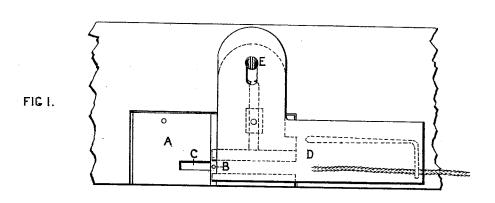
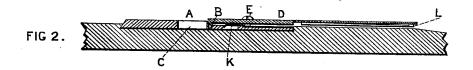
## G. H. W. CURTIS.

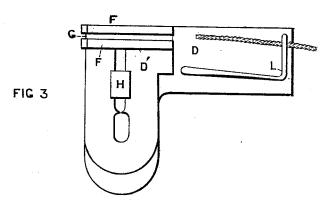
## BRAIDERS FOR SEWING-MACHINES.

No. 189,705.

Patented April 17, 1877.







WITNESSES:

Boy Elist

George H. W. Curlis.

INVENTOR.

## UNITED STATES PATENT OFFICE.

GEORGE H. W. CURTIS, OF NEW YORK, N. Y.

## IMPROVEMENT IN BRAIDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 189,705, dated April 17, 1877; application filed January 11, 1877.

To all whom it may concern:

Be it known that I, GEORGE H. W. CURTIS, of the city, county, and State of New York, have invented a new and useful Improvement in Braiding Devices for Sewing-Machines, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a plan of the devices as combined upon the cloth-plate of a sewing-machine. Fig. 2 is a section of the same, and Fig. 3 is a plan of the under side of the ad-

justable braid guide.

This invention relates to certain improvements in braiding attachments for sewing-machines; and consists of a novel construction and combination of parts, which will be fully hereinafter described, and specifically pointed out in the claim, a preliminary description be-

ing therefore deemed unnecessary.

At A is represented the throat-plate of a sewing-machine, with a hole for the needle to pass through it at B, and a hole for the feedbar at C. Said throat-plate is recessed to one-half its ordinary thickness from the needle-hole at B toward the end or side over which the fabric passes to the needle, so as to receive the braiding-guide D, it being about one-half the thickness of the throat-plate, as shown in the section at Fig. 2. Said guide is formed of two plates of sheet metal, both of which are fastened upon the machine by a single screw, as at E; but they are formed with ribs on their under side, as at F in Fig. 3, to form a groove, as at G, between which the braid is guided to the needle.

The under plate, as shown at D' in Fig. 3, is held in proper position upon the other plate D by a T-rivet, as at H, which passes through a slot in the plate D', and permits the ribs of the plates to be adjusted relatively to each other, so that the braid may be brought in proper position to the needle, and so, also, that braid of different widths may be used.

In order that braid of varying thickness may be used in the same guide, a spring, as at K, is placed in a slot in the throat-plate, and so arranged as to press up on the under side of the braid, to keep it flat in the groove between the two ribs on the guide.

There is, also, another spring, as at L, on the under side of the plate D, which serves to guide the braid flat in its passage toward the

groove

It is evident that the shape of these plates may be varied to suit the form of the machine to be used without departing from the nature of my invention.

I therefore claim—

The combination of the slotted adjustable plates D D' and T-rivet H with the recessed throat-plate A, the spring K, arranged in said throat for pressing on the under side of the braid, and the flat spring L on the under side of the plate D, substantially as described.

GEORGE H. W. CURTIS.

Attest:

JOHN W. RIPLEY, GEO. D. RIPLEY.