

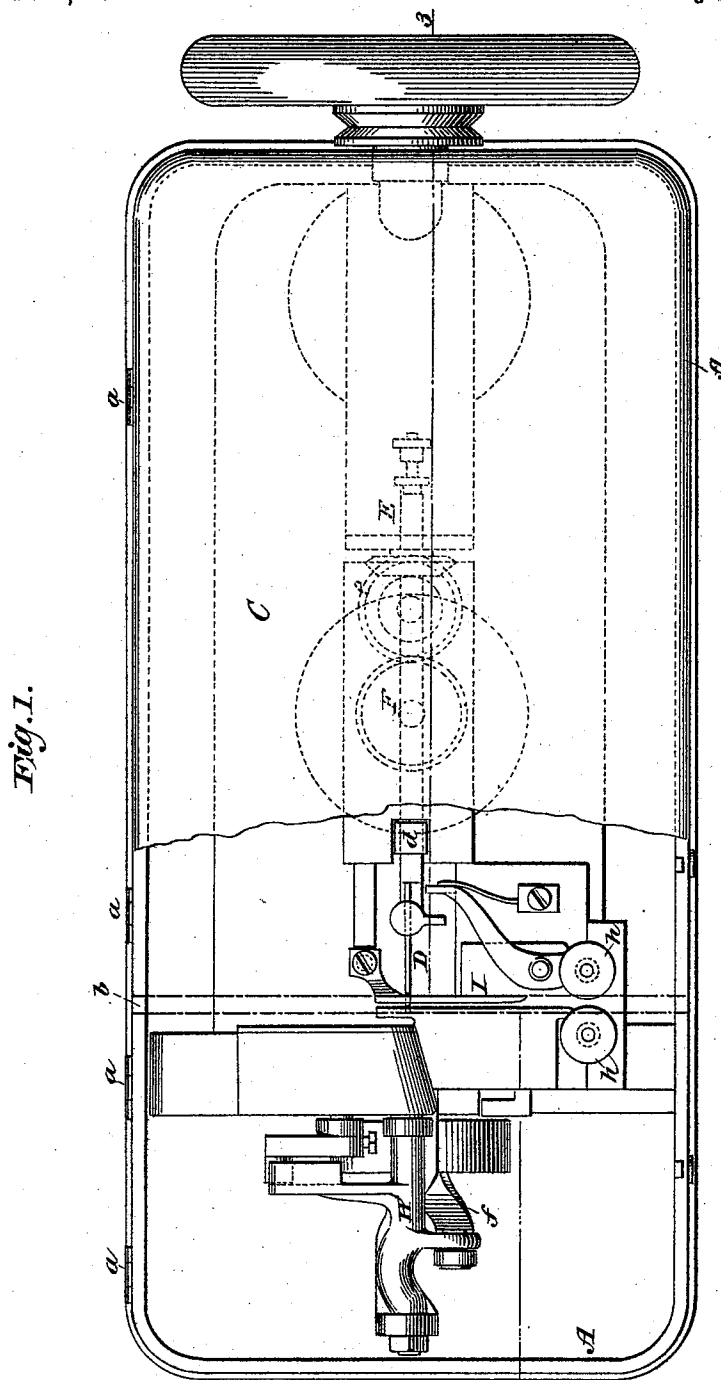
(No Model.)

4 Sheets—Sheet 1.

W. H. H. TRACY.
SEWING MACHINE.

No. 498,332.

Patented May 30, 1893.



WITNESSES:

WITNESSES:
Gustave Dietrich.
L. M. Hochsachlager.

INVENTOR:

INVENTOR:
William H. R. Tracy,
BY Briesen, Knauth
his ATTORNEYS.

(No Model.)

