

(Model.)

E. FAGES-PEYRE.

2 Sheets—Sheet 1.

SEWING MACHINE ATTACHMENT FOR DYEING THE EDGES OF GLOVE
SEAMS WHILE STITCHING AND FORMING THE SAME.

No. 303,271.

Patented Aug. 12, 1884.

FIG. 1.

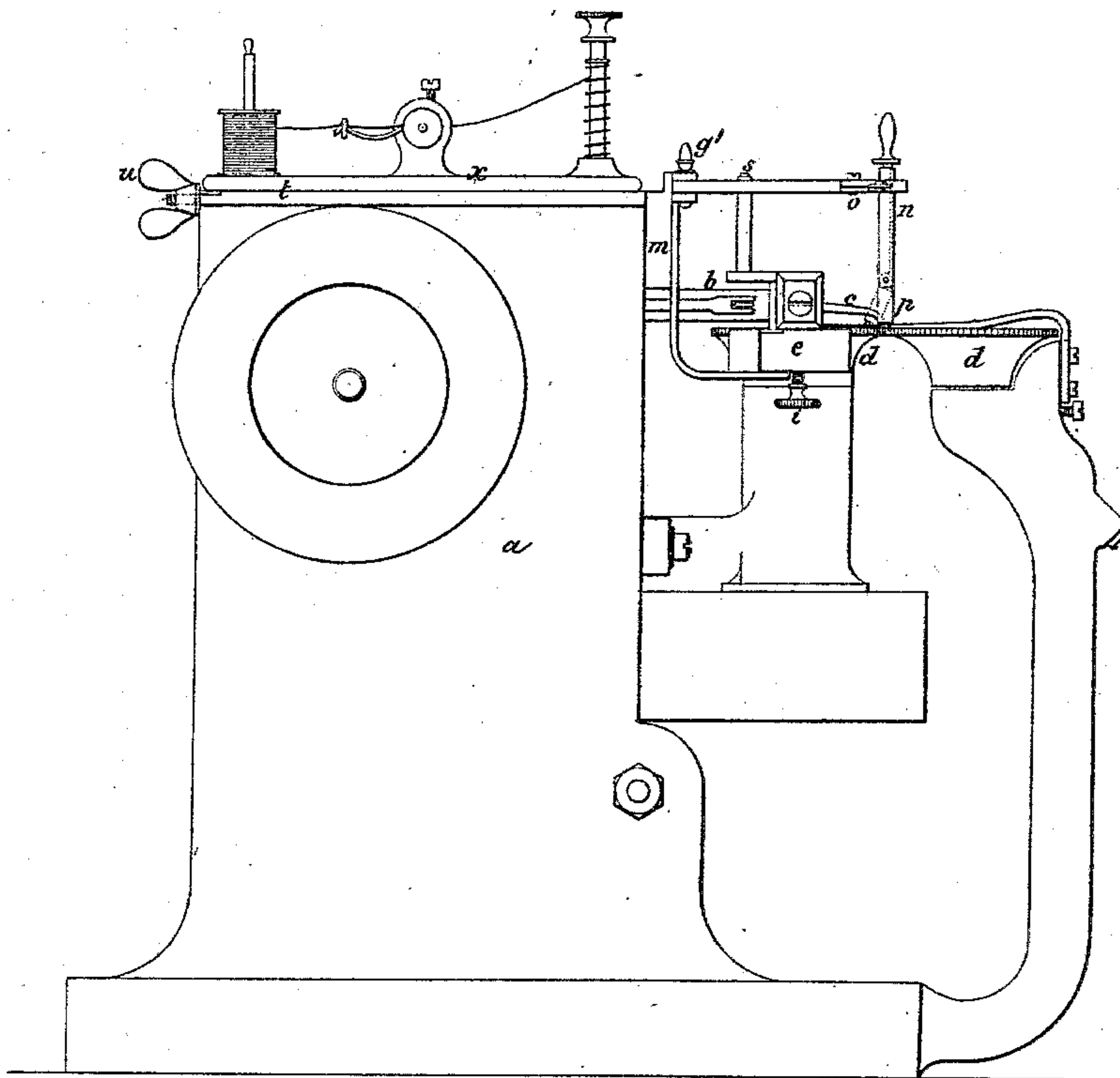


FIG. 2.

