

(No Model.)

D. HENIUS.

DEVICE FOR AND METHOD OF FORMING BRAID TRIMMING.

No. 256,895.

Patented Apr. 25, 1882.

Fig. 1

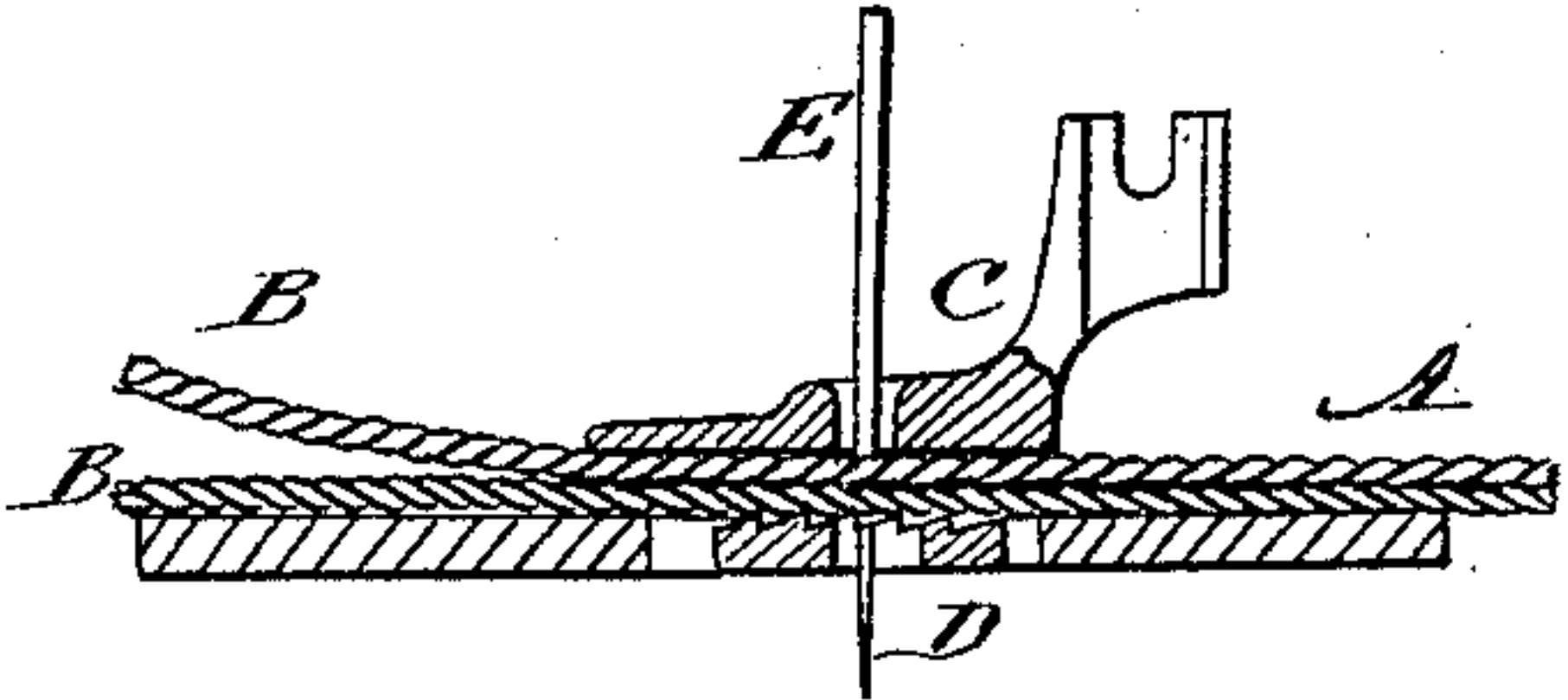