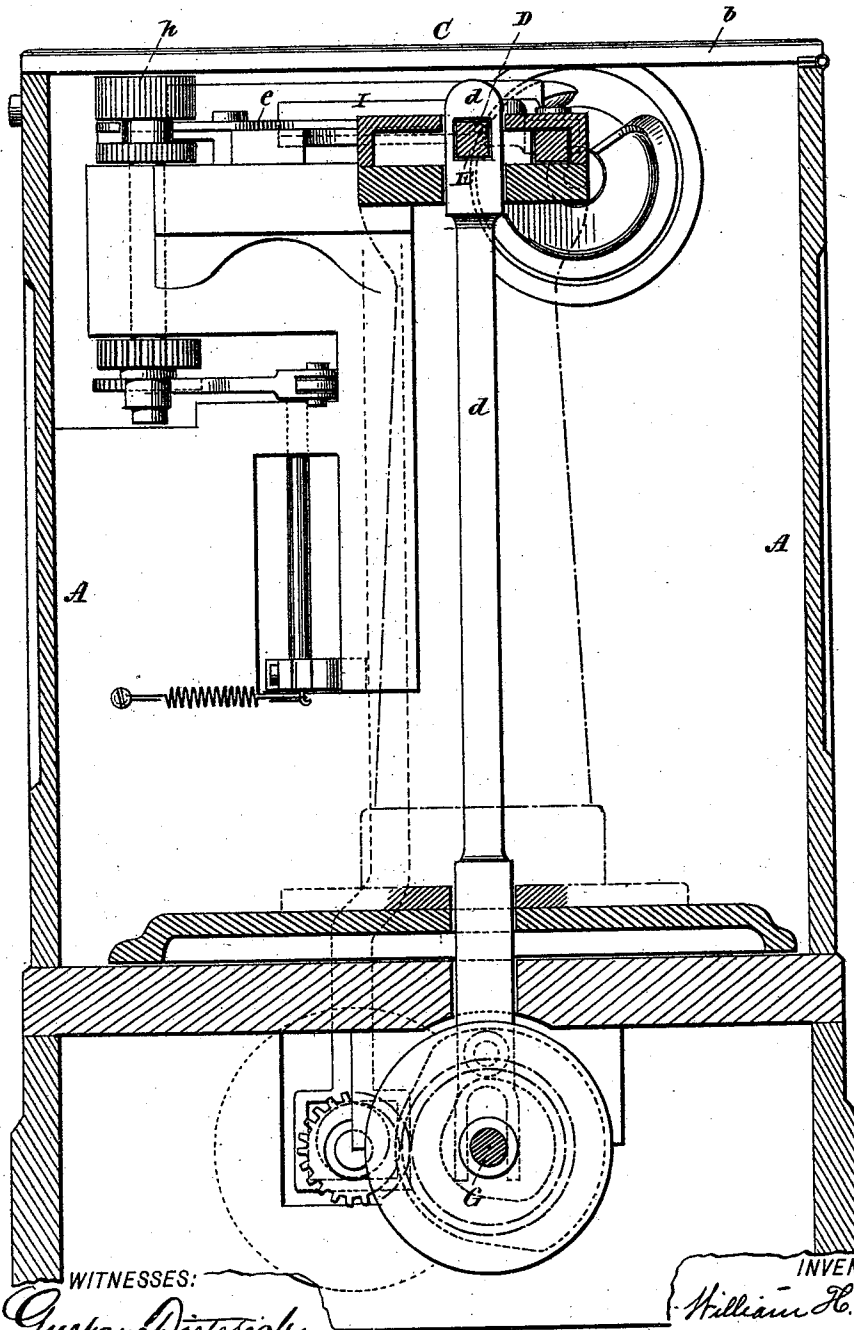
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Fig. 2.