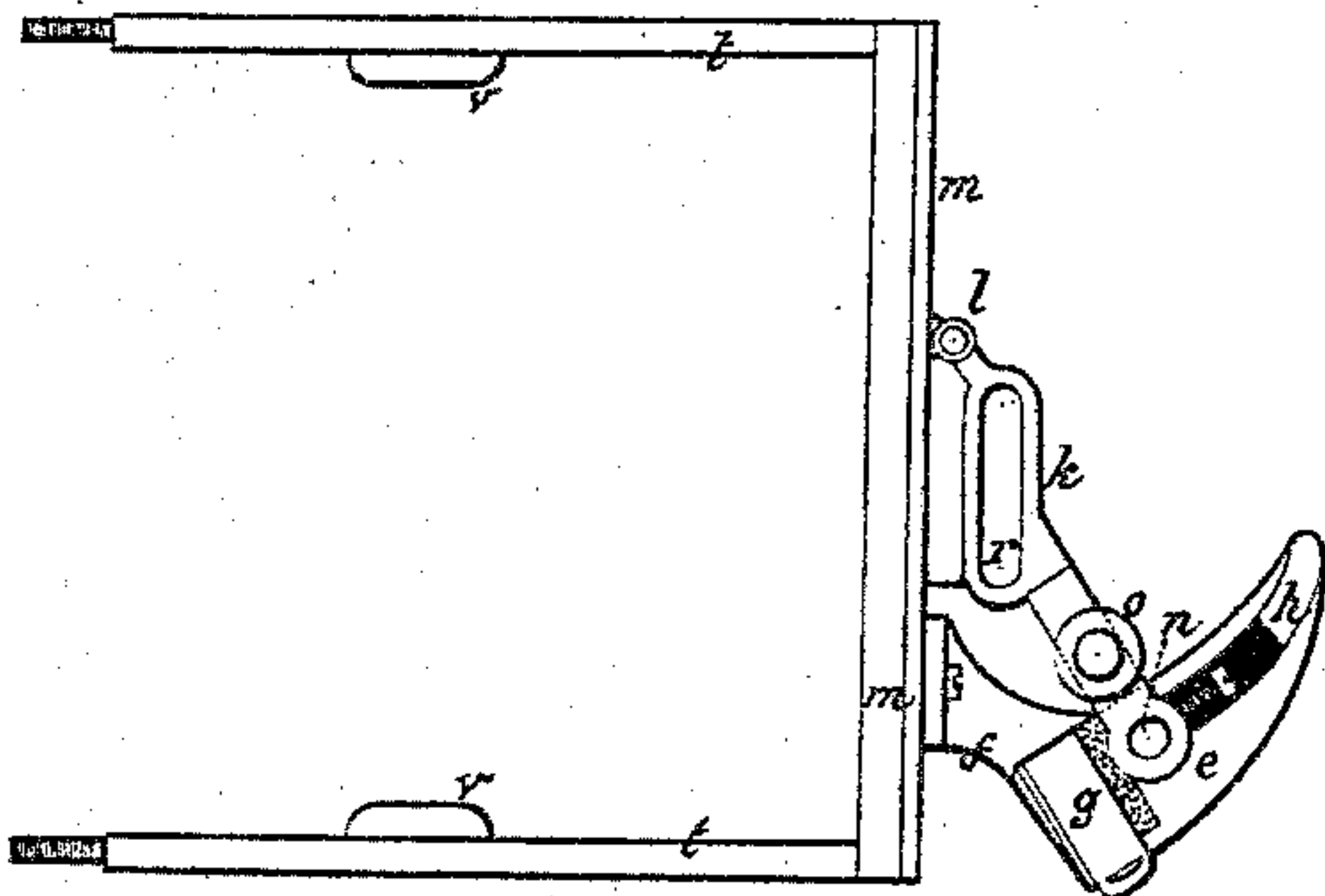


FIG. 5.



