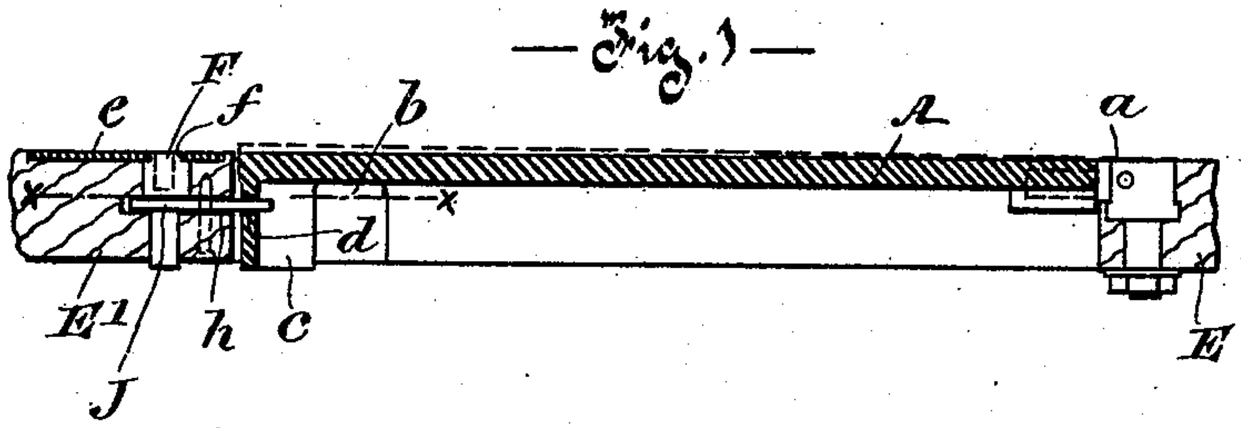
(No Model.)

C. W. DAVIS.

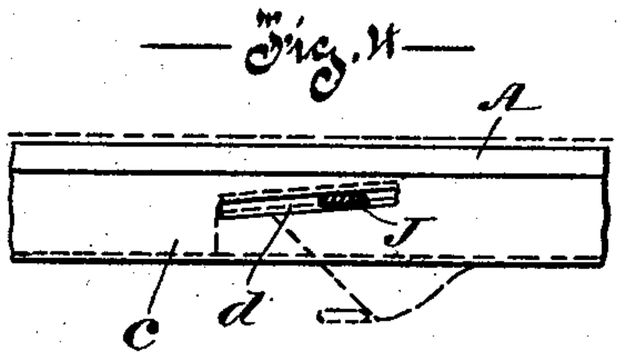
SEWING MACHINE.

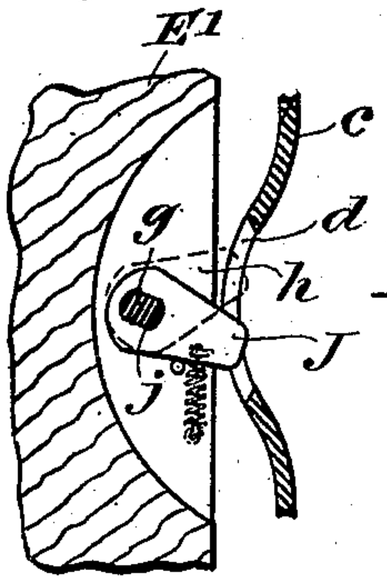
No. 504,061. Patented Aug. 29, 1893.

