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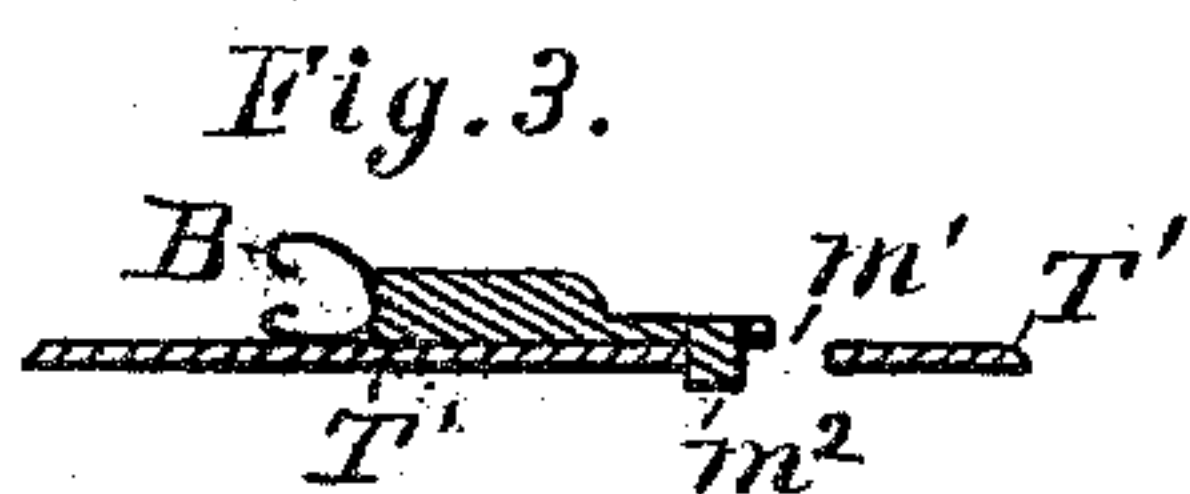
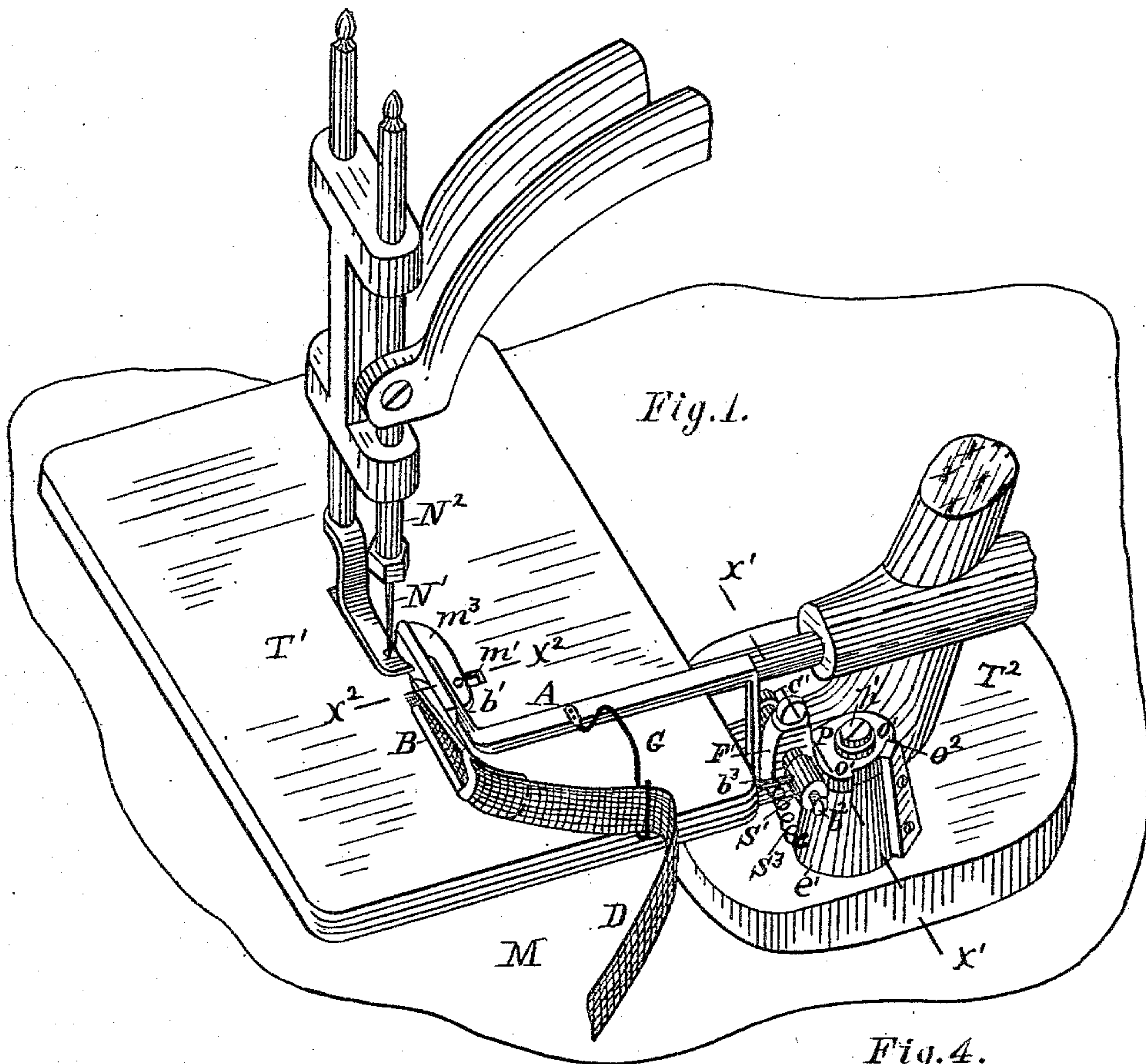
2 Sheets—Sheet 1.

