

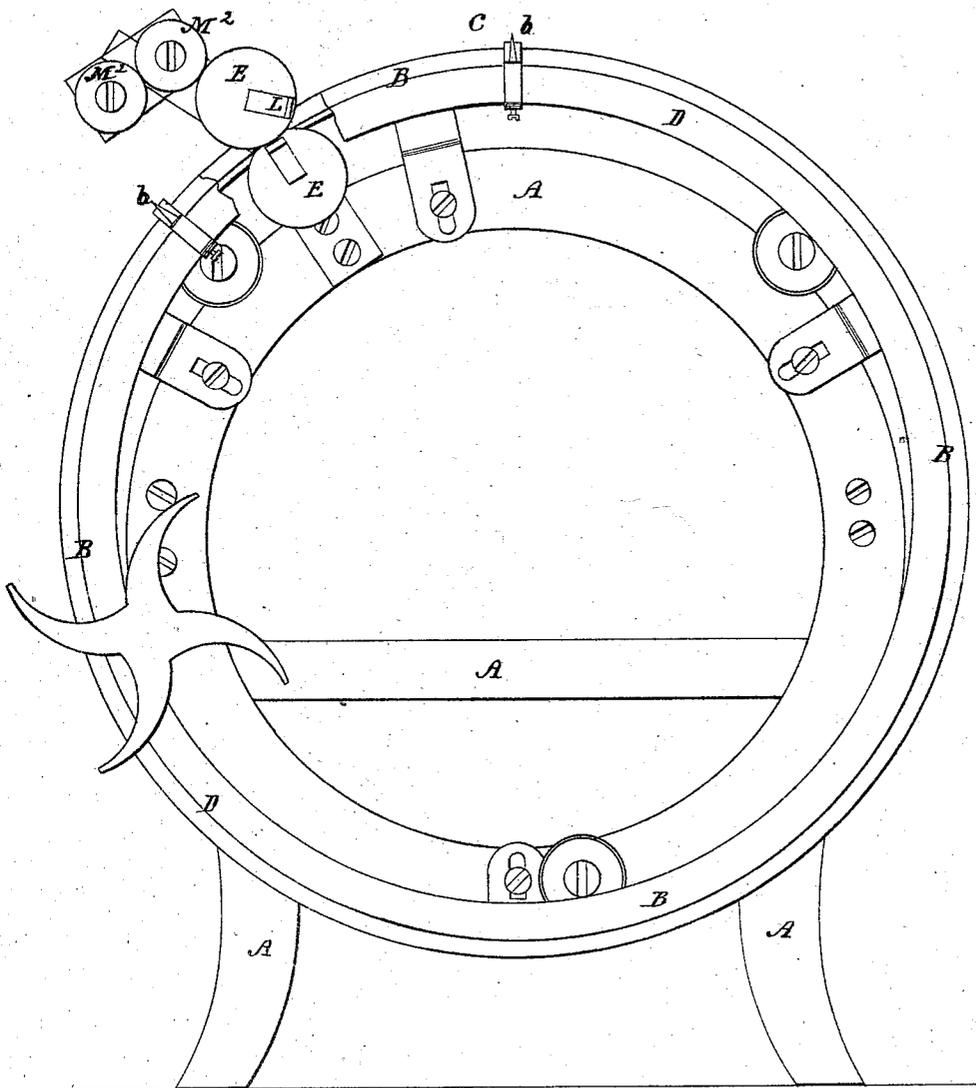
W. S. LINCOLN & W. A. RAYER.

Sewing-Machines.

No. 137,007.

Patented March 18, 1873.

FIG. 1.



WITNESSES.

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FIG. 2.

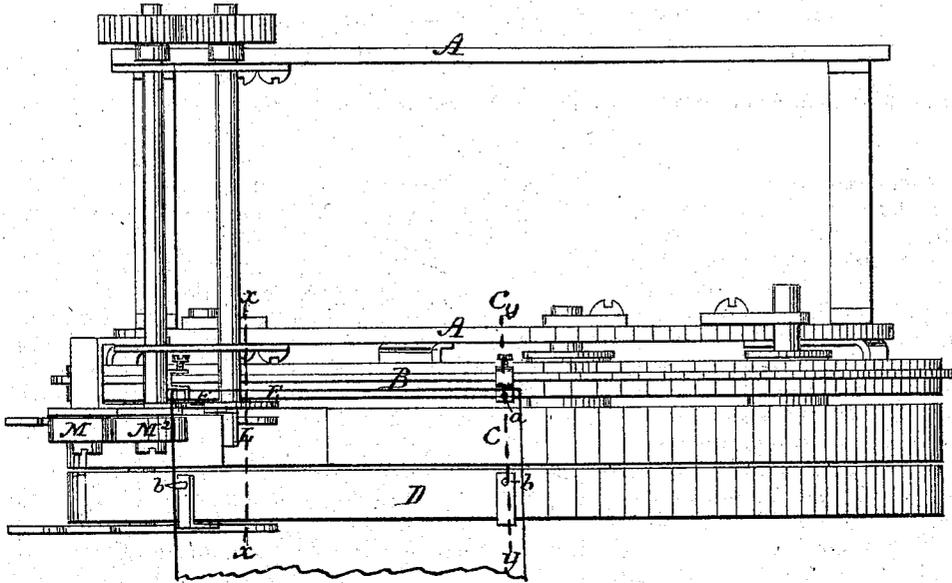


FIG. 3.