—Fig. 1—



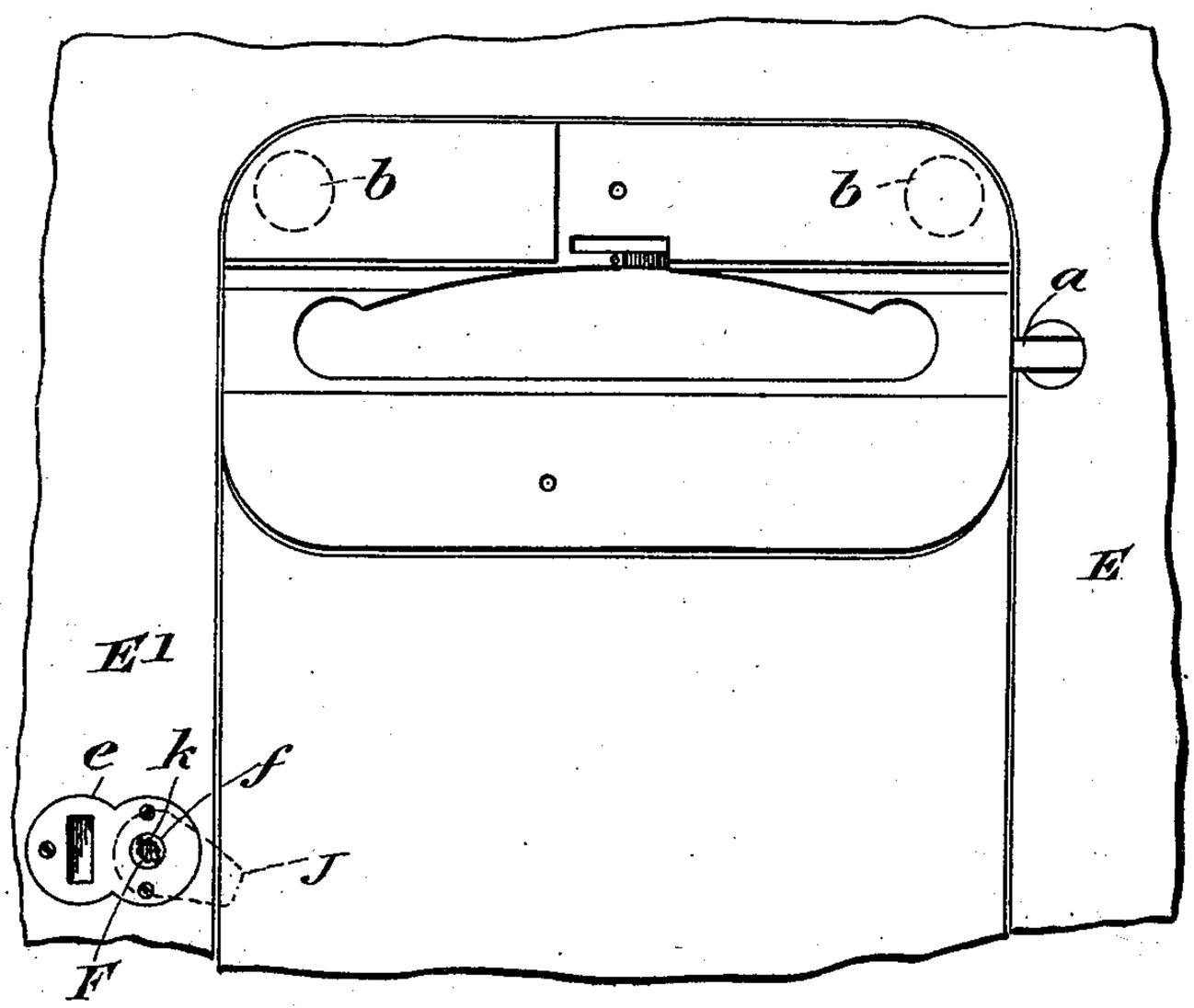
—Fig. 4—





—Fig. 2—

—Fig. 3—



Witnesses
Willis B. McLeod.
Fred. J. Sears

Inventor
Charles W. Davis
By his Attorney
Russell G. Lazenby

UNITED STATES PATENT OFFICE.

CHARLES W. DAVIS, OF MONTREAL, CANADA.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 504,061, dated August 29, 1893.

Application filed April 11, 1893. Serial No. 469,979. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WESLEY DAVIS, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to means for locking and retaining in place the sewing machine head which is usually hinged to the table in order that easy access may be had to the mechanism on the under side thereof. The machine head is hinged at the back and usually rests on a number of elastic cushions carried by the recessed seat in the table and in order that the head when in position may be held solidly in place a locking device of some sort is provided at the front. Heretofore such locking device has either been in the form of a screw inserted, at some inconvenience, from beneath the table, or a turn button located on top of the table and consequently being in the way of the operator as well as detracting from the appearance of the machine.