G. M. MORRIS.

BINDER FOR SEWING MACHINES.

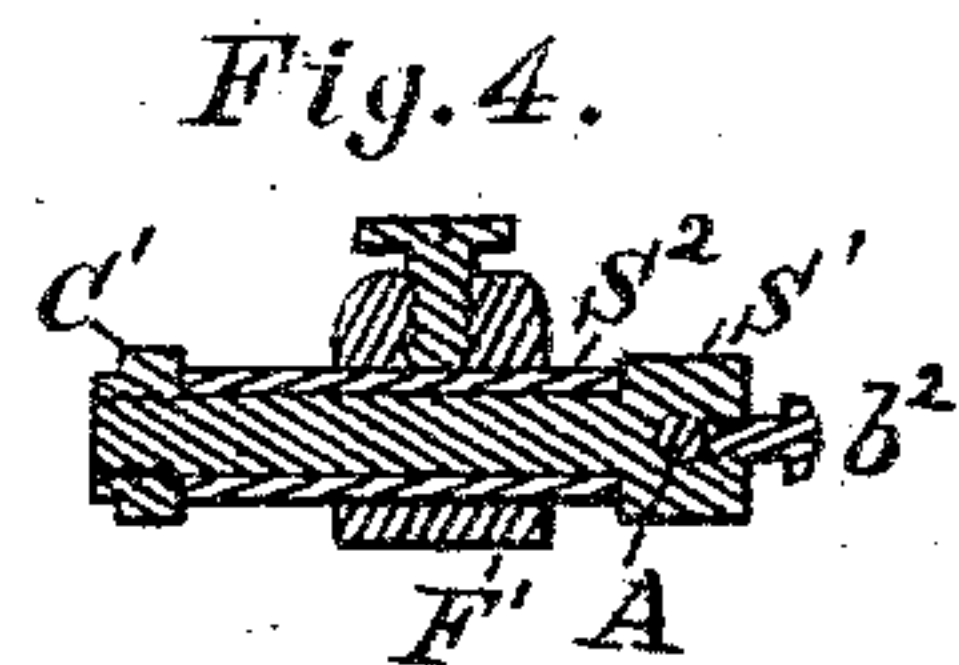
No. 274,634.