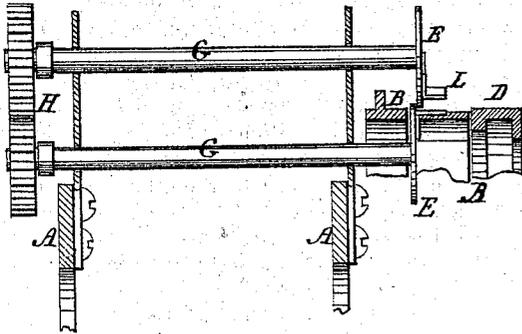
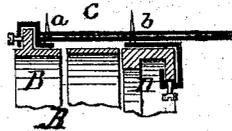


FIG. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM S. LINCOLN AND WILLIAM A. RAYER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 137,007, dated March 18, 1873.

To all whom it may concern:

Be it known that we, WILLIAM S. LINCOLN and WILLIAM A. RAYER, both of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machines; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying plates of drawing.

In cotton-mills, print-works, bleacheries, hosiery-mills, &c., it is desirable that the separate pieces of fabric manufactured should be stitched or sewed together end to end, producing a long, continuous strip therefrom. For such stitching or sewing, improvements in sewing-machines were made by us, and secured by Letters Patent dated November 1, 1870, and numbered 108,827; and more particularly the invention herein embraced relates to the aforesaid Letters Patent, although it is applicable, as will be obvious in most, if not all, of its features, to other sewing-machines. Essential to the sewing together of the goods end to end is the even stretching of the two pieces of goods at the ends being sewed together, and under the aforesaid Letters Patent this was accomplished by stretching and setting the two pieces of goods, one piece being laid upon the other, end for end, over two points or hooks located at a distance apart a little less than the width of the goods, but in the same line with each other. These hooks were arranged upon an annular guide-plate that was adapted to have a continuous rotary movement, and was so located as to carry the goods thus placed upon it to the sewing mechanism, to be sewed.

Experience in and use of the above mode of stitching the goods have shown that while an even stretch was obtained it was not sufficiently perfect; and to this end the present invention in its first feature relates, and it consists, first, in combination with the points or hooks described in the aforesaid Letters Patent, or any equivalent devices therefor, of points or hooks, or equivalent devices, arranged to hold the goods at or near each end, and also the side or edge of the goods back from the end goods. The goods are held upon four points or hooks, which, if lines were drawn connecting one with another, and the several with each other, the outline would be

a parallelogram; second, in a device or devices to automatically mark the goods sewed in the machine.

In the accompanying plates of drawing the present invention is illustrated, Fig. 1, in Plate 1, being a front view of the holding and other apparatus to be applied to a sewing-machine; Fig. 2, in Plate 2, a plan view; Fig. 3, Plate 2, a detached section in plane of line *xx*, Fig. 2; Fig. 4, Plate 2, a cross-section in plane of line *yy*, Fig. 2.

A in the drawing represents the framework, of suitable construction to support the various working and stationary parts of a machine, to which this invention relates. In the present invention is employed the annular rotating guide B, such as is used in the patent referred to, and it is provided with hooks or points *a* adapted to be adjusted to suit the width of the fabric to be sewed in the machine. In addition to the rotating guide B, and outside of the same, is another annular frame, D, arranged and operated in a manner substantially similar to that of the guide B, with which it acts as a holder to carry the goods to the sewing-machine, and so on. This additional rotating guide D is also provided with hooks or points *b b*, adapted, as in the case of the hooks *a a*, to be adjusted at any distance apart, according to the width of the goods. By these hooks *b b* and the hooks *a a*, with the goods properly placed on them, the goods can and will be held at four points, or in other words, at the four corners, of a parallelogram. The position of the goods to be sewed is shown in plan view, Fig. 2, and in section, Fig. 4; and by an inspection of Fig. 2 it will be seen that they are held by the points *b b* back from the ends of the material, which insures more perfect and even stretching of the ends. E E represent two circular sharp-edged disks of equal size and fixed to separate axes or shafts G, both of which are arranged to turn in suitable bearings of the framework A. The location of the shafts G is such that the cutting-disks E are on that side of the sewing-machine at which the goods sewed pass from the machine, with one disk below and the other above the goods, but the two edges pass each other so that as the fabric passes between it will be cut outside of the line of stitches. To drive the cutting-disks E

they are suitably geared together through their shafts G at H, and one or the other of the two shafts G is connected in any suitable manner to the driving mechanism. By the cutting-disks E the ends of the goods are trimmed as they pass from the sewing-machine. L represents the marking device. This marking device in the present instance is secured to the upper cutting-disk E projecting from its face, and on it is engraved a figure, 2. M M² two rollers arranged to run one against the other as shown, and in a position for the marking device L as it comes round by the rotation of the cutter to which it is secured to bear against and pass over the periphery of the roller M². These rollers M M² are the inking-rollers, and by the one, M, the ink is distributed upon the other, M², and from it transferred to the marking device L, adapting it to imprint its figure, 2, upon the goods as by the revolution of the cutter E it comes in contact therewith.

The inking-rollers are to be driven in any suitable manner from the driving-shaft or any part receiving motion from it.

The purpose of marking the goods as sewed is to distinguish them from others, and obvi-

ously marks of different character are therefore to be employed.

In addition to arranging a marker as shown and described, another marker may be arranged to mark the goods upon their under side as they pass through the machine, and if only one marker is employed it may be either above or below, as may be desired.

Having thus described our invention, what we claim and desire to secure by Letters Patent, is—

1. The combination, substantially as described, of a rotating guide, B, and an annular frame, D, each provided with hooks or points *a a b b*, all constructed and arranged to operate as herein set forth, for the purpose specified.

2. The marker L arranged on the cutter E, and in respect to inking-rollers M² M², all arranged and operating substantially as described, for the purpose set forth.

The above specification of our invention signed by us this 13th day of July, A. D. 1872.

W. S. LINCOLN.

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Witnesses:

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