

(No Model.)

S. C. TATUM, Jr.
SEWING MACHINE FRAME.

No. 293,109.

Patented Feb. 5, 1884.

Fig. 1.

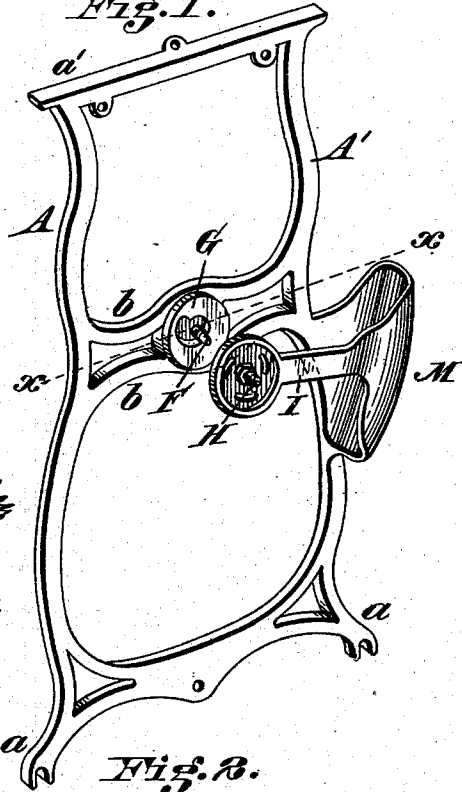


Fig. 4.

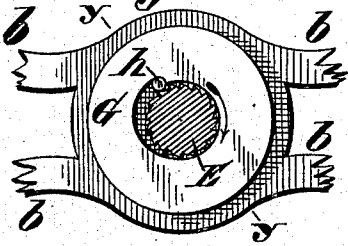


Fig. 5.

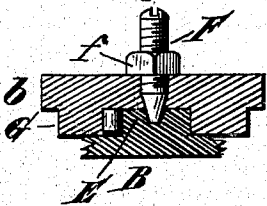


Fig. 2.

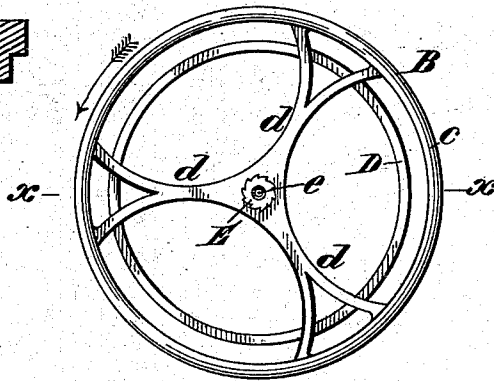
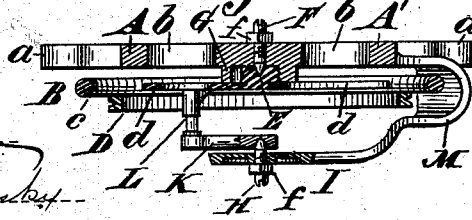


Fig. 3.



Attest

for E. Jones
A. Kluchawsky

Inventor
Samuel C. Tatum, Jr.
By Wood & Boyd
his Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL C. TATUM, JR., OF CINCINNATI, OHIO, ASSIGNOR TO S. C. TATUM & CO., OF SAME PLACE.

SEWING-MACHINE FRAME.

SPECIFICATION forming part of Letters Patent No. 293,109, dated February 5, 1884.

Application filed November 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL C. TATUM, JR., a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Sewing-Machine Frames, of which the following is a specification.

My invention refers more particularly to the method of constructing the frames for mounting the driving-wheel and arranging the parts in connection therewith.

The object of my invention is, first, to construct the frame so that the driving-wheel may be journaled on adjustable centers, and provided with mechanism for allowing the wheel to be driven forward, and yet prevented from being driven backward by a treadle movement.

Another object of my invention is to combine one of the arms supporting the adjustable center journals with the frame of the machine, so as to form a guard or dress-protector.

