No. 736,200. PATENTED AUG. 11, 1903.

S. BORTON.

EDGING FOR OPEN WORK GOODS.

APPLICATION FILED MAR. 31, 1903.

NO MODEL.

Fig: 1.

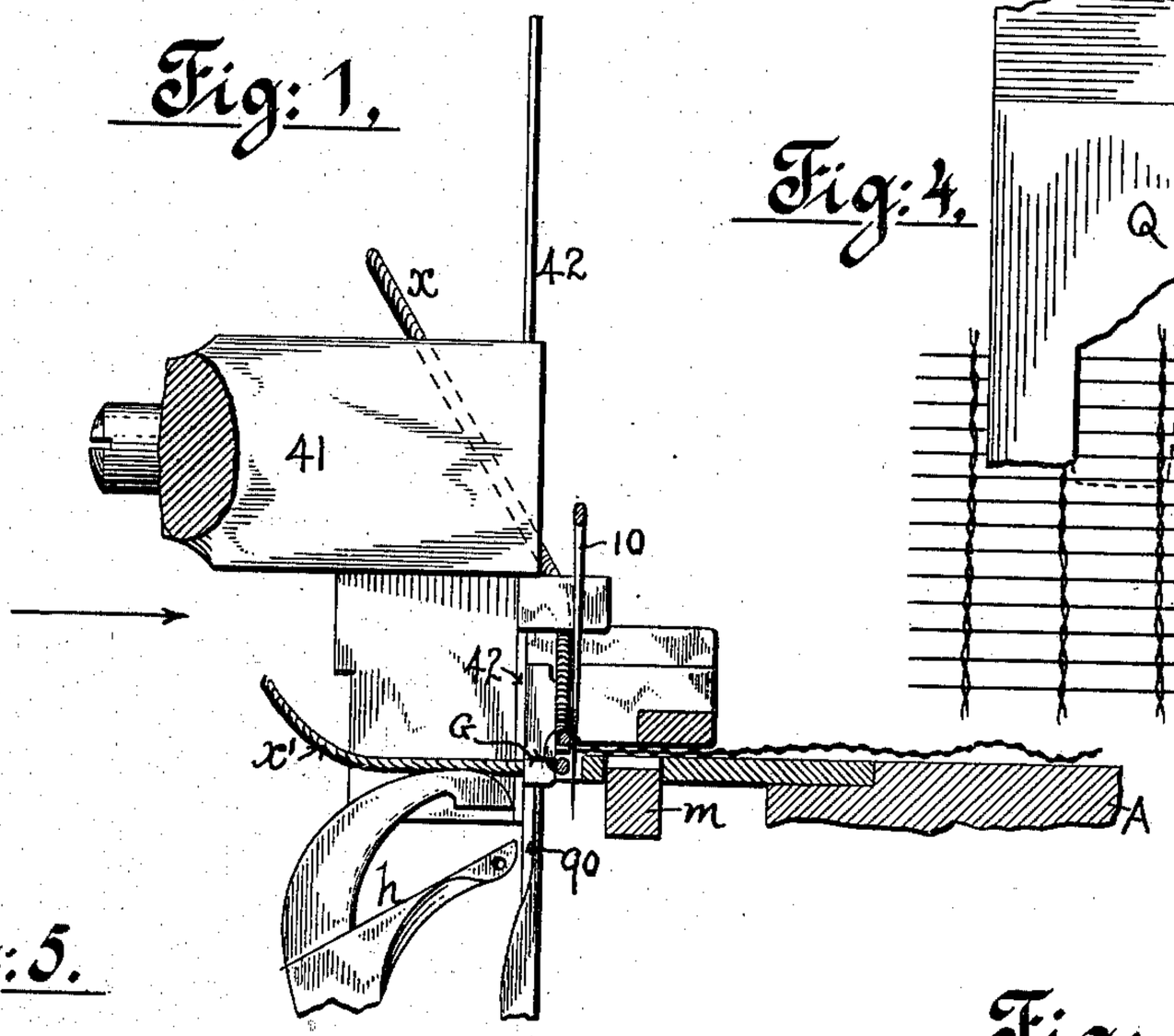


Fig: 4.

