

G. P. BENEDICT.
Sewing Machine Cording Guide.

No. 39,336.

Patented July 28, 1863.

Fig. 1.

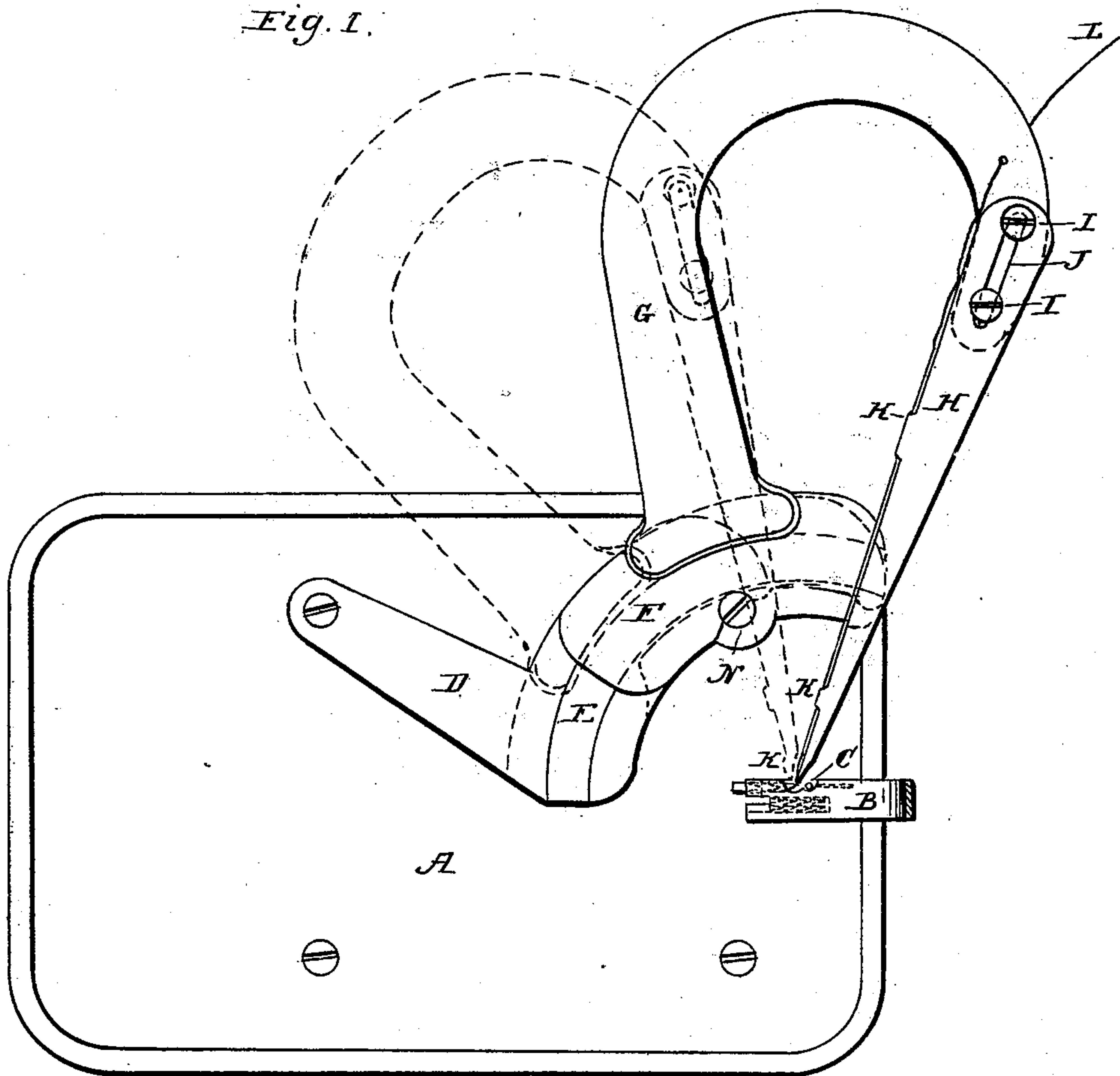
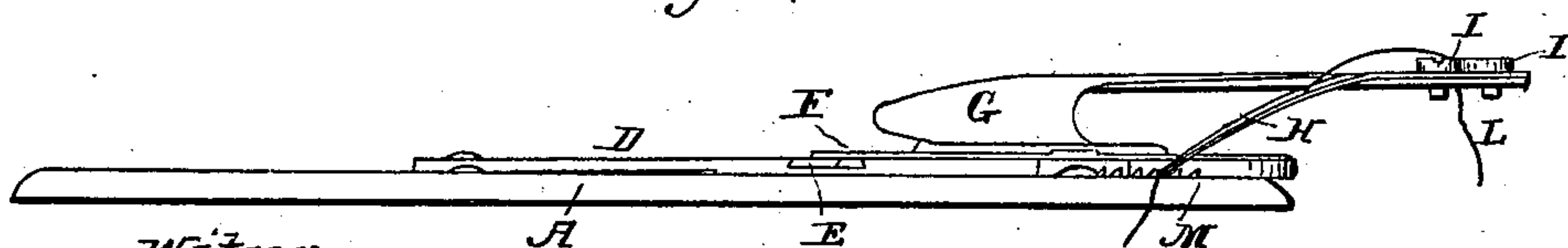


Fig. 2.