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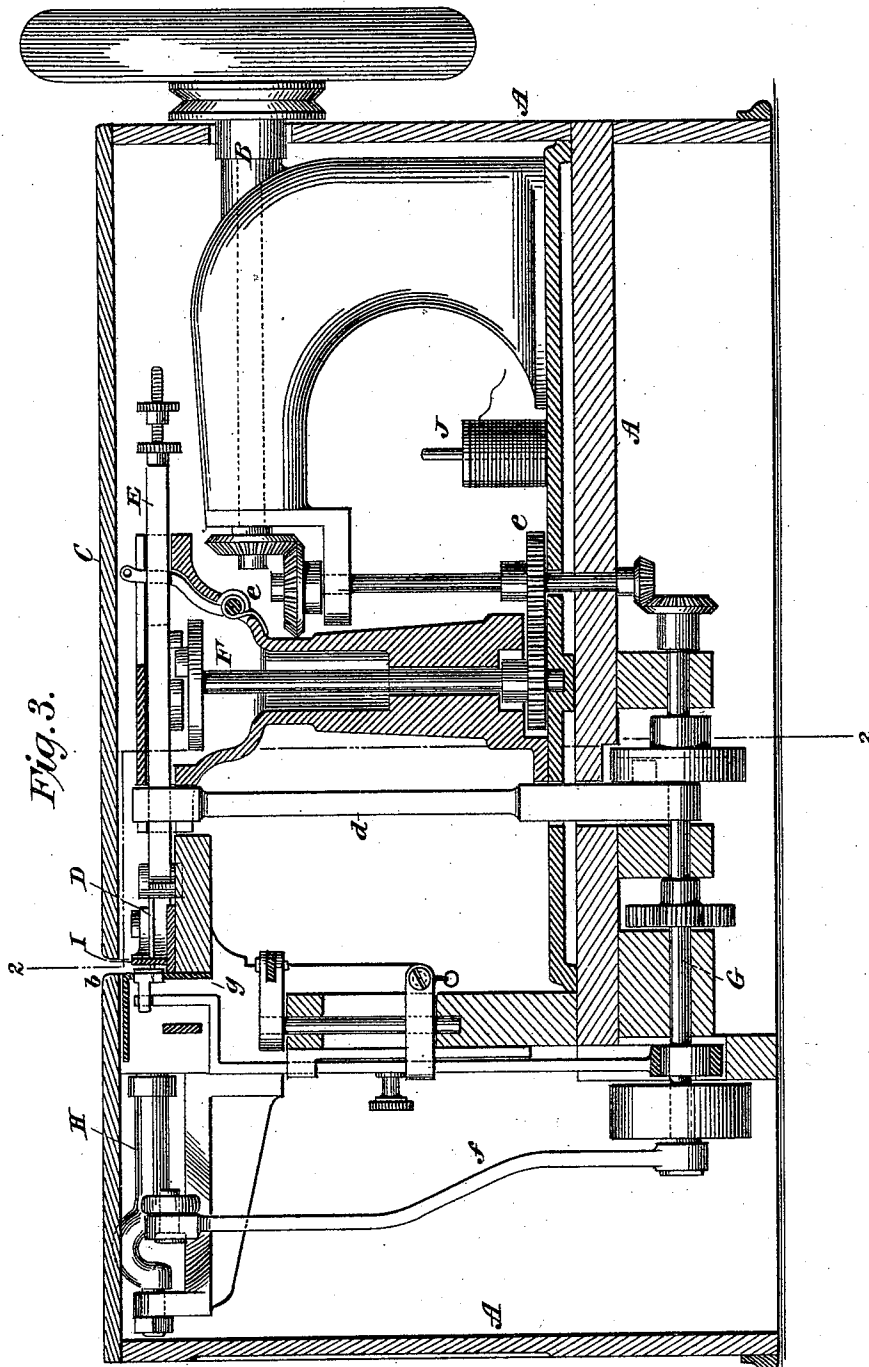
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WITNESSES:
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(No Model.)

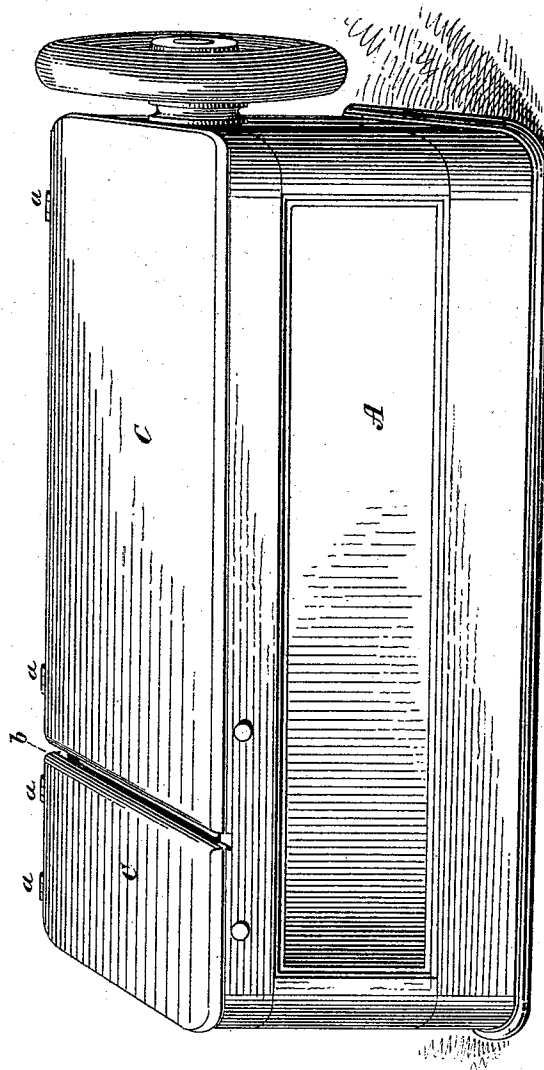
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Fig. 4.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM H. H. TRACY, OF TROY, ASSIGNOR OF ONE-HALF TO JEREMIAH A. SCRIVEN, OF NEW YORK, N. Y.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 498,332, dated May 30, 1893.

Application filed November 30, 1892. Serial No. 453,610. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. H. TRACY, a resident of Troy, Rensselaer county, in the State of New York, have invented an Improvement in Sewing-Machines, of which the following is a specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a plan or top view, with parts broken away, of my improved sewing machine. Fig. 2 is a vertical cross-section on the line 2—2, Fig. 3. Fig. 3 is a vertical longitudinal section on the line 3—3, Fig. 1; and Fig. 4 is a perspective view of the complete machine.