Patented Mar. 27, 1883.



Witnesses:

Charles S. Brintnall
Esq.



Inventor:

George Marion Morris
by McHagan—
his attorney—

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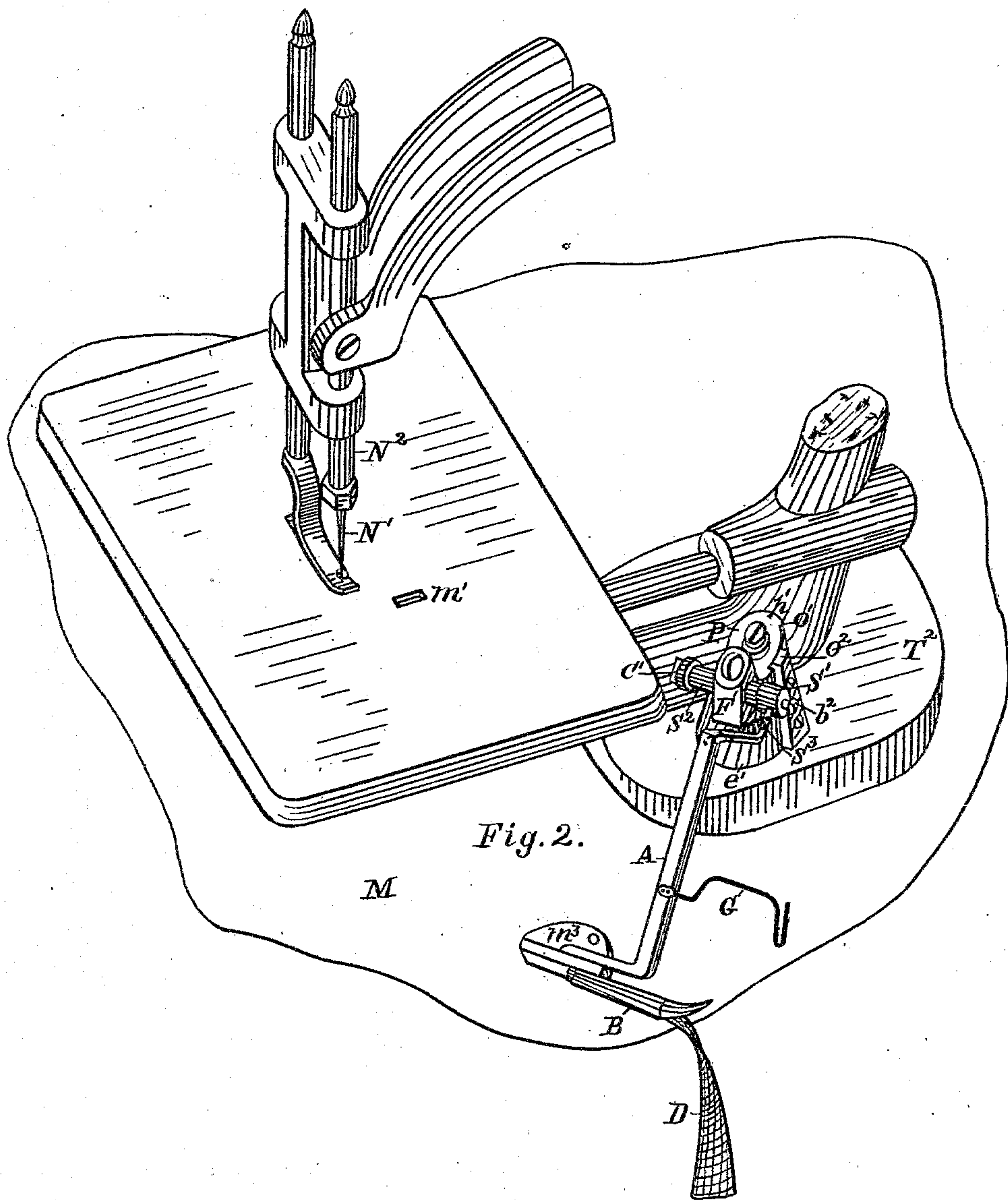
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his attorney