FIG. 3.

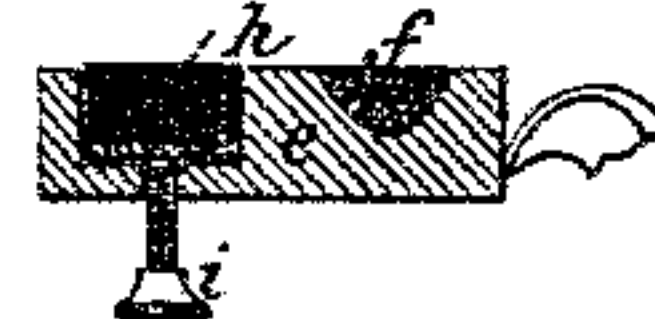
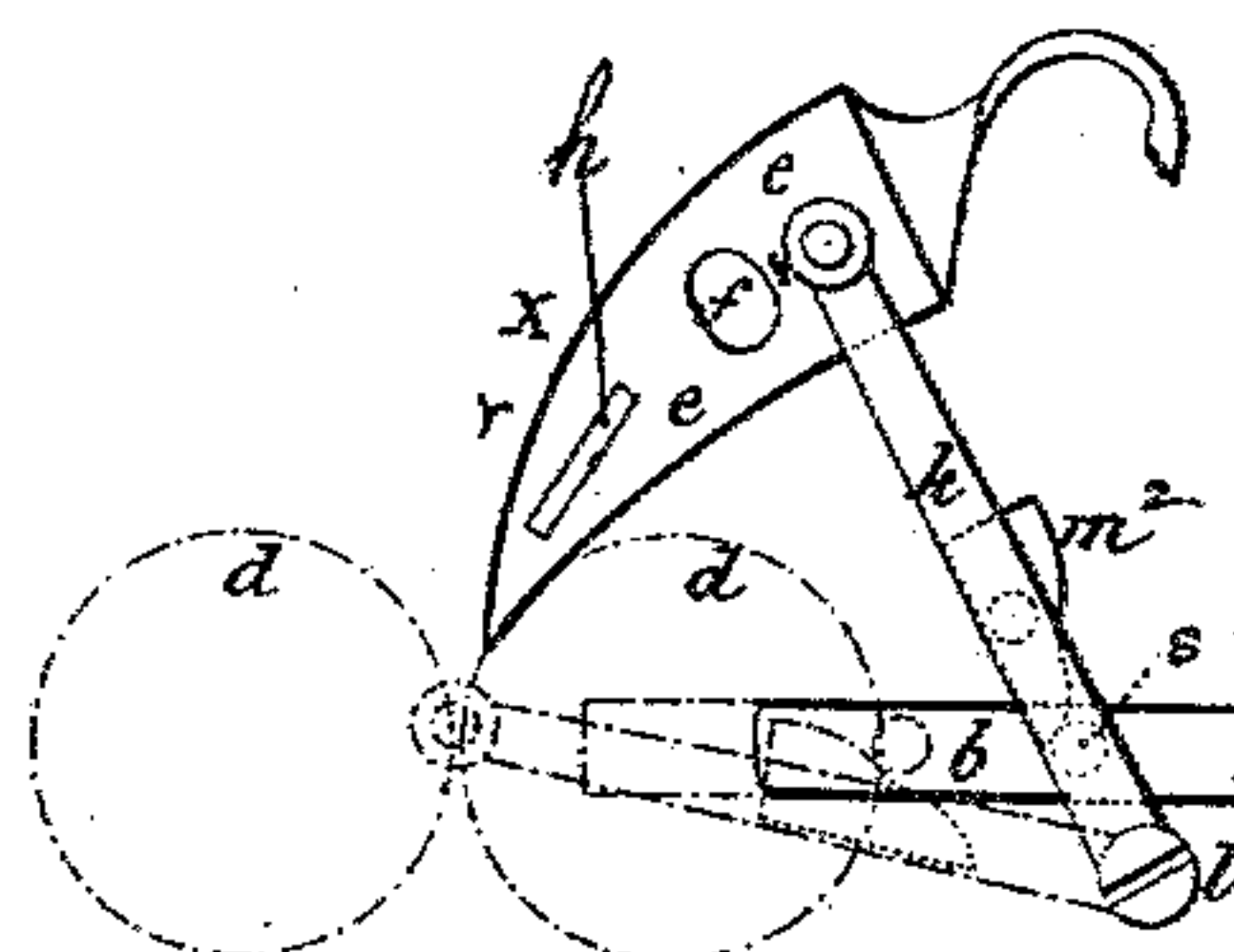


