided when the cabinet is closed, and the several receptacles are all inaccessible when the doors are locked.

I claim as my invention—

In a sewing-machine cabinet, the casing having a permanent top provided with a central opening, the machine-platform arranged to slide vertically within said casing, the cover hinged to one edge of the permanent top and arranged to swing in a vertical plane parallel with the plane of the movement of the platform, the lever pivoted at one end to said cover and provided at the opposite end with a loop one side of which is provided with a curved cam-surface, the stud secured to the platform and arranged to enter said loop and to engage said cam-surface, and the bracket secured to the permanent top and arranged to form a fulcrum for the lever, whereby the machine-platform is raised and lowered by the opening and closing of the cover and the cover is sustained when open by the lever, substantially as set forth.

NICHOLAS A. HULL.

Witnesses:

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A. H. BOND.