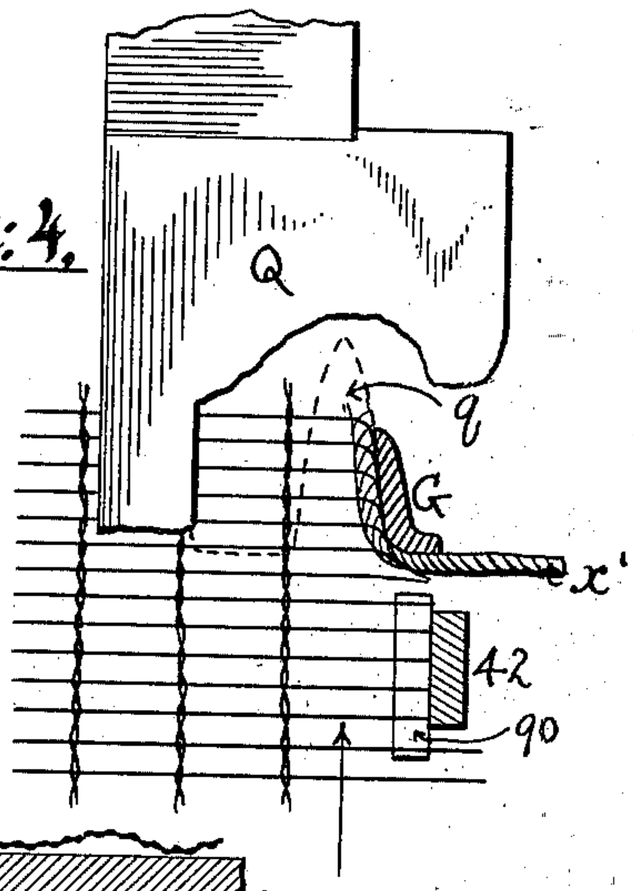


Fig: 5.