FIG. 4.



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(Model.)

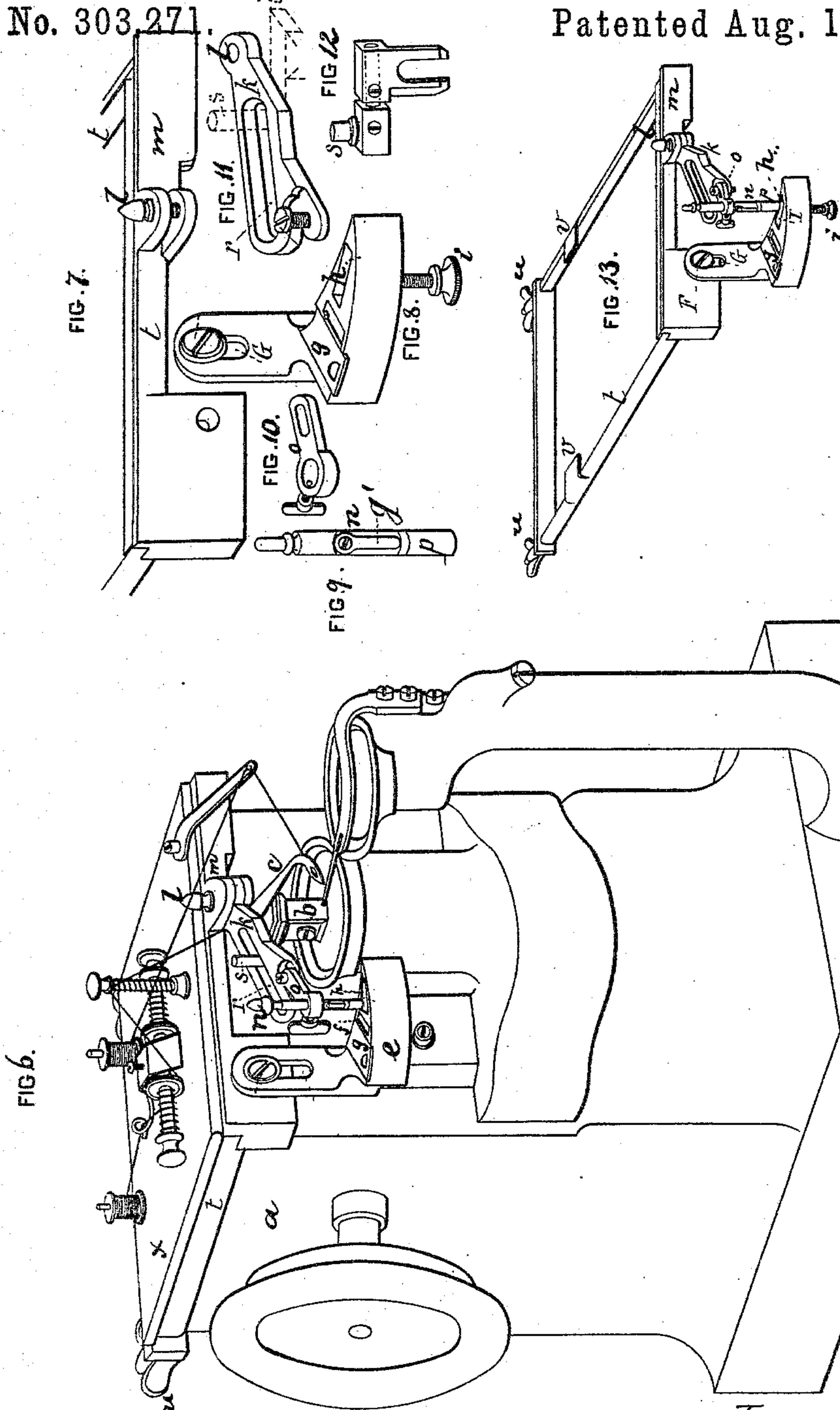
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SEWING MACHINE ATTACHMENT FOR DYEING THE EDGES OF GLOVE SEAMS WHILE STITCHING AND FORMING THE SAME.