Witnesses:

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IMPROVEMENT IN CORDING-GUIDES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 39,336, dated July 28, 1863.

To all whom it may concern:

Be it known that I, CHARLES P. BENEDICT, of the city, county, and State of New York, have invented an Improvement in Cording Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan of my improved cording attachment, and Fig. 2 is a side view thereof.

My invention consists in the construction of the cord-guide and the attachment thereof to a sewing-machine in such a manner that it may be turned around the point at which the cord is delivered as a center, so as to allow a square corner, or even an acute angle, to be turned by the machine in the performance of its work, as hereinafter more fully set forth, the delivering-point of the cord-guide being at the same time made independent of the presser-foot, and also placed in immediate proximity to the needle.

In the accompanying drawings, A is the plate of a common Wheeler & Wilson sewing-machine, upon which the work is laid to be done. B is the presser-foot. C is the needle. D is a piece of metal attached to the plate A, in which a dovetailed groove, E, is formed. This groove E is curved, forming an arc of a circle, the center of the circle upon which it is formed being the point of the cord-guide, where the cord is delivered to the work. F is a plate, which has a curved tongue working in the groove E, and to this plate F is attached an arm, G, which carries the cord-guide H. This cord-guide is secured to the arm G by two screws, I I, which pass through a slot, J, for that purpose, the slot J allowing an adjustment of the cord-guide inward or outward a slight distance to correspond to the size of the cord and other conditions of the work to be performed. K K are small loops or eyes attached to the side of the piece to guide the cord to its destination. L is the cord. M is the feed by which the cloth is moved forward. The plate F is so constructed that its motion is restricted by the screw N, projecting portions of the plate striking against it at the end of its range for the purpose of restricting the distance to which it is to be turned.

In the operation of cord-guides it has been found difficult to turn sufficiently short angles

and curves toward the cord, which is generally the direction in which it is desirable to turn the work. In many kinds of work a right angle is absolutely indispensable in putting in the cord—as, for example, in the construction of collars with square corners. If the cord-guide is fixed in one position, it is absolutely impossible to turn a square corner inward in the execution of the work, for the obvious reason that we would in that case assume the delivering-point of the guide to occupy absolutely no room whatever. As this is of course impossible, the room occupied by the guide must be provided for or the work cannot be done. To obviate this difficulty I have constructed my guide, as already described, in such a manner that it may be shifted in position, so as to accommodate itself to the changes necessary in the position of the work, and allow the work to be turned to any extent which is likely to be desired. To illustrate its operation, suppose it to be necessary to put in a series of cording into a collar with square corners. The corder is placed, in the first instance, in the position which it occupies as represented in the drawings. The guide is kept in this position till the corner of the work where the angle must be turned reaches it. The position of the guide, as will be perceived, enables the corner of the work, or even an angle somewhat acute, to pass up entirely to the point of the corder. When it has reached this point the position of the guide is changed, it being then turned, with the position represented in dotted red lines in Fig. 1. This allows the work to be turned so as to form a right angle, or even an angle somewhat acute, and it is obvious that the range of change may be made much greater, so as to allow a very acute angle to be turned. The work then proceeds as before. This arrangement also allows shorter curves to be run than could be run by a fixed corder.

It will be observed that the point of the corder is so arranged in reference to the other parts that the needle enters the cloth immediately between the said cord-guide H and the grooved portion of the presser-foot, under which the work passes after leaving the needle, and that the delivering-point of the corder, while made independent of the presser-foot, is placed in immediate proximity to the needle, so as to deliver the cord as closely to the needle as possible, instead of delivering it at a

remote point and depending upon the guidance of the presser-foot or other contingency to bring it into the proper position at the working point. This is important as permitting the cord to be guided much closer to the point of operation than would otherwise be the case. It will also be perceived that the arrangement of the parts is such that the presser-foot rests chiefly upon the work which has been already formed, and that the feed also works principally upon that portion of the work. This is important as securing uniformity and preventing the tendency to draw the work, which would result from feeding the cloth at a point where it was not connected.

It is obvious that the construction of this cord-guide may be varied without evading its essential characteristics and features of novelty—as, for example, the cord-guide may be hung upon a circle or arc of a circle attached to the beam to which the presser-foot of the

sewing-machine is attached, instead of being attached to the plate; or a separate device might be attached to the plate upon which the work is laid, or to some other part of the machine, and the cord-guide attached to it in such a manner as to vibrate or be vibrated around its point as a center without being attached to the upper part of the plate.

Having thus fully described my invention, I claim—

The construction of the cord-guide and its attachment to the machine in such a manner that it can be turned around the point at which the cord is delivered as a center to accommodate the work to be performed, substantially as and for the purpose set forth.

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Witnesses:

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