

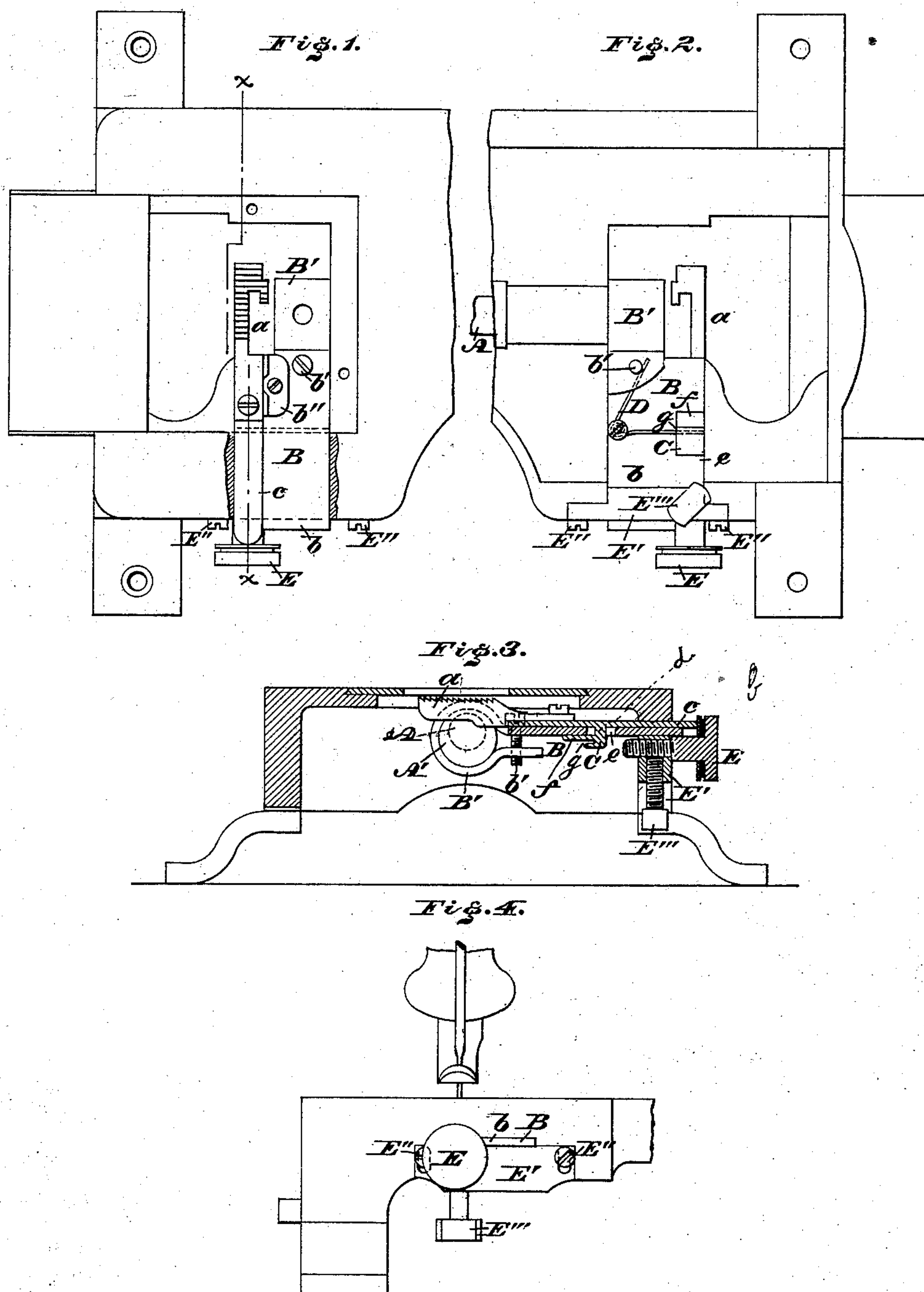
(No Model.)

T. LAMB.

FEEDING DEVICE FOR SEWING MACHINES.

No. 338,420.

Patented Mar. 23, 1886.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS LAMB, OF PHILADELPHIA, PENNSYLVANIA.