UNITED STATES PATENT OFFICE.

GEORGE M. MORRIS, OF COHOES, ASSIGNOR OF ONE-HALF TO WILLIAM I. BLEAKLEY, OF LANSINGBURG, NEW YORK.

BINDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 274,634, dated March 27, 1883.

Application filed December 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MARION MORRIS, of the city of Cohoes, county of Albany, and State of New York, have invented a new and useful Improvement in Binder Attachments to Sewing-Machines, of which the following is a specification.

My invention relates to binding devices that are attached to sewing-machines to guide and fold the strip or tape while the latter is being secured to the edge of the fabric; and my invention consists, as will hereinafter be described, in a manner of making such binder devices easily and promptly attachable to and detachable from the table-plate of a sewing-machine.

In sewing many kinds of work, and more particularly in the finishing of knit garments, the binding of the parts and the sewing of them, requiring the ordinary use of the machine, have to be done in alternating operations, and it takes time to attach and detach the binder when the latter is connected by the ordinary means in use. To remedy this difficulty and to expedite the connection and disconnection of the binder device is the object of my invention, and this I accomplish by pivoting the binder device to the sewing-machine table in such a manner that it can be swung onto or off from the table-plate, so as to be readily connected with the latter for use and be easily detached when not required.

In the accompanying two plates of drawings, forming a part of this specification, there are shown four figures illustrating my invention, and in all of which the same designation of parts by letter reference is used.

Figure 1 shows in perspective, my pivoted binder when swung up onto the table-plate of a sewing-machine for use. This illustration also shows in perspective the table-plate and detached portions of the several parts of a sewing-machine with which my invention is connected. Fig. 2 shows in perspective the same connected parts that are illustrated in Fig. 1, with the binder device swung from off the table-plate on to the table of the sewing-machine. Fig. 3 shows a vertical section of the binder and table-plate, taken on the line $x^2 x^2$ of Fig. 1. Fig. 4 illustrates a vertical section of that part of the mechanism whereby

the connected binder and arm are hinged, so as to be swung up from and down onto the table-plate, taken on line $x' x'$ of Fig. 1.

The parts of a sewing-machine with which my device is connected and the factors of which it is composed are designated by letter-reference, as follows:

T' indicates the table-plate of the machine; B, the binder, which guides and turns the tape or strip D.

The letter A designates an arm, which is attached to the binder at b' , and at its other end, b^3 , to the hinging-shaft S', the arm A passing through the latter at right angles to it, and being adjustably secured to it by means of the end set-screw, b^2 .

The letter F' indicates a bracket having a sleeved bearing passing through it at right angles to its vertical sides for the hinging-shaft S', the sleeved bearing being indicated at S'. This bracket is attached to a plate, P, that is at p' pivoted to the flat top of the stud e' , so that said plate P, attached to bracket F', arm A, and connected binder B, are free to move around horizontally on said pivot p' between the stops $o' o'$, formed on the edge of said plate P, and the vertical detent o^2 , secured to the stud e' .

The letter O' indicates a nut on the end of the shaft S' for the lateral adjustment of the hinged arm and binder.

T² indicates the flange-plate by which the machine is attached to the sewing-machine table; N', the needle; N², the needle-bar.

The letter m' indicates a slot made in the sewing-machine table-plate, and m^2 a downward projection formed on the under side of the binder-plate m^3 , which projection is constructed to enter said slot to hold the binder in place as against the feed-motion of the fabric.

