

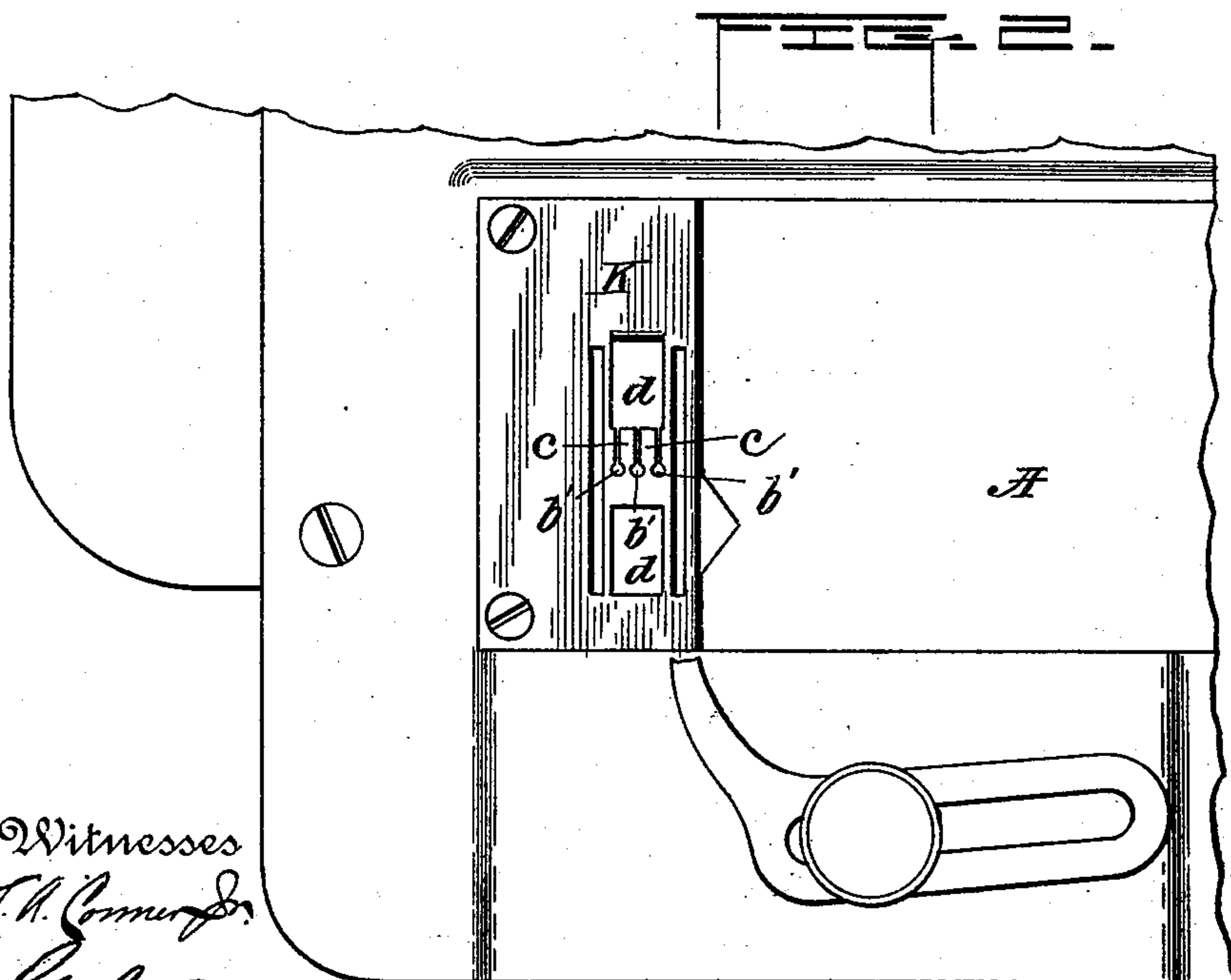