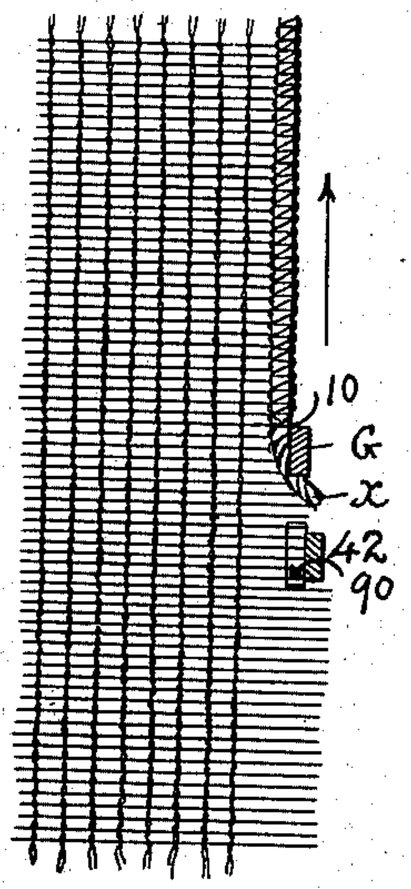
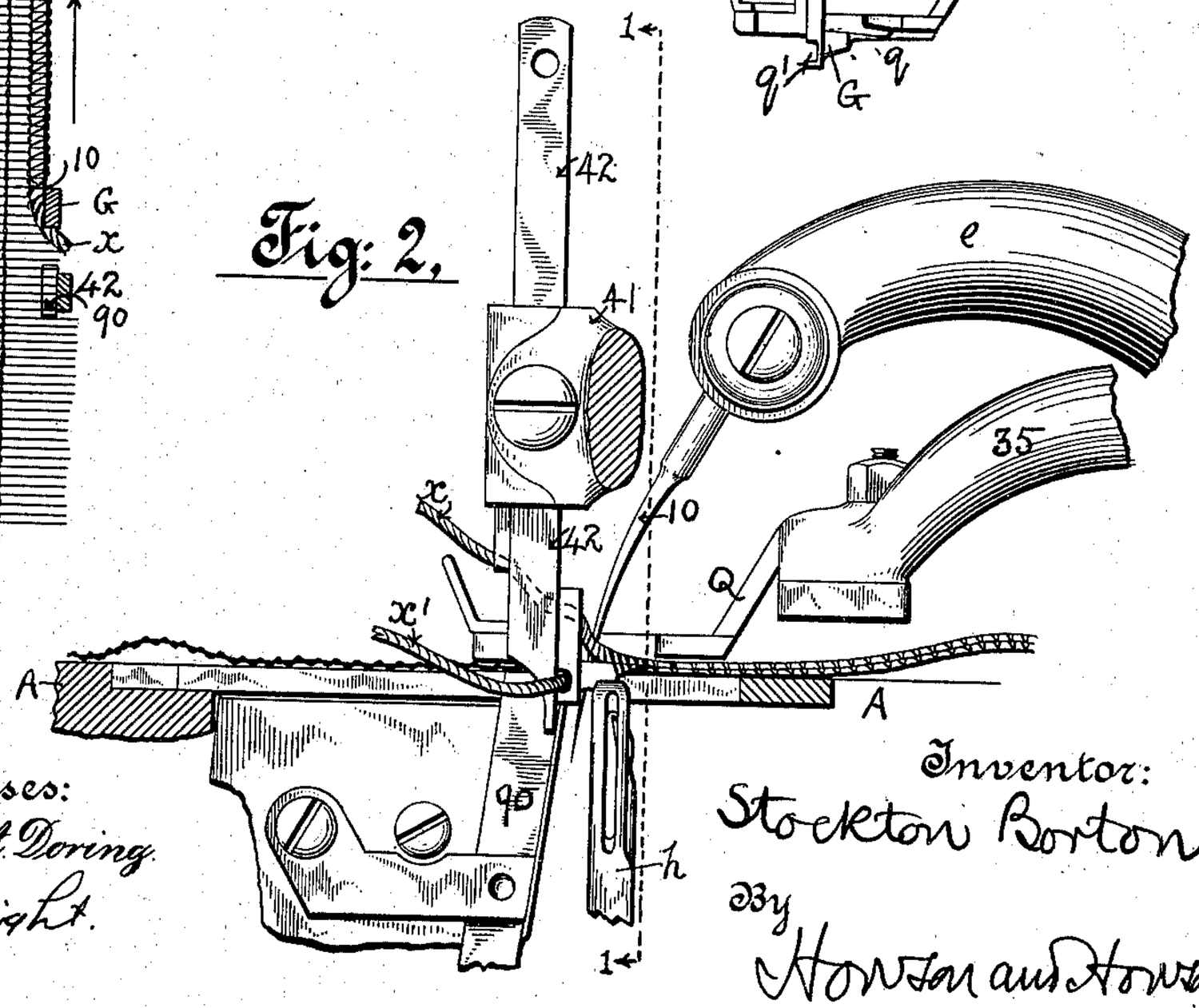


Fig: 3.

Fig: 2.



Witnesses:
Max B. A. Doring.
F. W. Wright.

Inventor:
Stockton Borton
By
Howson and Howson
Attorneys

No. 736,200. Patented August 11, 1903.

UNITED STATES PATENT OFFICE.

STOCKTON BORTON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO WILLCOX AND GIBBS SEWING MACHINE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

EDGING FOR OPEN-WORK GOODS.

SPECIFICATION forming part of Letters Patent No. 736,200, dated August 11, 1903.

Application filed March 31, 1903. Serial No. 150,425. (No model.)

To all whom it may concern:

Be it known that I, STOCKTON BORTON, a citizen of the United States of America, residing in Providence, in the county of Providence, State of Rhode Island, have invented Improved Edging for Open-Work Goods, of which the following is a specification.

My invention consists of an improved construction of overseamed edging for lace, haircloth, or other open-work goods, such as to wholly prevent the appearance of "whiskers" on the finished edge of the goods and at the same time to insure the secure attachment of the edging to the goods.

In carrying out my present invention I use overseam or other overedge stitching, and I preferably employ a cord or cords to produce an edging embodying the invention forming the subject of my Letters Patent No. 556,300, dated March 10, 1896, and in making edging of that patented construction I employ the combination of mechanism forming the subject of my Letters Patent No. 561,043, dated May 26, 1896.

Although I prefer to employ cords in making my present improved edging for lace, &c., I do not wish to confine myself thereto.