The letter M indicates a part of the sewing-machine table, and S³ a spiral spring connecting the arm A with the stud e' , the object of which is to pull down by its recoil force the mechanism when in place on the table-plate and to keep the projection m^2 within the slot m' .

The letter G indicates a tape-guide. The mechanism thus used to attach a binder may also be applied to attach a hemmer, if desired.

The operation and function of the parts as thus constructed and arranged are as follows:

With the binder B and connecting-arm A, hinged by the shaft or hinging-pin S', the binder is adapted to be raised from off and to descend onto the table-plate, and by means of the connection made with the binder by the hinged arm A to the pivoted plate P the binder is adapted (when raised on its hinged attachment) to be swung from over the table-plate, so as to descend onto the machine-table, with the binder thus easily adapted to be restored to its position on the table-plate when required. The arm A being connected with the binder and constructed to pass through the shaft S', to be adjustably secured therein by the set-screw b^2 , the position of the binder relatively to the needle may be varied at right angles to the direction of the feed, the projection m' in the slot m^2 being adapted to be moved outwardly and inwardly in the slot for such adjustment. If desired, the bracket F' may be dispensed with and bearings for the shaft or hinging-pin S' formed on the plate P, said bracket being merely an offset formed thereon. While I have shown a sleeved bearing for the shaft or hinging-pin S as formed on the bracket F, the bearings may be directly formed in said bracket or on the plate P, with collars and set-screws on the latter to keep the pin or shaft S' in place.

As the arm A, connected at one end with the binder and having a hinged connection at its other end, adapts the binder to be removed from the table-plate by being turned up and so as to leave the latter free for the passage of the fabric, and which connected binder and hinged arm, in combination with the projection m^2 on the binder bottom and the slot m' in the table-plate, perform a specific office independently of their connection with the pivoted plate P, I do not limit my invention of the before-named combination of factors to their further combination with the plate P.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a binder attachment to a sewing-machine, the combination of the arm A, with one of its ends attached to the binder and its other end constructed with a hinged attachment, by which the arm and connected binder can be

turned up from and down onto the table-plate, with the binder, provided with the projection m^2 , adapted to enter the slot m' in the table or bed plate, constructed and arranged to operate substantially as herein shown and described. 55

2. In a binder attachment to a sewing-machine, the combination of an arm with one of its ends attached to the binder and its other end constructed with a hinged attachment, a horizontal pivoted plate, to which the hinged end of the arm is connected, and the projection m^2 on the binder, adapted to enter the slot m' in the table or bed plate, as and for the purposes herein described and set forth. 60

3. In a binder attachment to a sewing-machine, the combination of an arm with one of its ends attached to the binder and its other end constructed with a hinged attachment, a horizontal pivoted plate, to which the hinged end of the arm is attached, a stud upwardly projected from the table, to the top of which stud the said horizontal plate is pivoted, stops upon the perimeter of the pivoted plate, a detent projected upwardly from said stud and between said stops, and a projection on the under side of the binder adapted to enter a slot in the table or bed plate, substantially as and for the purposes set forth. 65 70 75

4. In a binder attachment to a sewing-machine, the combination of an arm which at one end is attached to the binder and at its other end is constructed to pass through the shaft or pin by which said arm is hinged, a set-screw in said hinging pin or shaft, constructed to engage with said arm where passed through the pin or shaft, and a projection upon the binder, adapted to enter the slot m' in the table or bed plate, as and for the purposes herein set forth. 80 85

5. In a binder attachment to a sewing-machine, the combination of the hinged arm A, attached to the binder, and the tape-guide G, attached to the arm, as and for the purposes set forth. 90

Signed at Troy, N. Y., this 6th day of December, 1882.

GEORGE MARION MORRIS.

Witnesses:

CHARLES S. BRINTNALL,
EDWARD J. HICKS.