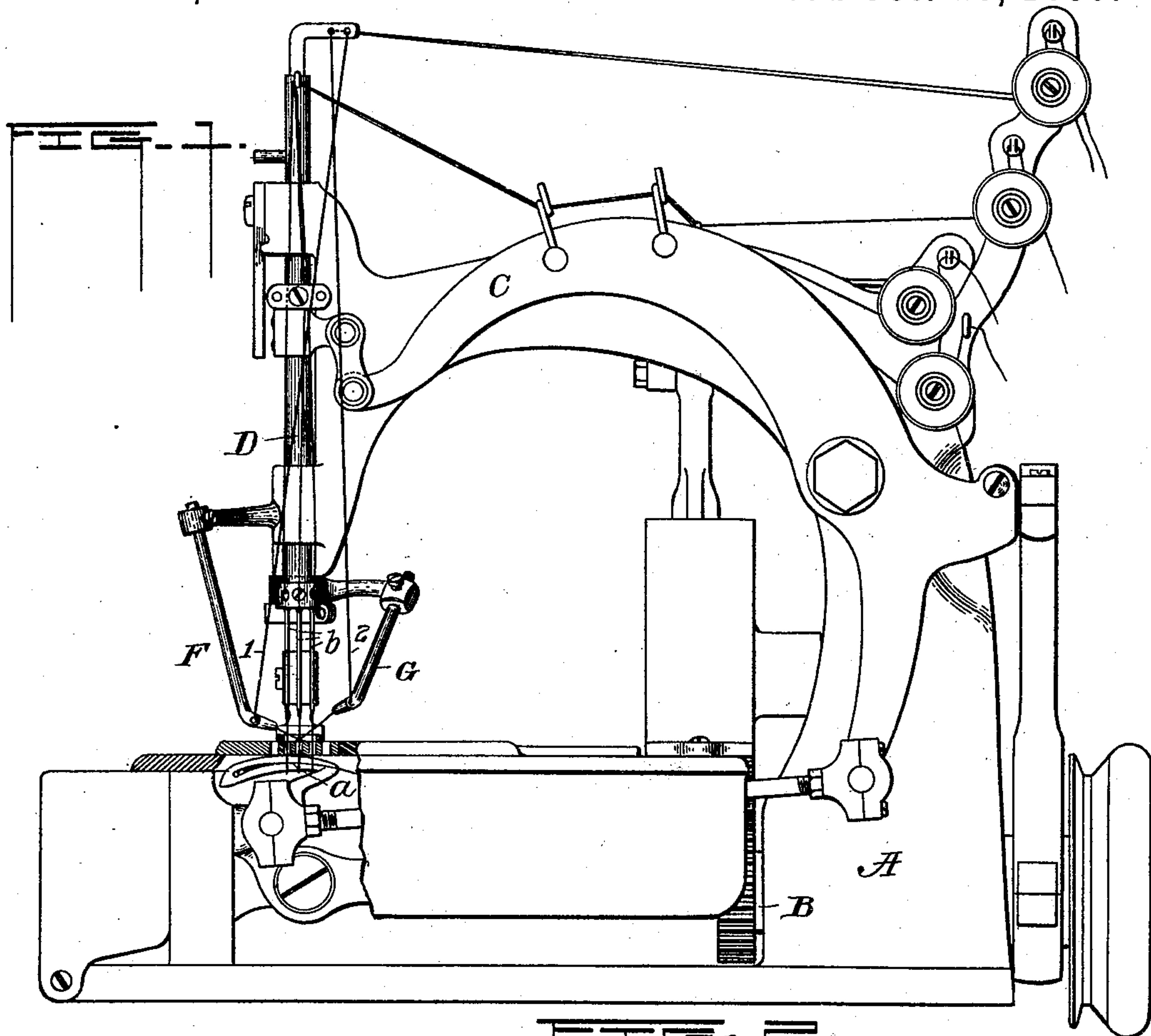
(No Model.)