My invention has for its object to provide a locking device free from any of the above mentioned objections (and which can if preferred be combined with the usual plate on all sewing machines to which the covers for same are locked), as well as to secure a more rigid holding of the head in place.

For full comprehension however of the invention reference must be had to the annexed drawings forming a part of this specification in which like symbols indicate corresponding parts and wherein—

Figure 1 is a transverse vertical section through the front and back portions of the sewing machine table and the bed plate of the sewing machine head, showing the locking device in elevation. Fig. 2 is a horizontal section of the same parts on the line *x x* Fig. 1; Fig. 3 a plan view of the same parts and Fig. 4 a face view of the portion of front edge or rib of the head bed plate containing the locking slot.

A is the bed plate of the sewing machine head hinged at *a* to the rear portion E of the table and resting on elastic cushions *b*; *c* is the rib of same and *d* a slot cut in such rib at an inclination slightly off the horizontal.

E′ is the front portion of the table in which the usual cover lock-plate *e* is set flush with its top surface.

I prefer to locate my locking device so that this cover lock-plate *e* may form the face plate thereof, although it might be separate from it if desired, the combination however saves the cost and trouble of making and setting in place an extra plate besides preserving the uniform and neat appearance of the machine. In this arrangement therefore the plate *e* is provided with an extra aperture *f* which is circular to fit the reduced upper end of a rotatable bolt or spindle F, (the lowermost half of which is also diminished) located in a shouldered or diminished annular perforation in the table and having a squared portion *g* about midway of its length and so as to co-incide with a horizontal recess *h* in the table extending inward from the face of same which is adjacent to the slotted flange of the bed-plate, this squared portion *g* being adapted to fit a correspondingly shaped aperture *j* in a flat finger J occupying such recess *h* which is shaped to allow the movement of the outer portion of such finger therein. The movement of the finger in one direction, to the right in the present case, will cause its outer end to enter the lower end of the slot *d* in the rib of the bed plate and by continued traversing of the incline thereof serve to press same tightly down upon the cushions (so as to firmly lock the head in place) the movement being effected by means of a key, screwdriver or such other instruments as are usually supplied in connection with a sewing machine, the key or the like being inserted in a socket *k* in the upper end of the bolt or spindle F. The arrangement just described will of course require the movement in the left hand direction to unlock the head.

If desired a spring could be used to automatically actuate the locking finger in one direction, such spring being indicated by dotted lines in Fig. 2. In this arrangement however it is necessary that the slot *d* should be open at the lower end and a beveled or inclined extension provided on the rib *c* of the bed plate as shown by dotted lines in Fig. 4, so that the head after being raised can be lowered and the locking finger pressed au tomatically to one side so that it will enter the slot

at its open end and then be drawn back by the spring.

What I claim is as follows:

1. The combination with the table and the hinged head of a sewing machine, of a horizontal movable locking finger located beneath the surface of said table and adapted to be engaged with said hinged head, with operating means directly connected with said finger and being flush with an exposed part of said table for the purpose set forth.

2. The combination with the table and the hinged head of a sewing machine, of a horizontally movable locking finger located beneath the surface of said table and adapted to be engaged with said hinged head, and an actuating body portion or bolt connected with said finger extending vertically through said table constructed to be readily engaged from above the table and being flush with the surface thereof for the purposes set forth.

3. The combination with the table and the bed plate of the hinged head of a sewing machine having an inclined slot in its face,—of a horizontally movable locking finger located beneath the surface of said table and adapted to be inserted within and to traverse such slot and means for operating such finger from above the table as and for the purposes set forth.

4. The combination with the table having vertical shouldered annular aperture and horizontal recess *h* and the hinged head of a sewing machine having an inclined slot in the bed plate thereof,—of a locking device consisting of a rotatable body portion located in said vertical shouldered annular aperture, a plate flush with the table surface for holding same in place and a horizontally movable locking finger connected with and operated by said body portion to engage said hinged head as set forth.

Montreal, April 5, 1893.

CHARLES W. DAVIS.

In presence of—
WILL P. MCFEAT,
FRED. J. SEARS.