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Witnesses:

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Harry M. Spur.

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UNITED STATES PATENT OFFICE.

EDOUARD FAGES-PEYRE, OF PARIS, FRANCE.

SEWING-MACHINE ATTACHMENT FOR DYEING THE EDGES OF GLOVE-SEAMS WHILE STITCHING AND FORMING THE SAME.

SPECIFICATION forming part of Letters Patent No. 303,271, dated August 12, 1884.

Application filed August 9, 1883. (Model.) Patented in France February 1, 1881, No. 140,907, and in Belgium May 13, 1881, No. 54,632.

To all whom it may concern:

Be it known that I, EDOUARD FAGES-PEYRE, of the city of Paris, France, have invented a new and useful system of mechanism for dyeing the edges of the various pieces of which gloves are composed, of which the following is a full, clear, and exact description, and for which I have received Letters Patent of France for fifteen years, dated February 1, 1881, No. 140,907, and of Belgium for fifteen years, dated May 13, 1881, No. 54,632.

My invention consists of a device for dyeing the edges of pieces of which gloves are composed while the same are being sewed, and which can be applied to all machines employed for the sewing of gloves. In the operation of sewing gloves the edges of the various pieces of which the glove is made up remain visible, and it is therefore indispensable, in the manufacture of black gloves especially, that the edges be dyed the same color as the kid or leather of which the glove is composed. Up to the present time various apparatuses placed upon the machine for sewing the gloves have been proposed for automatically effecting this dyeing of the edges. All these apparatuses, more or less complicated, necessitated the employment of reservoirs of ink or dye, which incumbered the machine, beside being defective in their action and difficult to regulate as regarded the flow of the dye, and they moreover did not give a satisfactory result.

The object of my invention is to provide a very simple mechanism, by means of which the dyeing of the edges of the pieces composing the glove can be effected during the time that the sewing is taking place, and that without the employment of any reservoir or of any liquid dye. This mechanism can be applied to all the systems of machines employed for sewing gloves.

In order that the invention may be better understood, I have represented a specimen of it in the annexed drawings, applied to a "Brosser" machine.

Figure 1 is a side elevation of a sewing-machine provided with my attachment. Fig. 2 is a plan or top view of the attachment. Fig. 3 is a vertical longitudinal section of the dye-

receptacle and sponge-carrier which is used in the attachment. Fig. 4 represents a diagram or plan view of a modification of my attachment indicating the two extreme positions of certain parts of the mechanism there shown. Fig. 5 is a detail side view of the jointed brush-holder. Fig. 6 is a perspective view of a Brosser machine containing my invention. Figs. 7 to 13, inclusive, are perspective views showing the parts of the mechanism in detail.

a is the frame of the sewing-machine; *b*, the needle-carrier; *c*, the hook. *d d* are the drawing or feeding cylinders.

My attachment is composed principally of two parts, the one being the dye-receptacle *e*, carrying the cake of dye *h* and the sponge *f*, and the other movable part being the brush-holder and brush *p*, for taking the dye in suitable quantities and applying it to the edges of the glove during the time the sewing takes place. The receptacle *e* is secured by a slotted shank and screw, *G*, to a frame, *m*, which is clamped to the frame *a* of the machine. In the receptacle is, near said frame *a*, a cavity which contains a sponge, *f*. Over a part of this cavity is or may be placed a sliding cover, *g*, so that a part of the sponge projects out of the uncovered part of the cavity. This sponge is kept moist by water which surrounds it in the cavity. Instead of this sponge may be used any other suitable wet spongy matter. Near the other end of the receptacle *e* there is another cavity, in which is placed a cake of dye, *h*, which may be raised or lowered by the screw *i*. (See Fig. 3.)

