

D. C. CHESTER.  
Sewing-Machine Attachment.

No. 89,915.

Patented May 11, 1869.

Fig. 1.

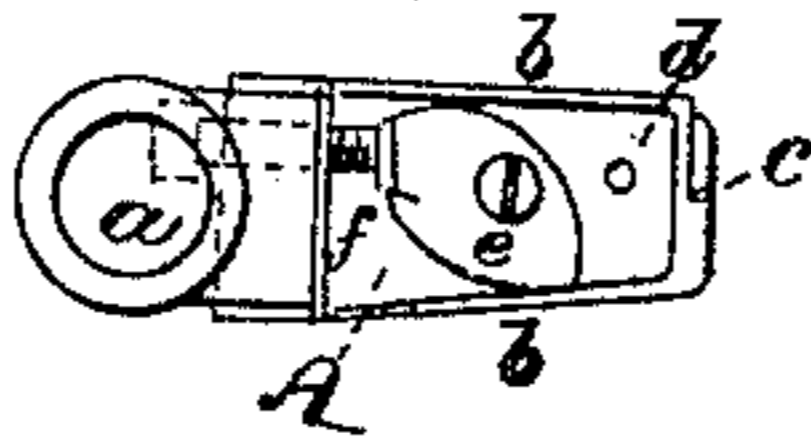
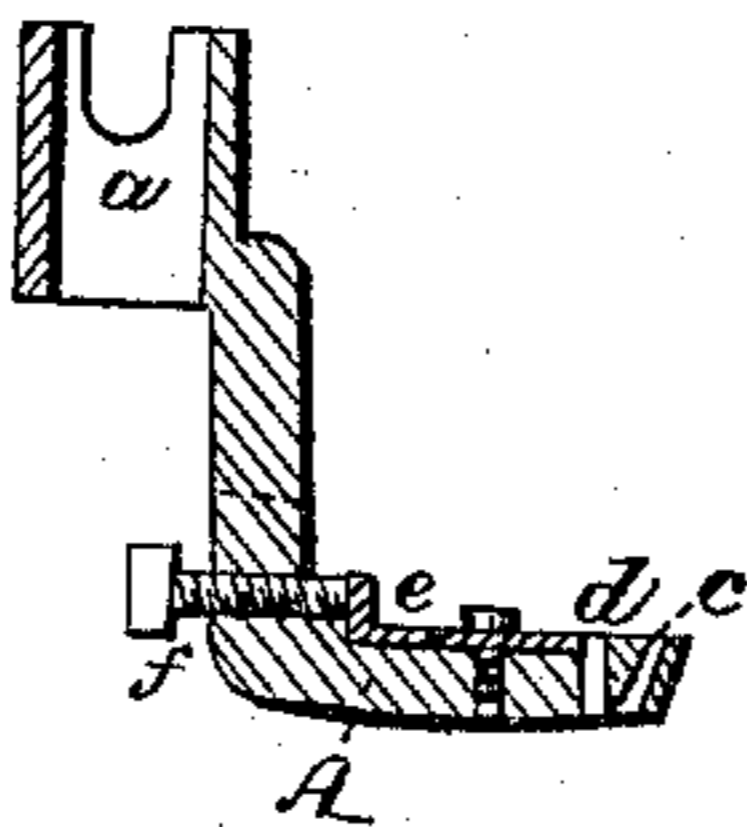


Fig. 2.



Witnesses:

J. M. Coombs,  
Fred Haynes

Inventor:

D. C. Chester  
per Brown & Coombs  
attys

# United States Patent Office.

DANIEL C. CHESTER, OF OGDENSBURG, NEW YORK.

Letters Patent No. 89,915, dated May 11, 1869.

## IMPROVEMENT IN BRAIDING-FOOT FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DANIEL C. CHESTER, of Ogdensburg, in the county of St. Lawrence, and State of New York, have invented a new and useful Improvement in Braider-Feet, or Attachments to Sewing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a plan of a sewing-machine presser-foot, with my improvement applied to it, and Figure 2, a vertical section thereof.

Similar letters of reference indicate corresponding parts.

My improvements in braiders, as attachments to sewing-machines, consist in a novel construction of foot, which may be used as the ordinary presser-foot of the machine, and be employed alike for plain sewing or braiding, by forming, or providing said foot with adjustable fingers, arranged to extend along either side of and overlap the front end of the foot, leaving a passage for the braid down through between them and the end of the foot, and guiding it to and under the needle, said fingers, which are of an elastic character, being adjustable by a cam and set-screw, or their equivalents, to adapt the device to different sizes of braid.

Referring to the accompanying drawing—

The foot, A, is shown as constructed to fit a particular kind of machine, but which, by suitably altering its socket-portion, *a*, that fits on the foot-bar, may be adapted to various kinds of machines, and which, so far as its general structure is concerned, is similar to the ordinary presser-foot, and may be used for common, or plain sewing, though it is preferred to make said foot somewhat smaller at the front end than usual, in order that it may cover as little of the pattern being braided as possible.

Attached to the sides of the foot, at or near its rear, are elastic fingers, *b b*, arranged to extend toward, and bent so as to overlap the front end of the foot, the bent portion of one finger being reduced, and made to lap over the bent portion of the other finger, for the purpose of forming a passage, *c*, for the braid; that is introduced over the reduced portion of the bent end of the one finger, and passed down, in a sloping direction, to and under the needle-hole, or passage, *d*, with which the braid-passage *c* is in line, by which arrangement the braid is always held centrally under the needle, and

this regardless of its width, as the passage *c*, which guides it, is made adjustable, by spreading or contracting the elastic fingers *b b* to suit different widths of braid.

This central stitching of the braid is secured, no matter in what direction the cloth is moved, or how intricate the figure being braided.

To adjust the fingers *b b* to suit different widths of braid, there is, arranged on the top of the foot, a cam, *e*, arranged to swivel, or turn on a centre, attached to the foot, and made to bear against the inner sides of the fingers *b b*, so that, by turning the cam to open or spread the fingers, which may be done by working up or forward a screw, *f*, arranged in the back portion of the foot, and bearing against a lateral projection on the cam, the braid-passage *c* is widened, or guiding-edges of the bent portions of the fingers set to accommodate braid of increased width, while, by slackening the screw *f*, the elastic fingers close, to suit braid of a narrower width, the cam *e* turning back by the elastic action, or pressure of the guides, or fingers on it. In this way may the passage *c* be adjusted with the greatest accuracy, to guide braids of varied width, and so that the braid is always directed centrally under the needle-hole *d*, which the passage *c* intersects, or meets, or thereabouts, on the under side of the foot, thus securing central stitching of the braid under all circumstances.

Of course other mechanical expedients may be substituted for the cam *e* and screw *f*, but such devices I find superior to many others, for effecting an equable adjustment of the guides, or fingers.

What is here claimed, and desired to be secured by Letters Patent, is—

1. A braider-foot, constructed substantially as described, with elastic fingers *b b*, arranged along either side of the foot, and bent at their ends, to form a braid-passage, *c*, in line with, and so that it meets, or approximates the needle-hole *d*, on the under side or face of the foot, essentially as specified.

2. The combination of the cam *e* and screw *f* with the elastic fingers *b b*, constructed to form a braid-passage, *c*, disposed, in relation to the needle-hole *d*, substantially as specified.

DANIEL C. CHESTER.

Witnesses:

ALLAN B. PHILLIPS,  
Z. PHILLIPS.