The various features of my improvement will be fully set forth in the description of the accompanying drawings, in which—

Figure 1 represents a perspective view of my improvement attached to one end of a skeleton frame. Fig. 2 is an elevation of the driving-wheel with my improved ratchet-center. Fig. 3 is a section on line *x x*, Figs. 1 and 2. Fig. 4 is an elevation of the stop device with the ratchet in section. Fig. 5 is a central sectional view of the same, but showing the ratchet connected to the driving-wheel.

A A' represent the posts of the frame; *a*, the legs; *a'*, the top flange to which the table is secured.

b b represent cross-arms connecting posts A A' near their center, so as to form a journal-support for the driving-wheel.

B represents the driving-wheel.

c represents a balance or weighted ring.

D represents the band-rim.

d represents spider-arms forming the center, and connected to the rims C and D.

E represents a serrated hub or boss formed upon the inner central face of the spider *d*.

e represents a conical groove for center F. The periphery of the boss E is preferably

made with ratchet-shaped teeth; but serrations of any form may be used with a less degree of efficiency.

G represents a boss or disk-shaped projection, preferably cast on and with the arms *b*, as shown in Fig. 1. It is provided with an eccentric or scroll-shaped orifice, as shown in Figs. 1 and 4, the concentric portion of which opening is made sufficiently large to allow the boss or ratchet E to freely revolve therein, and the eccentric portion is sufficiently large to allow the loose pin or roller *h* to work therein, and is provided with an abrupt stop, as illustrated in Fig. 4, against which the pin rests and is kept by the forward revolution of the driving-wheel.

F H represent center bearings, one of which taps through the arm I, and the other through boss G, cast with the arms *b*.

f f represents set or jam nuts for securing the adjustable centers F H in any desired fixed position.

K represents a crank-arm connected at one end to the crank-pin L. The lower end of the crank-arm is provided with a conical-shaped socket to receive the center H, which forms one of the axial journals of the driving-wheel.

M represents a shield cast on and with the arm I, and with the frame-post A', and it forms a very firm, rigid support for the outer journal of the driving-wheel, and it is projected above and below the planes of the arm I a sufficient distance to form a shield or dress-protector. It is preferably made of oval form upon the exterior, the interior being concentric with the rim C of the driving-wheel, forming at once a symmetrical and firm journal-support and an efficient dress-guard.

The mode of operation of the driving parts is as follows: The driving-wheel is adjusted on the centers F H, as shown in Fig. 3. The set-screws *f f* are adjusted so as to prevent any lateral movement of the driving-wheel on its centers. The pin *h* is placed in the eccentric outside of the boss E, as shown in Fig. 4, and when the wheel is revolved forward the pin *h* will be kept or forced up against its stop, and a free revolution of the driving-wheel is obtained by a treadle movement in the ordinary

manner. A reverse motion of the crank-arm causes the pin *h* to be carried down in the eccentric slot until it is caught between the serrated boss *E* and the outer periphery of this eccentric slot *G*, and the backward movement of the crank and driving wheel is arrested.

Having thus described my improvement, what I claim as my invention is—

1. In combination with the centers *F* *H* and driving-wheel *B*, the boss *G*, having the concentric opening, serrated boss *E*, and stop-pin *h*, substantially as herein set forth.

2. In combination with the frame *A* *A'*, the boss *G*, adjustable center *F*, adapted to receive the stop *E*, and pin *h*, substantially as herein set forth.

3. In combination with the driving-wheel *B*, crank *K*, and wrist-pin *L*, the serrated boss *E*, forming a center for a journal-support and

secured to the arms of the driving-wheel, substantially as herein set forth.

4. A lock or stop motion for a sewing-machine, composed, essentially, of the serrated boss *E*, secured to the driving-wheel, and the hub *G*, secured to the frame, provided with an eccentric central opening adapted to receive the boss *E*, and pin *h*, substantially as herein set forth.

5. The shield *M*, cast integral with the post *A'* of the frame, and with the arm *I*, which serves as a journal-support, substantially as shown and described.

In testimony whereof I have hereunto set my hand.

SAM. C. TATUM, JR.

Witnesses:

ANDREW E. SCOTT,

A. GLUCHOWSKY.