

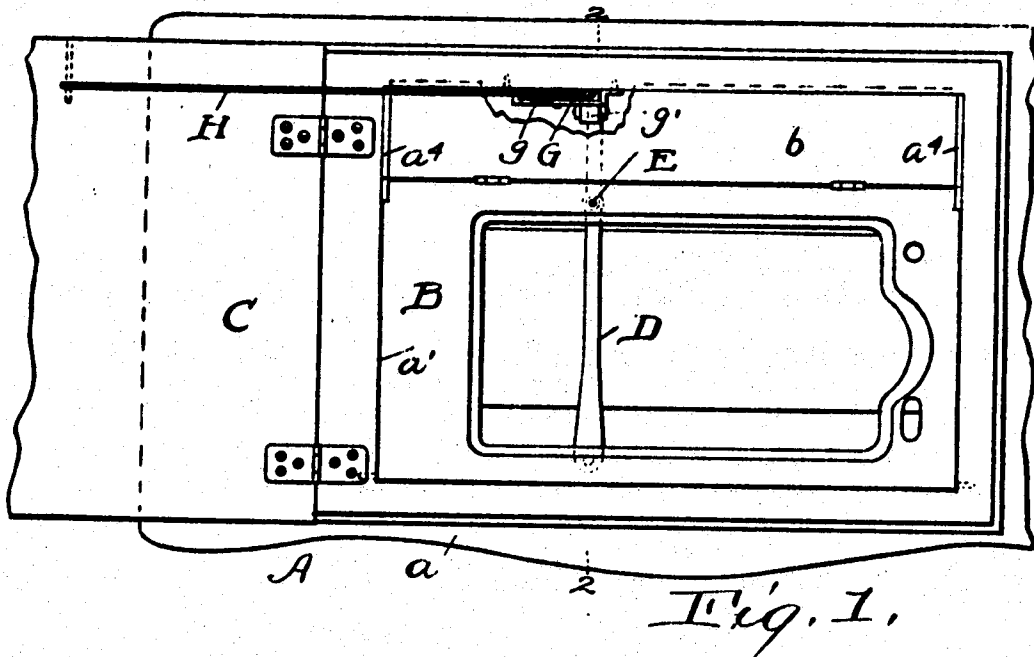
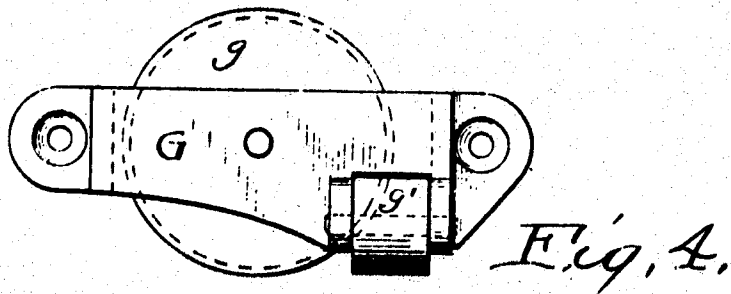
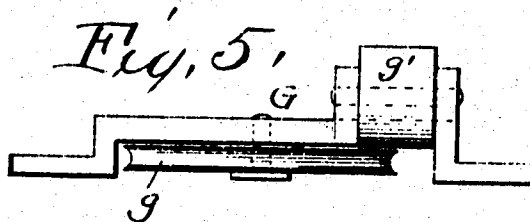
No. 799,331.

PATENTED SEPT. 12, 1905.

W. GROTHE.
DROP TABLE FOR SEWING MACHINES.

APPLICATION FILED JUNE 16, 1902.