Fig. 2



Fig. 3

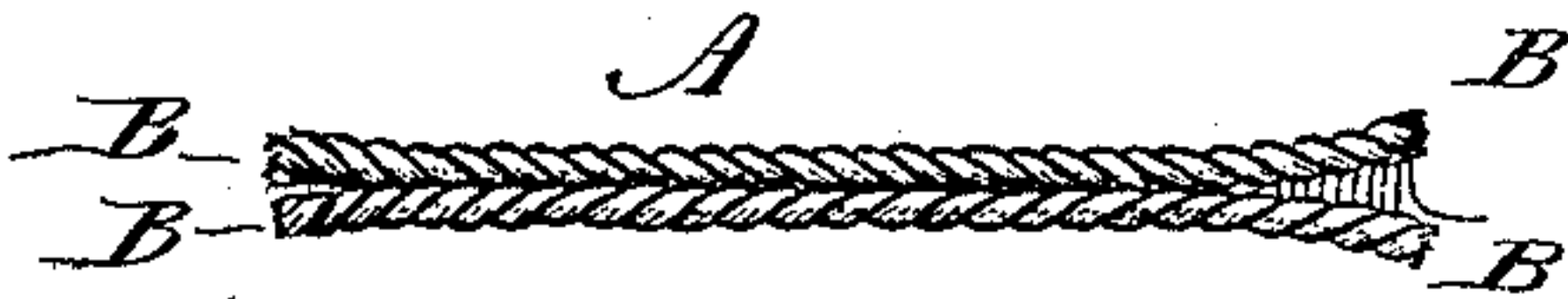


Fig. 4

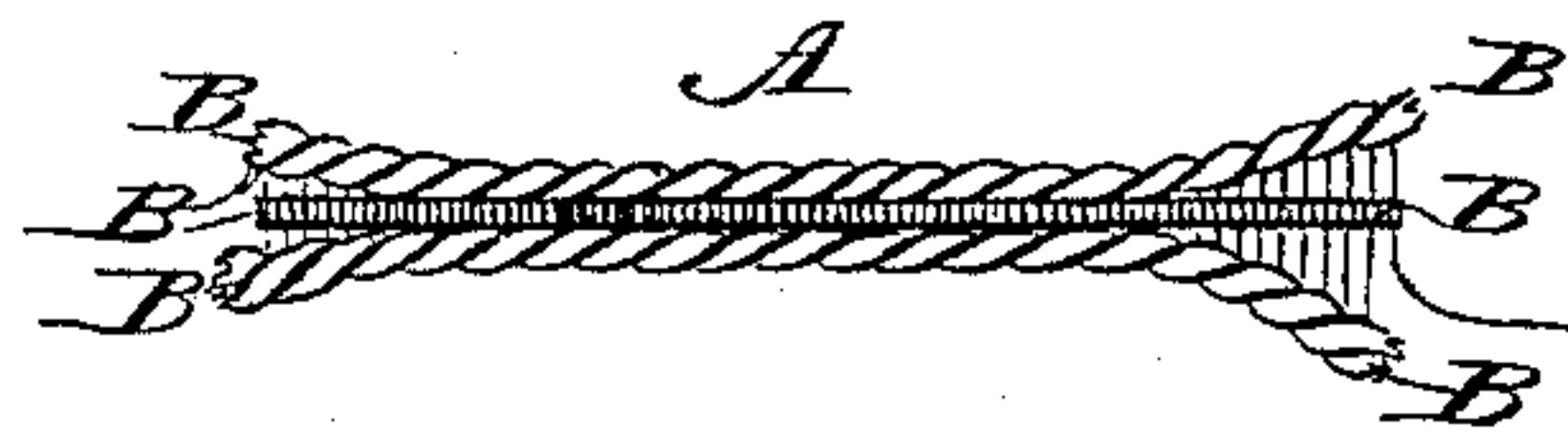
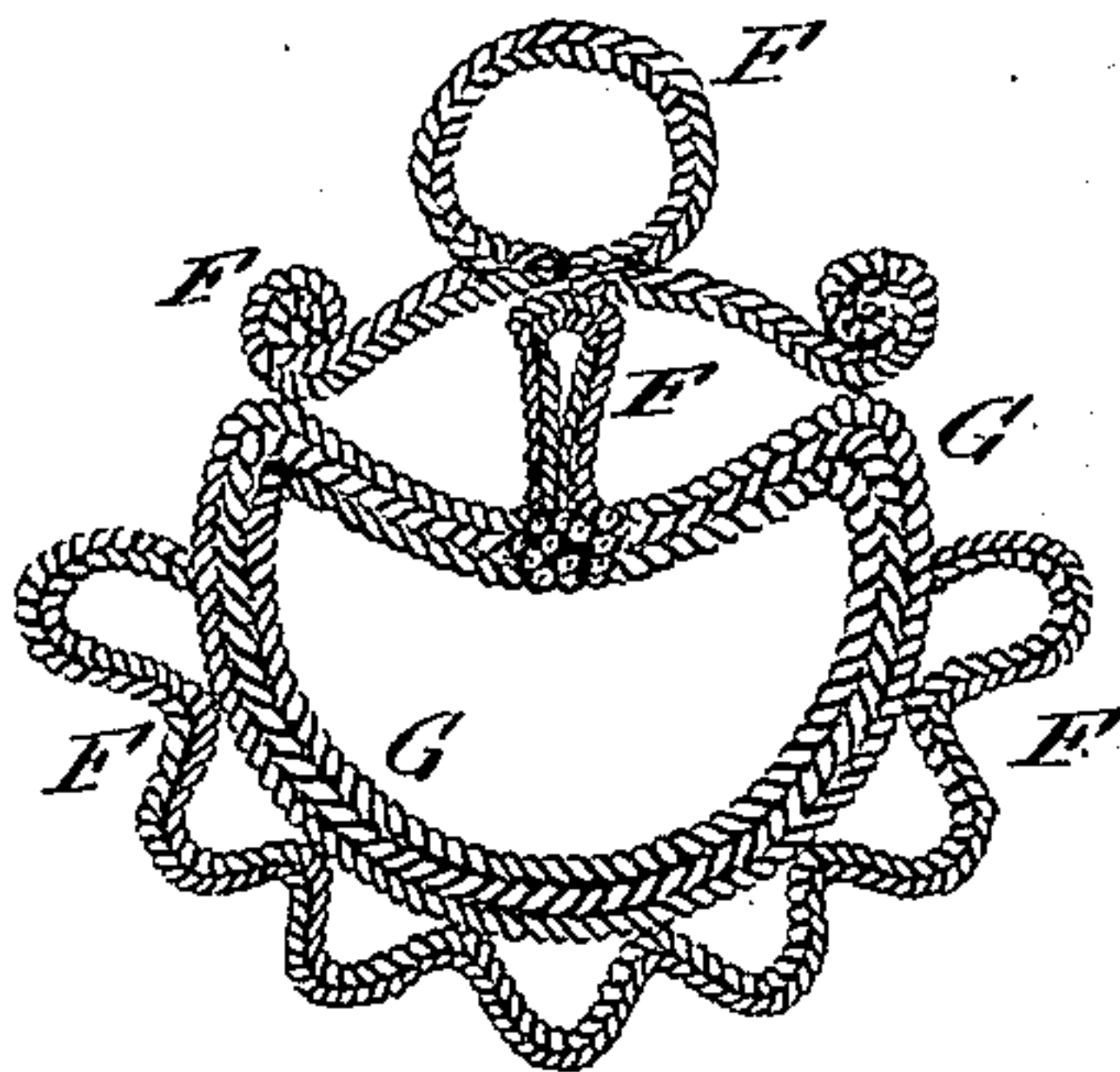