By the term "whiskers" I intend to designate the ends of the body-threads of the lace, haircloth, or other open-work goods which project laterally beyond the cut edges of the goods and which have heretofore been liable to protrude between and beyond the overseaming-stitches and the cords laid thereon. According to my present invention I cause these cut ends of the threads or whiskers to be brushed or turned back and laid onto each other (and, if desired, bent or folded under or over the edge of the goods) as the goods are being fed through the machine. This may be effected by various means or attachments applied to a sewing-machine for applying the overseam-stitching to the edge of the goods. Although I do not wish to restrict myself thereto, I prefer to employ for the purpose the overseaming and trimming machine for which patents were granted to myself and Charles H. Willcox April 5, 1892, Nos. 472,094 and 472,095. For the better understanding of my invention I have illustrated in certain of the views in the accompanying drawings parts of the machine of said patents sufficient to illustrate a means for producing my improved edging.

In the accompanying drawings, Figure 1 is a sectional view of a part of the machine, drawn to an enlarged scale, on line 1 1, Fig 2. Fig. 2 is a view looking in the direction of the arrow, Fig. 1. Fig. 3 is a side view of a form of presser-foot which may be employed to aid in the production of my improved edging. Fig. 4 is a view, on a still larger scale, of parts to illustrate the mode of producing my edging; and Fig. 5 is a view of a piece of haircloth or like open fabric in process of being edged.

In Figs. 1 and 2, A represents the bed-plate, *e* the needle-bar carrying the needle 10, and *h* is the looper of the machine of the above-mentioned patents of April 5, 1892. The presser-foot Q is carried by a presser-bar 35, Fig. 2.

It is preferable to employ a trimming device in connection with the sewing mechanism, and in Figs. 1 and 2, 41 indicates a vibrating arm, in the outer end of which is mounted the upper shear-blade 42 of the trimming device, the lower shear-blade 90 being adjustably fixed in the frame, Figs. 1 and 2.

The presser-foot Q has in addition to the usual chaining-finger *q* a downwardly-projecting piece G underneath. A somewhat similar piece was employed in the machine of my Patent No. 561,043 as an eye *q'* for the lower cord *x'* to be fed to the under side of the edging, and I may employ this piece in part for a similar purpose here if I use such under cord in the edging; but I make this piece G in the present instance different in construction and for another purpose—namely, to serve as an edge-guide to bend or brush or turn back the projecting ends of the whiskers or ends of the threads cut by the trimming device and before the goods reach the overedging devices in being fed through the machine. The cord-guiding notch or eye *q'* in the piece G is best illustrated in Fig. 3; but the edge-guiding part of the piece G is best illustrated in the enlarged view, Fig. 4.

The goods being fed by the feed-dog *m*, Fig. 1, through the machine in the direction of the arrows, Figs. 4 and 5, the projecting edge of the material will first be trimmed by the shearing action of the blade 42 and 90, Figs. 4 and 5, and then the cut ends or whiskers of the body-threads left projecting will be brushed back or turned in the direction of the line of feed and laid onto each other, and while in this condition the overedge-stitch-forming devices will apply the overedge-stitches around these brushed-back whiskers, and so not only prevent their protruding through and between the overedge-stitches, but also more securely hold the overedge-stitching in place on the edge of the goods whether cords such as *x* and *x'* be used or not. It will be observed that the edge-guide G is not only located between the trimmer and the stitch-forming mechanism in the direction of the feed, Fig. 5, but said edge-guide G also lies between the trimming-line and the sewing-line, Fig. 5. It will be understood that by suitably shaping the inner guiding edge of the guide G the whiskers may be not merely brushed back, but may be turned, folded, or bent over or under, as thought desirable.

The mechanism which I have described above for the better understanding of my present invention is, however, not essential thereto and, on the other hand, forms the subject of an application for a patent filed by me July 25, 1902, Serial No. 116,980.

I claim as my invention—

1. As a new article of manufacture, a lace or other open-work fabric having the laterally-projecting body-thread ends turned or laid in the direction of the length of the edge and overseam-stitching embracing said turned thread ends, substantially as described.

2. As a new article of manufacture, a lace or other open-work fabric having the laterally-extending body-thread ends turned or laid in the direction of the length of the edge, a cord thereon and overseam-stitching embracing both said turned thread ends and the cord, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

STOCKTON BORTON.

Witnesses:

CHRISTINA P. BORTON,

JNO. L. NEWBOLD.