2 SHEETS--SHEET 1.



Witnesses.
E. B. Gilchrist
H. M. Wise

Inventor:
William Grothe.
By His Attorneys,
Thurston & Baker

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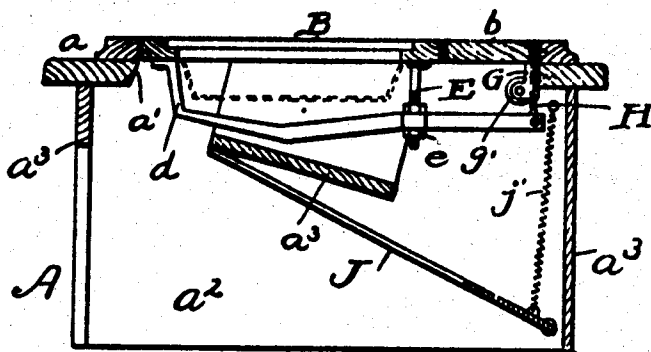


Fig. 2.

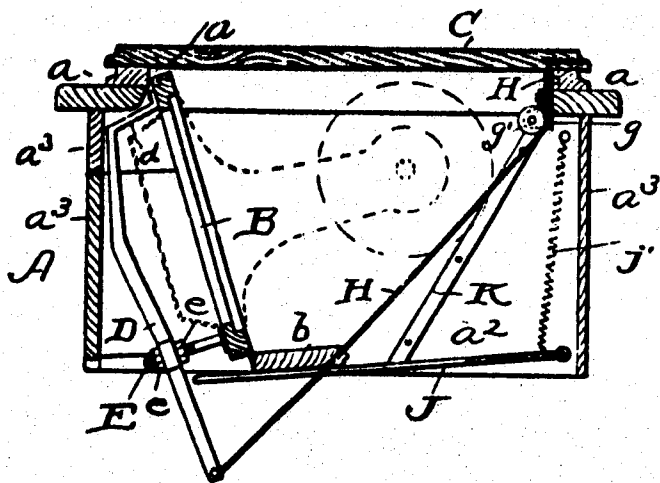


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM GROTHE, OF CLEVELAND, OHIO, ASSIGNOR TO THE WHITE SEWING MACHINE COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

DROP-TABLE FOR SEWING-MACHINES.

No. 799,331.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed June 16, 1902. Serial No. 111,814.

To all whom it may concern:

Be it known that I, WILLIAM GROTHE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Drop-Tables for Sewing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

10 This invention relates to certain improvements in so-called "drop-tables" for sewing-machines and the like; and the object is to produce a table of this character which is exceedingly simple and cheap, but nevertheless thoroughly efficient.

The invention is illustrated in the accompanying drawings; and it consists in the construction and combination of parts hereinafter described, and definitely set forth in the claim.

20 In the drawings, Figure 1 is a plan view of a sewing-machine cabinet embodying my invention. Fig. 2 is a transverse sectional view on the line 2 2 of Fig. 1 when the parts are in the position and condition shown in Fig. 1. Fig. 3 is a similar view when the drop-leaf is lowered and the hole in the table-top covered by the extension-top. Fig. 4 is an enlarged front view of the bracket-plate carrying the sheave and roller over which the operating cable or cord passes, and Fig. 5 is a bottom plan view of the same.

30 The cabinet A consists of a top *a*, having through it a hole *a'* large enough to allow the machine-head to pass, and such sides *a'' a''* and end pieces *a''' a'''* as may be desired. The table-top is really the only part of the so-called "cabinet" which is essential to the primary invention herein set forth, and this cabinet in whatever form it may be constructed may be secured to suitable supporting-legs or frame members of the usual or any suitable construction. It has not been thought necessary, however, to show such legs or frame members in the drawings.

45 B represents a drop-leaf on which the machine-head must be firmly secured by any suitable means. This leaf is pivoted near its front edge to the cabinet, preferably to the top *a*. This drop-leaf is capable of taking the position shown in Fig. 1, where it fills the opening *a'* in said table-top and forms substantially a part of said top. This drop-leaf may have its middle part cut out, as shown,