Fig. 5



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UNITED STATES PATENT OFFICE.

DAVID HENIUS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO SAMUEL BERNSTEIN, OF SAME PLACE.

DEVICE FOR AND METHOD OF FORMING BRAID TRIMMING.

SPECIFICATION forming part of Letters Patent No. 256,895, dated April 25, 1882.

Application filed January 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, DAVID HENIUS, of the city, county, and State of New York, have invented a new and useful Improvement in Unit-
ing Cords for the Formation of Braids and Trim-
mings; and I do hereby declare that the fol-
lowing is a full and exact description thereof,
reference being had to the accompanying draw-
ings, making part of this specification.

The kind of braid and trimming to which my
invention is applicable is composed of two or
more cords laid side by side and sewed together
to form a braid or trimming equal in thickness to
the thickness of one of the cords and in width to
as many times the thickness as there are cords
thus united. Since various colors may be com-
bined by the employment of cords of different
colors, this method of making braids and trim-
mings is capable of producing a variety of orna-
mental effects for many ornamental and useful
applications; but heretofore, so far as I am
aware, the cords have been united by hand-
sewing only, which is slow, and makes the
manufacture expensive, thereby greatly lim-
iting the use of the article.

I have devised a method of sewing together
cords for this class of manufacture, which is
very simple, easy, and rapid, whereby the braid
and trimmings are very cheaply made, only a
very little more costly than the cords of which
they are composed, which, however, may be of
as rich and expensive material as desired and
correspondingly beautiful; and in carrying out
my improved method I have invented a sim-
ple attachment to a sewing-machine for sewing
together the cords. My improved method con-
sists in moving the cords that compose the
braid or other trimming through a guide which
holds them one upon another in proper posi-
tion for uniting, and in guiding the needle
which sews the cords together accurately in
such relation to the cord-guide as to pass the
thread uniformly through the middle of the
several cords edgewise of the braid. This
method insures a very regular union of the
cords and makes an exceedingly perfect braid
or trimming of regular and uniform surface in
addition to the enhanced cheapness of the
article.

