## E BOSTOCK.

2 Sheets-Sheet 1.

Sewing Machine Tuck Creaser.

No. 64,404.

Patented May 7, 1867.



N. PETERS, Photo-Lithographer, Washington, D.

## 2 Sheets-Sheet 2.

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Inventor d Bostock. du

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## UNITED STATES PATENT OFFICE.

#### EDWARD BOSTOCK, OF ALBANY, NEW YORK.

#### IMPROVEMENT IN SEWING-MACHINE TUCK-CREASER.

Specification forming part of Letters Patent No. 64,404, dated May 7, 1867.

#### To all whom it may concern:

Be it known that 1, EDWARD BOSTOCK, of the city of Albany, State of New York, have invented a new and useful apparatus for service in a sewing-machine or with handsewing to mark, crease, or fold tucks in the material being sewed; and I declare the following specification, with the drawings forming part thereof, to be a full and complete description of my invention.

Figure 1 represents, in perspective, my apparatus as applied to a sewing-machine; Fig. 2, the apparatus in plan; Fig. 3, a vertical longitudinal section in the range of the needle; Fig. 4, a diagram of the cloth as tucked.

Similar létters denote the same parts of the apparatus.

À is a thin flat metal plate, shaped as shown in Fig. 2, which represents it of the dimensions proper for an ordinary family machine. It is pierced by a slot, B, through which a setscrew, C, is fitted to secure it upon the bedplate of any sewing-machine in proper position for service. Upon the front edge of this plate A there is fitted an arm, D, which carries, at right angles thereto and along the left edge of the plate, a pair of jaws, E, which supports a small grooved wheel, G. This wheel rest upon a low ledge or rail, R, fitted to its groove, which rises from the left projecting edge of the plate A.

The arm D is attached to and continued along the front of the plate by a metal spring, H, which is secured at its extremity to the plate at J. This arm may be made entirely of one metal spring-bar.

At L an arched socket, firmly attached to plate A and straddling the spring, is fitted with a thumb-screw, M, to regulate the pressure of the spring H in its operation upon the arm D and wheel G.

N is a thin metal gage-plate, shaped and fitted, as shown, to lie upon the broad part of A and bemoved to the right and left to gage the work for the machine. It has a slot, P, along its length corresponding in width with slot B, in order that screw C may be used to fasten both plates in position when set in place upon the machine. Its left-hand edge Q is turned up so as to form a straight ledge, against and along which the cloth to be stitched can be rested and guided. It has also a downward projection, W, the inner edge of which is for the purpose of securing a parallelism of the straight edge with the line of feeding, creasing, and stitching.

In the figures, a represents the needle-bar, b the needle, e the presser-bar, and f the bedplate, of any sewing-machine.

The apparatus is adjusted and secured to the bed of the sewing-machine so that the center of the wheel G shall be opposite, or nearly so, to the needle b, and the gage Q ranging parallel with the line of direction of the stitching.

The arm D, which supports the wheel G, is so constructed as to locate the wheel over the rail R in such position relatively to the points where the stitching and feeding of the machine take place as to prevent an undue strain and drag on the material being stitched, to deflect or give it a bias out of the direction of the feeding action of the machine.

The operation of the machine is thus: The size and distances of the tucks being deter-mined, for example, (see Fig. 4,) h i being the width of the tuck, and h l the distance between the tucks, the plate A is set so that the edge of the rail R shall be as far from the needle b as the distance required from i to m—that is, from the stitching of one tuck to the stitching of the next one-adding to it the distance from m to l, (the width of a tuck,) and the gage Q of plate N is to be set the width of a tuck, h to i, from the needle. The cloth Y to be stitched is then, with its first tuck properly folded, to be placed under arm D, and consequently between wheel G and its rail R, with its folded edge against the gage Q. The ma-chine is then to be put in operation, when, as the cloth advances, the groove in the wheel pressing it over the edge of R will make a deep crease or fold, l, in it (see Fig. 3) parallel with the stitching i of the tuck. It is most desirable in creasing to make only a single, well-defined crease. If the two edges of the wheel be too sharp, it is evident that each is liable to make on either side of the desired crease a crease not wanted, and so disfiguring the goods. I preferably so round and smooth the edges of my wheel, and at the same time make the groove so deep and the rail R so thin,

as to give but a single sharp crease at the bottom of the groove. When the first tuck is sewed the cloth is taken out and folded back as creased at l, replaced under D with l against the gage Q, when, the machine being again operated, the cloth will be stitched through mk, the cloth creased by the wheel at p, and the second tuck completed. The cloth is to be again removed, folded back at p, placed against the gage as before, the machine operated, the third tuck stitched, and the crease made for a succeeding tuck, and so on until the requisite number of tucks are completed. It is manifest that in order to crease the cloth the wheel G may be made with a sharp edge and the rail R grooved; but in that case the fold of the crease would be in reverse of what it should be for convenience in folding down for the work.

Along the edge of plate A, between the rail R and the farthest range of the gage from the needle, a graduated scale, X, is marked in parts of an inch, in order to measure the proportions of the work.

The entire apparatus can be used independently of the sewing-machine for marking tucks in work sewed by hand by drawing the edge of a completed tuck along the gage, which will cause the wheel to mark the cloth properly for the next fold.

I claim—

1. The tuck creaser or folder for use with or without a sewing-machine, made and operated as specified.

2. I also claim, in combination with the gage-plate N, constructed as described, the plate A and the creasing-wheel, when both plates are adjustable relatively to each other, and also relatively to the needle and feeding-device of the machine, by means of a single thumb-screw.

3. I also claim, in combination with the plate A, which carries the creasing devices, the gageplate N, having a downward projection, W, on the same, for the purpose of sliding or adjusting it along the plate A, in such manner as to secure a parallelism of the straight edge with the line of creasing and stitching.

4. I also claim the socket or bridge L, fixed firmly upon the plate A, for embracing and keeping in true position the wheel supporting bar D H, and also for the reception of a thumbscrew, M, for adjusting the vertical pressure of the wheel or creaser.

5. I also claim constructing the arm D with a right-angled projection, which supports the wheel, as and for the purpose specified.

6. I also claim the combination of the rightangled projection on the wheel-carrying arm D with the right-angled projection on plate A, when the same are constructed and arranged to operate as described.

#### EDWARD BOSTOCK.

Witnesses: RICHD. VARICK DEWITT, D. W. DEWITT.