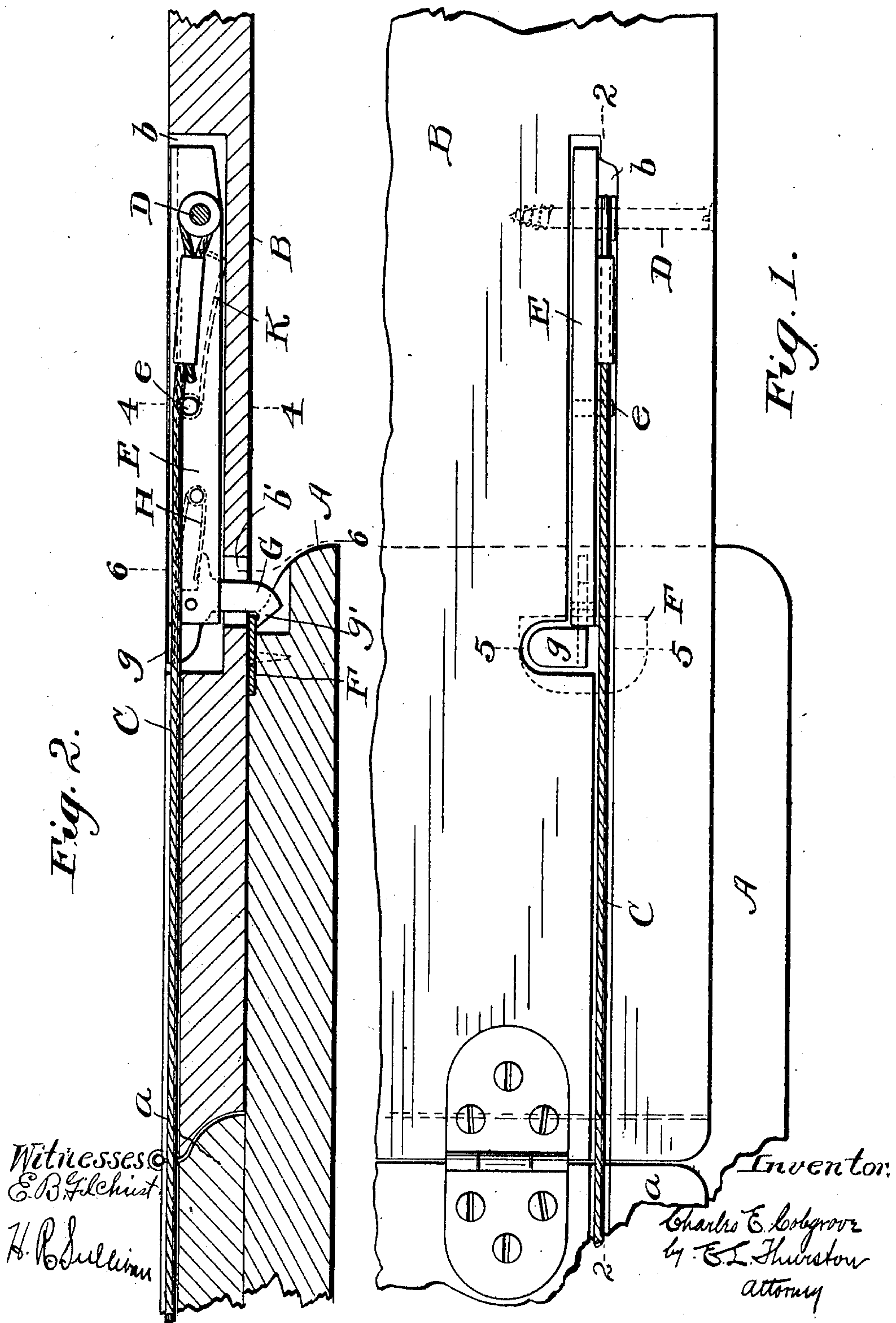


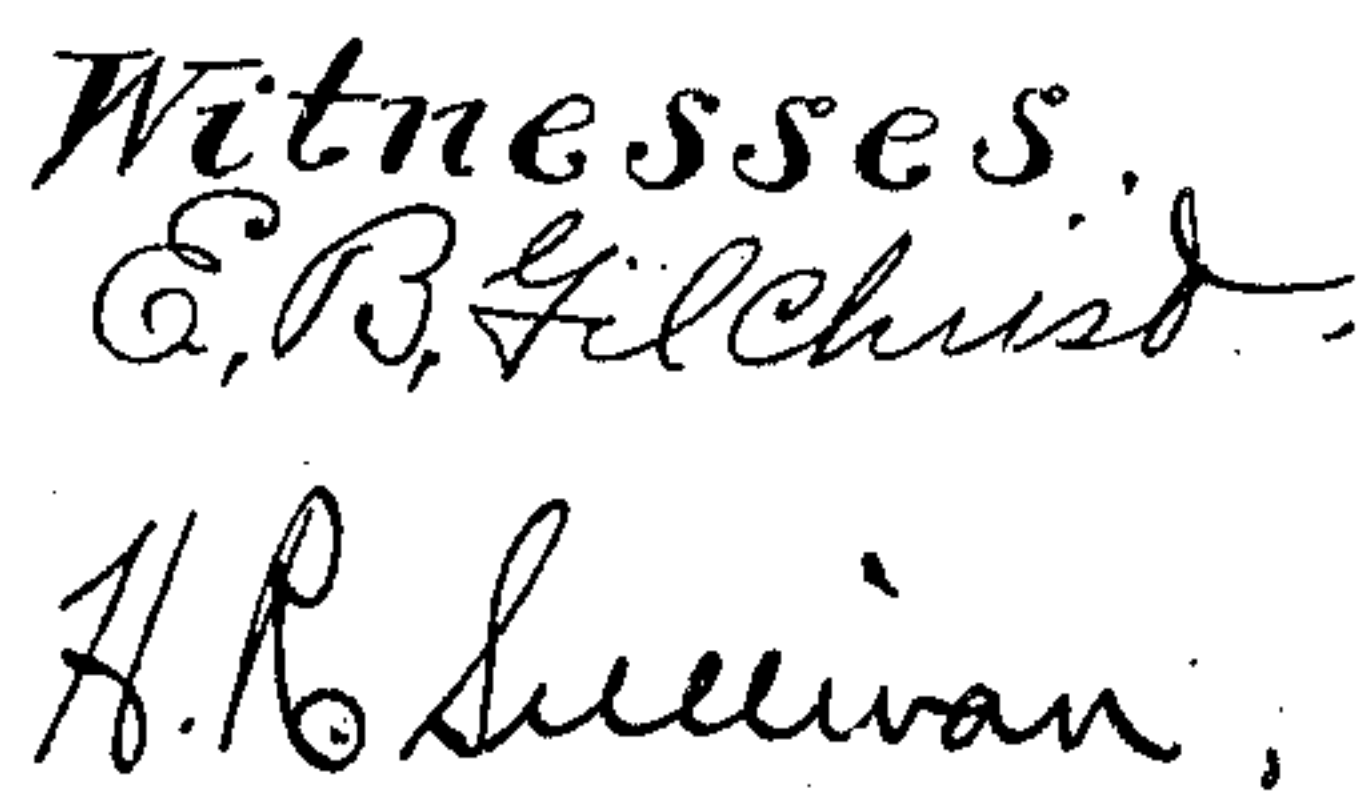
969,938.

2 SHEETS—SHEET 1.



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2 SHEETS--SHEET 2.



Inventor
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by
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UNITED STATES PATENT OFFICE.

CHARLES E. COLEGROVE, OF EAST CLEVELAND, OHIO, ASSIGNOR TO THE WHITE SEWING MACHINE COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

EXTENSION-LEAF-LATCHING MECHANISM FOR SEWING-MACHINES.

969,938.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed January 28, 1910. Serial No. 540,480.

To all whom it may concern:

Be it known that I, CHARLES E. COLEGROVE, a citizen of the United States, residing at East Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Extension-Leaf-Latching Mechanism for Sewing-Machines, of which the following is a full, clear, and exact description.

This invention pertains to drop head sewing machine tables, and particularly to the means for latching the hinged leaf of such a table in its open or spread position.

The object is to provide latching means which will automatically engage when the table leaf is open so as to hold it open, but which, when the leaf is closed, will not project above what will then be the top surface of said leaf.

In the drawing, Figure 1 is a plan view of the invention showing so much of a sewing machine table and its extension leaf as is necessary to show its application. Fig. 2 is a vertical section in the plane indicated by line 2—2 on Fig. 1. Fig. 3 is a similar sectional view, but showing the position of the parts after the leaf has been swung upward some distance from its spread position. Fig. 4 is a sectional view in the plane indicated by line 4—4 on Fig. 1. Fig. 5 is a sectional view in the plane indicated by line 5—5 on Fig. 1; and Fig. 6 is a sectional view in the plane indicated by line 6—6 on Fig. 2.

Referring to the parts by letters, A represents the table top, and *a* the panel which is usually secured thereon.

B represents the hinged extension leaf, the same being hinged to the table some distance back from the edge thereof. Specifically, this leaf is hinged to the panel *a* so that when the leaf is opened its top surface shall be a horizontal extension of the top surface of the panel. When in this position also the hinged leaf rests upon the table top.