Fig. 4 of the drawings best expresses the object of this invention, which is to construct a sewing machine so that none of the operating parts, not even the needle, will be exposed on the outside of the machine, the machine itself presenting a substantially plain box with a slot for inserting the fabric to be sewed and provided at any part with a wheel by which the necessary motion is received. The advantages of such a construction of sewing machine are obvious. Articles to be sewed can be spread broadcast over the machine, will not be cramped by contact with projecting arms or other parts of the mechanism, will not be soiled by lubricating matter used on bearings, and the parts of which the machine is composed will be protected from atmospheric influences by being wholly concealed within the body of the machine.

The invention, generally speaking, consists of a sewing machine having all its parts inclosed in a box whose upper surface is covered by a cloth plate consisting of a hinged lid or lids containing a slot through which the fabric may reach the needle, the mechanism within said box being so arranged that the needle beneath the hinged lid will move in a horizontal direction, all as hereinafter more fully described.

In the accompanying drawings the letter A represents the frame of the machine.

B is the main driving shaft adapted to receive rotary motion by means of a belt or from any other suitable driving device. The external portion of the frame A is, as Figs. 2 and 3 clearly represent, box-shaped and

adapted to contain within the embrace of the box the entire sewing mechanism.

The top of the box is formed by a plate C, which is hinged as at *a* to one of the sides of the box, or otherwise rendered capable of being opened so that the interior of the box may be laid bare. In this cloth plate C is formed a transverse slot *b* (see Fig. 4) which extends across the top of the machine and practically divides the hinged or movable top C into two parts or flaps, clearly represented in Fig. 4. In many instances one of these flaps might remain stationary.

Underneath the cloth plate C of the machine is provided suitable mechanism for moving the reciprocating needle D which is attached to a needle-bar E to which the proper reciprocating motion is imparted by a suitable shaft F connected by gearing *e* with the driving-shaft B.

For producing a zig-zag stitch, when such is desired, a vertically movable bar *d* is employed, its upper end embracing the needle-bar E, while its lower end is moved by an eccentric on a shaft G that connects by gearing with the main driving shaft B.

Suitable shuttle mechanism, (not fully represented,) is operated when desired by means of a shaft H actuated by a connecting-rod *f* from the shaft G. Suitable feed-mechanism, presser-foot, &c., are also of course provided for.

One form of presser-foot is shown at I in Fig. 1, but any other analogous device may be used so that such mechanism is located beneath the cover or housing. This presser-foot crowds the fabric which is inserted through the slot *b* against a stationary ledge *g* formed in the machine beneath the hinged cloth plate C.

The feed mechanism may be composed of wheels *h*, Fig. 1, and well-known means for imparting to them intermittent rotary movement, or may be of any other suitable kind. It will be observed, however, that the needle D in this machine moves horizontally beneath the cloth plate C of the machine, and by this fact I am enabled to employ a boxed or housed sewing machine which exposes no projecting arm or part to contact with the

5 fabric to be sewed, operating the fabric by
permitting it to enter the slot *b* and thereby
expose itself to contact with the needle and
the thread carried thereby. Even the spool-
holder *J* can be contained within the housing
of the machine, and all the tension devices
may in like manner thus be housed.

10 I do not desire to limit myself to any spe-
cial kind of organism or character of stitch
producing device, so long as the needle is
moved horizontally beneath the slotted top-
plate having the slot *b*.

15 The invention is useful with a shuttle of
suitable kind, be the same rotary or oscillat-
ing; it is useful without a shuttle, that is, with
a chain stitch making hook, and can therefore
be profitably applied in connection with all
known kinds of sewing machines.

20 Having described my invention, what I
claim is—

1. In a sewing machine, the combination
with a needle, of means for operating said
needle and for forming stitches, mechanism
for feeding the material to be operated upon,

and a slotted cloth plate arranged above said 25
needle, and above the operating, the stitch
forming, and the material feeding mechan-
ism, as and for the purpose described.

2. A sewing machine having its entire or- 30
ganism housed, and covered by a slotted cloth-
plate or lid *C*, the slot of which serves to in-
troduce the fabric beneath said cloth-plate
and into contact with the needle and thread,
substantially as and for the purposes specified.

3. In a sewing machine having its entire or- 35
ganism housed, the combination of the slotted
cloth plate constituting the cover of said hous-
ing, a needle operating parallel to said cloth
plate, means for operating said needle and
forming a stitch, and means for feeding the 40
material to be operated upon to the needle,
whereby the sewing is accomplished within
the housing, substantially as described.

WILLIAM H. H. TRACY.

Witnesses:

HARRY M. TURK,
CHARLES E. SMITH.