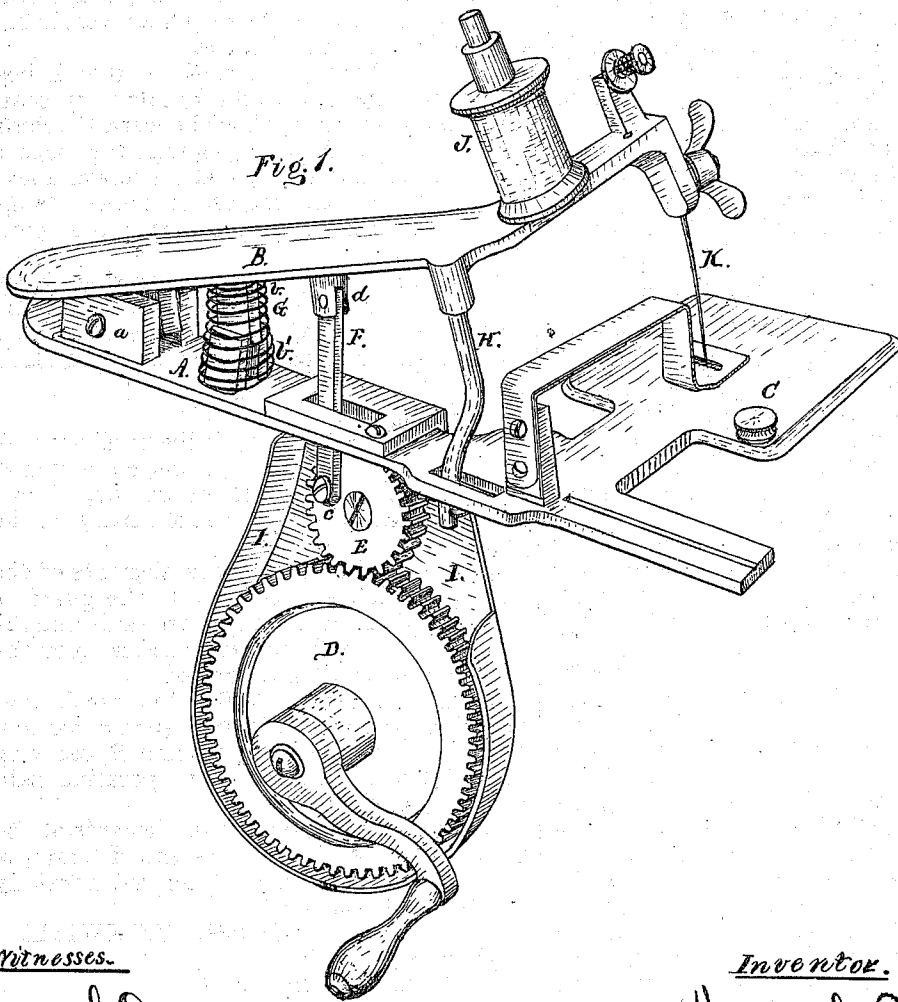
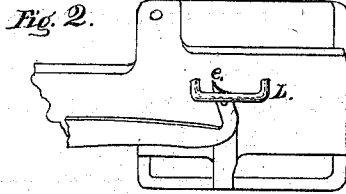


WILLIAM G. BECKWITH.

Improvement in Sewing-Machines.

No. 126,921.

Patented May 21, 1872.



Witnesses.

Edward L. Deane
Edward W. Johnson

Inventor.

William G. Beckwith
by his Atty
C. A. Myers

UNITED STATES PATENT OFFICE.

WILLIAM G. BECKWITH, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE
BECKWITH SEWING-MACHINE COMPANY, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 126,921, dated May 21, 1872.

Specification describing certain Improvements in Sewing-Machines, invented by WILLIAM G. BECKWITH, of Newark, in the county of Essex and State of New Jersey.

My invention is an improvement upon the patent granted me April 18, 1871; and consists in certain novel combinations and arrangements of parts which greatly improve the machine patented to me.

Figure 1 of the accompanying drawing is a perspective view of my improved machine. Fig. 2 is a view in detail of the under side of the cloth-plate.

General Description.

The construction of the machine is clearly shown in Fig. 1 of the drawing, and in its principal parts is particularly described in my Letters Patent of April 18, 1871. The levers A B are pivoted at *a*, and while the end of the lower one is secured to the table by a clamp, the upper one is reciprocated to force the needle K through the cloth and produce the stitches. The lower lever is provided with a supporting-plate, C, to hold the cloth properly beneath the needle, and the upper one has a spindle for the thread J, and a tension device. The lever A has a shield, I, secured to it, which covers and protects the gear D and its pinion E from injury, prevents the drip of oil from the parts, and also furnishes suitable bearing for their shafts. The connecting-rod F is pivoted to the pinion E at *c*, and jointed at *d* to the lever B, so that the rotation of the gear D by means of its handle gives a reciprocating motion to the lever B. The upward motion of the lever B is assisted by the coil-spring G, which acts, also, to give uniformity to the movements of the lever. The lugs *b d* upon the two levers A B, just in front of the pivot *a*, are arranged to prevent any lateral motion or play of the levers that may result

from wear of the parts or action of the spring; the upper one, *b*, on the lever B, moves up and down in the slot in the lower one, *d*, upon the lever A, and both act to keep the levers in line with each other at all times.

To insure the proper formation of the stitches, it is necessary to have the needle reciprocate in such relation to the hook beneath the cloth-plate C, that it shall always seize the loops of thread from the needle; and the device above described is of importance, as it prevents the needle moving out of line during the operation of sewing.

The guard L, upon the under side of the cloth-plate C, projects below the hook *e* and protects it from injury when the machine is being fastened to or removed from the table.

Claims.

1. The combination, with the needle-arm B, of the pitman F and connections *c d*, pinion E, and driving-gear D with its handle, all constructed and operated substantially as described.
2. The combination of the elements of the preceding clause of claim with the guard L; for protecting the hook and needle during the operation of fastening the machine upon the table, constructed as described.
3. The combination, with the needle and arm B, of the mortise *d* and tenon *b*, for preventing lateral motion of the arm B, carrying the needle, constructed and operating substantially as described.
4. The combination of the elements of the first clause of claim with the shield I, for protecting the clothes from oil, &c., substantially as described and specified.

WM. G. BECKWITH.

Witnesses:

C. A. DURGIN,
EDWARD H. JOHNSON.