C represents a cable whose function is to connect the leaf B with a dropping support for the sewing machine head. In the common construction this support is hinged to the table and is adapted to swing down below the table top carrying the machine head with it. This movement is permitted when the extension leaf is swung to its closed position. In this position, it covers an opening through the table top. When the extension

leaf is swung to its open position, this head support is swung up, thereby closing this opening, and bringing the machine head into operative position. It has not been thought necessary to show this hinged head support, because the construction is old and well understood by those familiar with this art.

It is desirable in constructions of this sort that, when the extension leaf is in its open or spread position it shall be latched and held against any accidental displacement; and it is also desirable that whatever latching mechanism be employed, it shall be such that no part of it shall project above what is then the top of the leaf when the leaf is in the closed position. The present invention is a latching device which realizes practically these desirable conditions.

The cable C is connected with the hinged leaf B by means of a pin which is extended across a recess *b* in what is the top of the leaf when the same is opened. This recess is wide enough to accommodate and receive the cable, and also a latch bar E which is pivoted to the leaf on the same pin D to which the cable is attached. This bar extends from its pivot toward the table proper, and it has projecting from its side a pin *e* over which the cable passes. Near its free end this latch bar has a latch G pivoted to it.

When the latch bar is in the recess *b* this latch projects through a hole *b'* in the leaf into a position where it may engage with a metal plate F fixed to the table top. An arm *g* is a rigid part of the pivoted latch, and is in such position that, when the table leaf is open and latched in the open position, the end of the arm *g* lies in the recess *b* and just below the top surface of said leaf, so that an operator may press down upon it, and thereby move the latch G into releasing position. This latch is under the influence of a spring H tending to throw it in the latching direction; and said latch has a beveled end *g'* adapted to engage with the plate F, whereby the latch is thrown back in opposition to its spring, and allowed to pass the plate F, whereupon the spring H throws it beneath the plate into the latching position.

When the latch is released and the table leaf is swung upward as shown in Fig. 3, for example, it will reach a position where the cable C no longer engages with the pin *e*.

The latch bar being thereby freed from restraint, a spring K swings it partly out of the recess *b*, and thereby withdraws the end of the latch into said recess, or rather into the hole *b'* which extends from said recess through the leaf. The latch bar, and the parts attached thereto remain in the position shown in Fig. 3, when the leaf is closed over the table top, and therefore the latch does not project above what is then the top surface of said leaf.

When the leaf is swung open and nears the horizontal position, the cable will engage with the pin *e*, will swing the latch bar down into recess *b*, thereby carrying the latch into operative position, and this latch will engage with the plate F and latch the leaf open.

Having described my invention, I claim:

1. The combination with the hinged extension leaf of a drop head sewing machine table, and a cable connected with said leaf and adapted for operating the drop head mechanism, a latch bar pivoted to said leaf and having a portion adapted to be engaged by said cable, a spring latch carried by said bar and adapted to project through a hole in the leaf, and a plate fixed to the table top adapted to be engaged by said latch.

2. The combination with the hinged extension leaf having a recess in what is its top surface when the leaf is open and having a hole extending from said recess through the lower surface, a latch bar pivoted to said leaf and adapted to lie in said recess or to swing out of the same, a pin projecting from the side of said latch bar, a cable connected with the leaf and extending therefrom over said pin, a spring latch pivoted to said bar and adapted to extend therefrom downward through the hole in the leaf, and a plate

fixed to the table top and adapted to be engaged by said latch.

3. The combination with the hinged extension leaf having a recess in what is its top surface when the leaf is opened and having a hole extending from said recess through the lower surface, a latch bar pivoted to said leaf and adapted to lie in said recess, a spring tending to swing it out of said recess, a pin projecting from the side of said latch-bar, a cable connected with the leaf and extending therefrom over said pin, a latch pivoted to said bar and adapted to extend therefrom downward through the hole in the leaf, a plate fixed to the table top for engagement with said latch, and a spring tending to swing said latch in the latching direction.

4. The combination with the hinged extension leaf having a recess in what is its top surface when the leaf is opened and having a hole extending from said recess through the lower surface, a latch bar pivoted to said leaf and adapted to lie in said recess, a spring tending to swing it out of said recess, a pin projecting from the side of said latch bar, a cable connected with the leaf and extending therefrom over said pin, a latch pivoted to said bar and adapted to extend therefrom downward through the hole in the leaf, a plate fixed to the table top for engagement with said latch, said latch having a releasing arm adapted to lie in said recess, and a spring for swinging said latch in the latching direction.

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

CHARLES E. COLEGROVE

Witnesses:

E. L. THURSTON,
H. R. SULLIVAN.