so as to permit certain parts of the sewing-machine head to pass down through it. Secured to this drop-leaf is an operating-arm D, the front end of which is bent upward and attached to the front part of the drop-leaf. The body part of this operating-arm is therefore such a distance below the under side of the drop-leaf that it will not interfere with said sewing-machine mechanism, which passes through said drop-leaf. This operating-arm is adjustably secured to the rear side of the drop-leaf by means of a threaded stud E, secured to said drop-leaf and passing through a hole in the operating-arm, and two nuts *e* upon said stud. This operating-arm, it will be seen, serves as the means for connecting the cable H with the drop-leaf. If one cable alone were used in a construction in which this arm D were not present, that cable would have to be attached wholly to one end of the drop-leaf, and thus the pull tending to close and hold the drop-leaf closed would be applied wholly to this end and would not probably be efficient. Then, again, it is necessary when the drop-leaf is closed that it shall nicely fit the opening in the table-top and shall be held in the plane thereof. Without this adjustable arm this result would only be secured by making the cable H of exactly the necessary length; but with this arm made adjustable, as shown, the cable may be made of approximately proper length, and the arm D may be adjusted in its position relative to the drop-leaf, so that the cable shall be effective in producing the result stated. The arm D has sufficient flexibility, and it is attached at its end to the drop-leaf with such a degree of looseness that it is possible that it may be moved relative to the drop-leaf quite as much as is necessary for securing the stated result. It is the position of its front end to which the cable is attached relative to the drop-leaf that is essential, and this is determined by the position of the nuts *e* on the plate E, which passes through said arm.

An extension-top C is hinged to one side of the top *a* on an axis at right angles to the axis of the drop-leaf, and this extension-top may be swung into the position shown in Fig. 1, where it serves as an extension of the top *a*, or into the position shown in Fig. 3, where it rests upon the top *a* and closes the hole *a'* therein. A cable or cord H, preferably a

small wire cable, is fastened at one end to the rear adjustable end of the arm D and at the other end to the extension-top C some little distance beyond its hinge. This cable passes from this latter point of attachment over a grooved sheave *g*, mounted in a bracket-plate *f*, which is secured to the cabinet near the rear edge of the hole *a'*, so that the axis of this sheave is at right angles to the axis of the drop-leaf. Then the cable passes under a roller *g'*, also mounted in the same bracket-plate on an axis at right angles to the axis of the sheave. The cable then passes and is secured to the arm D, as before stated. When the extension-top is swung to the position shown in Fig. 1, it acts, through said cable, to lift the drop-leaf into the position shown in Fig. 2, where it is firmly held, because the cable *H*, which lies in a groove in the top *a* and the extension C, passes below the axis on which the said extension-top swings, and therefore any weight upon the drop-leaf when the same is raised cannot possibly cause it to move downward.

As shown, the drop-leaf has an extension-strip *b* hinged to its rear edge on an axis parallel with its hinge-axis. Secured to one of the end pieces *a'* is an inclined guide-strip *K*, against which when the drop-leaf is being raised or lowered the rear edge of this extension-strip *b* will engage and be thereby prevented from swinging by gravity into alignment with the drop-leaf. When, however, the drop-leaf is in the horizontal position, as shown in Fig. 2, this extension-strip and the rear edge of the drop-leaf as well engage

with stop-plates *a'*, secured to the table-top, slightly overhanging the hole *a'*.

J represents a dust-board, which is pivoted to the ends of the cabinet and is held by a spring *j'* in such position that when the drop-leaf is lowered it will engage with the front part of the said drop-leaf and thereby in a large measure inclose the space in which the machine-head is inclosed. The purpose of this board is to prevent in a large degree the access of dust to said machine-head.

Having described my invention, I claim

The combination of a table-top having a hole through it, a drop-leaf, having a hole through it, hinged to the table-top and adapted to close the hole therein, a bent operating-arm having at its front end an upwardly-extended foot which is secured to the under side of the front part of said drop-leaf, a threaded stud secured to the rear part of said drop-leaf and passing through said operating-arm, and two nuts on said stud, with an extension-top hinged to said table-top at right angles to the axis of the drop-leaf, a cable or cord secured at its ends to said extension-top and to said operating-arm respectively, and a sheave, and roller, mounted at right angles to each other, with which said cable or cord engages, substantially as specified.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WM. GROTHIE.

Witnesses:

E. B. GILCHRIST,
E. L. THURSTON.