In the case of dyeing the edges of the pieces composing a black glove, I prefer to compose the cake of dye in the following manner, although I reserve to myself the right of employing any other suitable composition: extract of logwood, twenty to thirty per cent.; extract of sumac, two per cent.; sulphate of iron, five per cent.; oxide of zinc, thirty per cent.; alum, seven per cent. These materials are mixed with water in such a manner that they form a compact paste, and are then molded.

The brush-holder *p* is inserted through a

slotted link, *o*, Fig. 10, which is secured by a screw to a slotted bar, *k*, that is pivoted at *l* to the framing *m*, which is clamped to the frame *a* of the machine. In the slot *r* of the piece *k* is placed a pin, *s*, which is attached to the needle-carrier of the machine, and as this needle-carrier moves the pin *s* moves in the slot *r*, and causes the bar *k* and its attachments to move in the arc of a circle. As the brush is thus moved it passes first over the cake of dye *h*, then over the sponge *f*, which moistens the brush, and as it passes over the cake of dye in its returning movement it takes a portion of the same, which it applies to the edge of the glove which is being sewed.

The brush-holder *p* is more clearly shown in Figs. 5 and 9, and is preferably jointed, and provided over the joint with a spring, *q*, which holds its members in the desired position. This permits the brush to be swung behind the glove for allowing the inspection of the sewing. The position of the brush behind the glove is shown in Fig. 1 by dotted lines. The brush may be adjusted to any convenient height by means of the thumb-screw, which holds it in the link *o*. Through the slot which is situated at the other end of the link *o*, passes a screw by which the link *o* is secured to the bar *k*. The object of this slot is to enable the brush to be placed in such a position that it may properly pass over the sponge, ink, and seam of the glove. The shank of the pin *s*, by which the same is secured to the needle-carrier, consists in reality of two pieces, one of which is forked, as in Fig. 12, said forked end being secured to the needle-carrier. The object of this forked part is to permit vertical adjustment.

A modification of the movable part of my mechanism is shown in Fig. 4, in which the bar *k* is shown to be provided with a projecting cam, *m*², instead of the slot. As the pin *s*, which is attached to the needle-carrier, moves forward, it presses against this cam *m*²,

and thereby moves the brush-bar *p* into the dotted position shown in Fig. 4. The returning movement may be made by the use of a suitable spring or weight.

All parts of my mechanism, except that shown in Fig. 12, are attached to the frame *m*. This frame is provided with straps of metal *t*, having plates *v* projecting inwardly, and which straps are terminated by screw-threads. The frame *m* is placed on the upper outside part of the frame *a* of the machine, so that the plates *v* may rest on the top part of the frame *a* and prevent the parts attached to *m* from slipping down. Over the disengaged ends of the straps *t* is then passed a bar having holes to correspond with the screw-threads with which the ends are provided. Over these ends are then passed suitable thumb-nuts, *u*, which firmly clamp the frame *m* to the frame of the machine. Fig. 13 shows this clamping device with the parts which are secured to the same.

I claim—

1. The combination of the receptacle *e*, carrying the cake *h* and the sponge *f*, with the brush-holder *p*, and mechanism, substantially as described, for moving said brush-holder over the sponge and coloring-matter, and with the feed-rollers *d d*, substantially as herein shown and described.

2. In an apparatus for dyeing the edges of the pieces composing a glove, the combination of the bar *k* with the pin *s*, fixed on the needle-carrier of the sewing-machine, and with the link *o*, brush-holder *p*, and feed-rollers *d d*, substantially as shown and described.

3. The combination of the needle-carrier and needle of a sewing-machine with the hook *c*, bar *k*, pin *s*, brush-holder *p*, receptacle *e*, and feeding-rollers *d d*, substantially as herein shown and described.

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