## FEEDING DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 338,420, dated March 23, 1886.

Application filed September 11, 1884. Serial No. 142,757. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS LAMB, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Feeding Devices for Sewing-Machines, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a top or plan view of the portion of a sewing-machine embodying my invention, the cloth-plate being broken away. Fig. 2 represents a bottom plan thereof. Fig. 3 represents a vertical section on line *xx*, Fig. 4 is a side elevation of a portion thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to improvements in feeding devices for sewing-machines; and it consists of the various details of construction and arrangement of parts hereinafter fully set forth and claimed, whereby the play of the feed-bar is adjustably regulated, and the operation thereof in connection with the other parts performed with a minimum of wear.

Referring to the drawings, A represents the driving-shaft of a sewing-machine, and B the feed-bar thereof. The shaft A is provided with an eccentric, A', and the feed-bar with a yoke, B', which encircles the eccentric, whereby the proper motions are imparted to said bar. The feed-bar is formed of a sliding rough-surface plate or serrated dog, *a*, which is fitted to a sliding plate, *b*, the latter being supported on a proper part of the table and connected with the yoke B', said yoke and plate in the present case being formed of one piece of metal. The dog *a* is lengthened by means of a bar, *c*, connected with the tail end thereof, said bar having formed or connected with it a depending hook or angular piece, C, the vertical limb *d* whereof is fitted in a recess, *e*, on the side of the plate *b*, said recess being of such length that the limb *d* has a certain play therein in the transverse direction of the machine, it being seen that the bar *c* is on the upper side of the plate *b*, and the horizontal limb *f* of the hook or piece C on the under side thereof, the dog *a* thus being permitted to slide on the plate *b* and is guided thereon, both the plate

*b* and bar *c* being fitted between lateral guides on the table of the machine, whereby they retain their position on said table. A notch, *g*, is formed on the hook C, against which bears a spring, D, the latter being properly secured to the plate *b* and operating to force the outer end of the bar *c* toward an adjusting-screw, E, which is fitted to the side of the table of the machine for adjusting the feed or motions of the dog.

When power is applied to the shaft A, the feed-bar is operated and receives its four-way motions, as usual. As the screw E is set relatively to the extent of the feed, it limits the return motion of the dog, it being seen that on said return motion the bar *c* strikes the head of the screw, and is thus rendered immovable. The plate *b*, however, owing to the recess *e*, continues its full return motion without imparting motion to the same extent to the dog *a*, unless it is desirable to produce stitches of extraordinary length, it being evident that the length of stitches may be adjusted relatively to the length of the recess *e* by properly setting the screw E so that its head limits the return motion of the dog *a*, the plate *b* having, however, the motion independent of said dog, as above referred to.

The yoke B' is provided with a set-screw, B', for properly adjusting the same on the eccentric A', and the plate *b* has secured to it a guide, *b''*, for the inner side of the dog *a*, whereby the latter moves true and uniform at all times.

The screw E is fitted to a bar, E', at the side of the table of the machine, and is vertically slotted, so that by means of screws E'', passing through the bar into the table, the bar is vertically adjustable, and when contiguous parts are worn said bar may be raised, and thus proper adjustment of the same maintained. To said bar E' is also fitted a screw, E''', for tightening the screw E and preventing motion of the latter, especially when in adjusted position.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In the feeding device of a sewing-machine, the feed-dog *a*, having bar *c* attached thereto, said bar *c* having a depending hook, C, connected therewith, formed of vertical limb *d* and



horizontal limb *f*, in combination with the sliding plate *b*, having yoke *B*, shaft *A*, having eccentric *A'*, and adjusting-screw *E*, working in the frame of the machine and limiting the  
5 play of the bar *c*, all of said parts being arranged, combined, and operating substantially as and for the purpose set forth.

2. A feeding device consisting of the dog *a*, the bar *c*, with hook *C*, having horizontal limb

*f* and notch *g*, the plate *b*, having recess *e*, 10 spring *D*, secured to the plate *b* and bearing against the bar *c*, and the adjusting-screw *E*, substantially as and for the purpose set forth.

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Witnesses:

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