My improved device for carrying out this

method consists in a grooved guide for contain-
ing and holding the cords in position to be at-
tached to the presser-bar of a sewing-machine
in place of the usual presser-foot of the sew-
ing-machine, this guide to have a hole or notch
through which the needle passes to sew the
cords together, and a groove or slot in its un-
der surface of proper width and form to hold
the proper thickness of cord and afford suffi-
cient friction to the cords as they are moved
longitudinally through the groove to keep them
firmly in position and allow a steady and uni-
form feed motion thereof, and of proper depth
to nearly contain the number of cords to be
united, but to cause the lower cord to project
below the guide far enough to enable the feed-
plate or feeding-surface of the sewing-machine
to feed the united cords along as fast as they
are sewed together, in the manner of feeding
cloth along, and without any additional device
therefor. Thus a simple guide made of a single
piece and taking the place of the presser-foot of
a sewing-machine, and therefore attachable and
detachable by turning a single screw, is all
the additional mechanism required for perform-
ing this process.

The accompanying drawings represent my
improved guide attachment for this purpose
and illustrate the method of uniting the cords.

Figure 1 shows a longitudinal vertical sec-
tion of the guide, showing also the adjacent
part of the sewing-machine table in section
and a part of the needle of the machine in po-
sition for sewing, also parts of two cords in the
guide to be sewed together; Fig. 2, a front
view of the guide attachment with the two
cords therein; Fig. 3, a portion of the united
braid or trimming of two cords; Fig. 4, a por-
tion of the braid of three cords; and Fig. 5,
an ornament composed of two or more kinds
of the braid, illustrating one of many modes
of applying the product.

Like letters designate corresponding parts
in the several figures.

A indicates the compound braid or trimming
united by sewing, and B B indicate the sepa-
rate cords of which it is composed. The cord-
guide C has a slotted or notched stock, *a*,
formed to fit or embrace the lower end of the
presser-bar of the sewing-machine just as the

presser-foot is attached thereto, and it may have the general form of the presser-foot, the place of which it takes, except that it is made much deeper to admit the deep groove *b* in its lower side, in which the cords are held and guided. The width of this groove obviously should vary to suit the size of cords used, and also the depth should vary to suit both the number and size of cords used. Where great variety of the product is required numbers of these attachments should be provided, which is done with little expense, since each guide may cost but little. A suitable hole is made down through the guide, as shown in Fig. 1, for the passage of the needle *E*, which is guided in its motions down centrally through the cords *B B*. The feed-plate of the sewing-machine, located as at *D*, Fig. 1, acts on the slightly-projecting lower surface of the lower cord *B* to feed all the cords composing the braid along, just as it feeds cloth along.

Fig. 5 shows the ornament composed of two-cord braid *F* and three-cord braid *G* of this product. This, however, only illustrates a single mode of applying this product, which is capable of numberless forms and combinations.

Grooves have been formed in the presser-foot or other attachment of a sewing-machine for holding cords and braids to cloth while sewing them thereto; but such grooves are mere guides to position, and are incapable of holding two or more cords therein, one above another, and they are therefore totally unable to serve the present purpose, which requires a groove of much greater depth than is required

for the purposes alluded to above—in fact, a groove that will hold more than one cord at a time, while being only wide enough to hold a single cord laterally. Besides, this guide requires a groove of such depth that the feed-plate of the sewing-machine will take hold of the lower cord and feed it along without the intervention of cloth, whereas grooved presser-feet heretofore used have only been adapted to holding the cord or braid on the cloth while the latter is fed along.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The method of forming braid trimmings herein shown and described, which consists in laying cords together, one above the other, feeding said cords through a grooved guide, which keeps them accurately together, and sewing centrally through the said cords, substantially as herein specified.

2. A guide, *C*, adapted to be applied as a presser-foot to a sewing-machine, provided with a groove, *b*, of the proper width to hold one thickness of cord, and of a depth sufficient to hold two or more cords, as required, and to allow one cord to project below the same, so that the feed device may act on it and move the cords along, and with a vertical hole which admits the needle through the middle of the several cords, substantially as and for the purpose herein specified.

DAVID HENIUS.

Witnesses:

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