3 Sheets—Sheet 1.

G. D. MUNSING.  
SEWING MACHINE.

No. 506,524.

Patented Oct. 10, 1893.



Witnesses  
T. H. Connor &

Edw. G. Moore

Inventor  
George D. Munsing  
By Chas. S. Sturtevant  
his Attorney

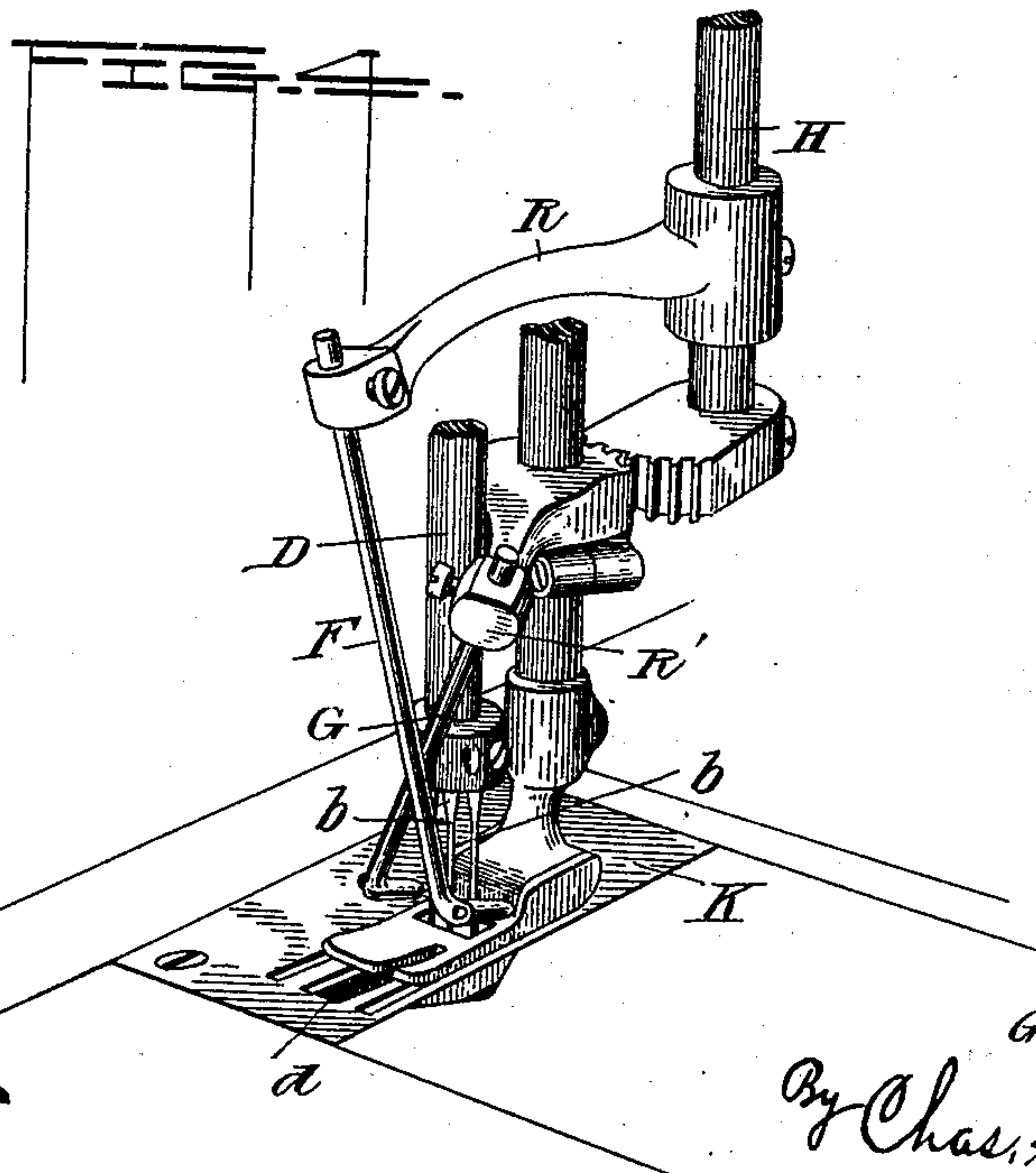
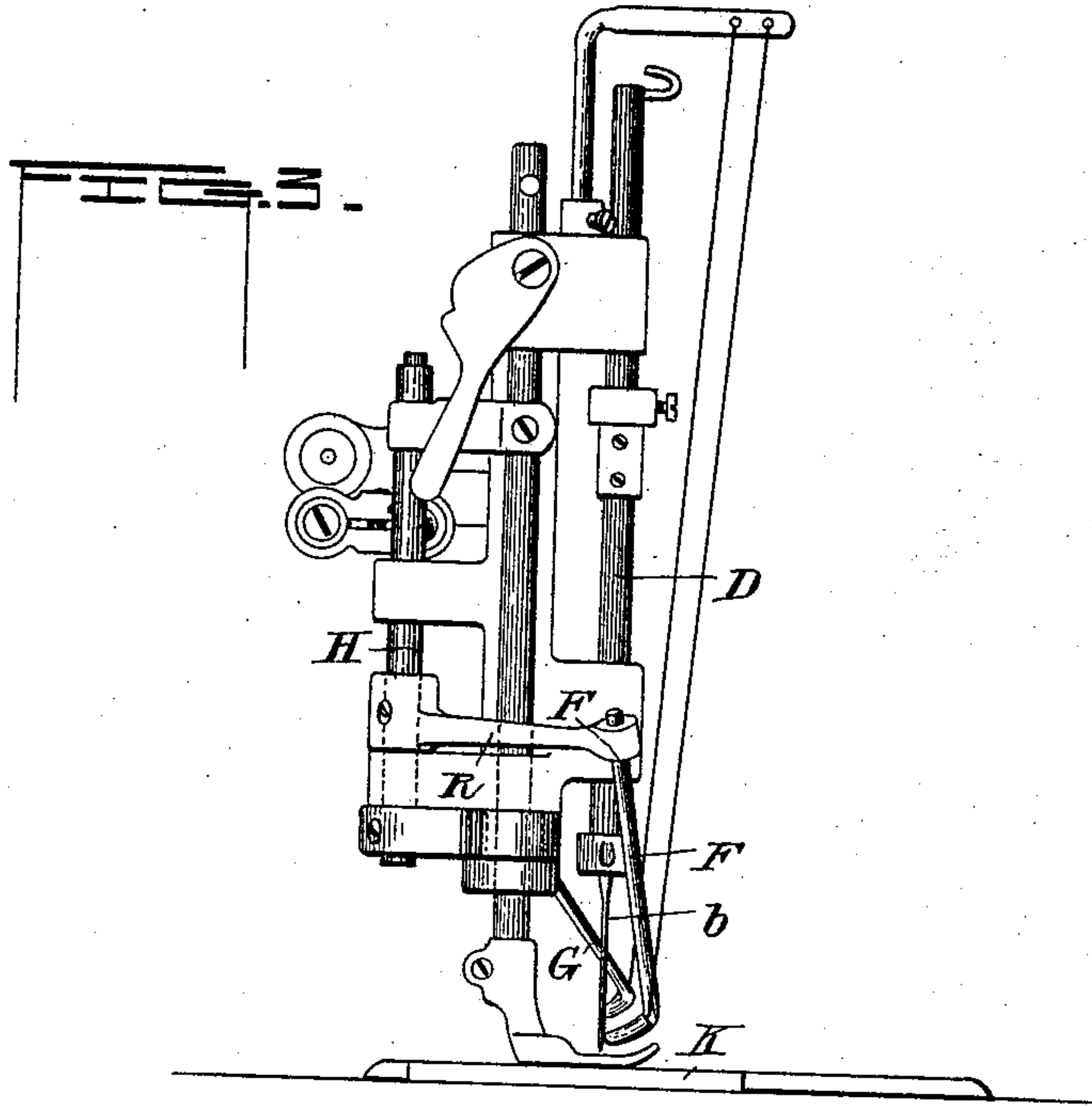
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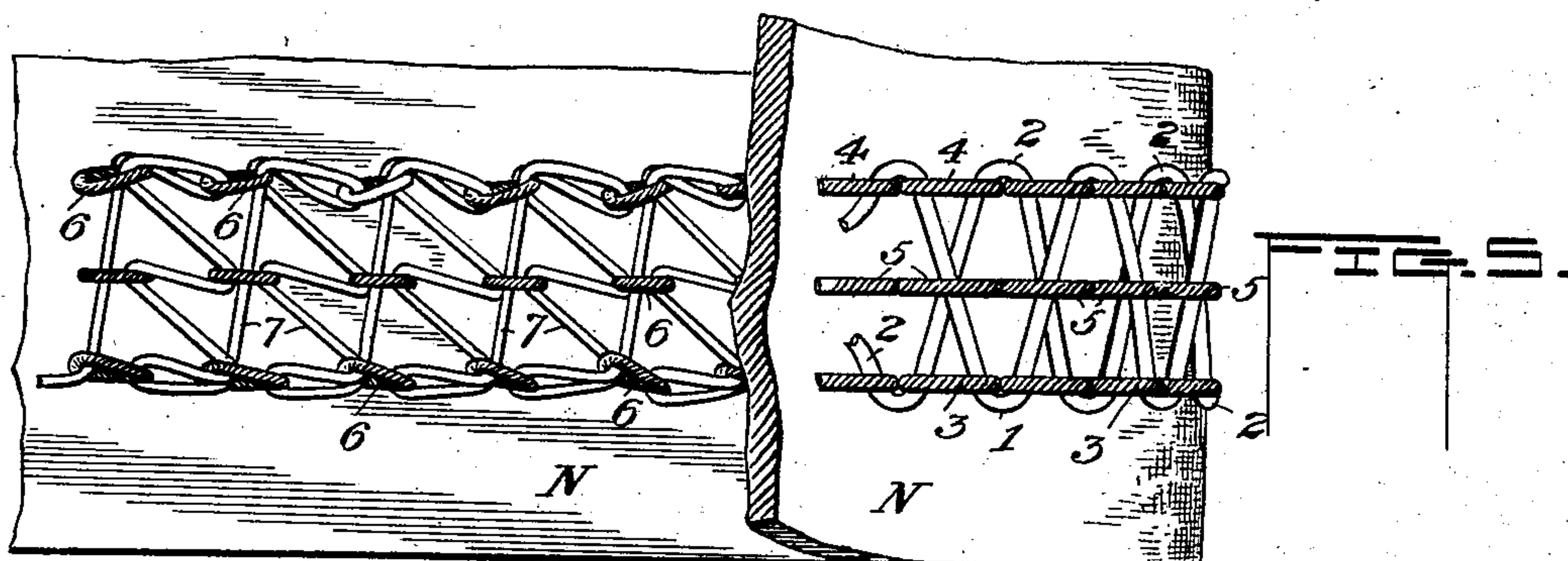
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his Attorney



# UNITED STATES PATENT OFFICE.

GEORGE D. MUNSING, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE UNION SPECIAL SEWING MACHINE COMPANY, OF CHICAGO, ILLINOIS.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 506,524, dated October 10, 1893.

Application filed April 16, 1892. Serial No. 429,409. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. MUNSING, a citizen of the United States, residing at Minneapolis, Minnesota, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a description, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon.

My invention relates to an improvement in sewing machines and its object is to provide a machine adapted to unite the edges of fabrics or to form an ornamental border on the edge or flat face thereof.

The particular class of fabric upon which I propose to operate with my machine is underwear, for ladies especially.

The invention, therefore, consists in the various matters hereinafter described and referred to in the appended claims.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a front elevation of a sewing machine made in accordance with my invention. Fig. 2 is a plan view showing the throat plate. Fig. 3 is an end view of a machine embodying my invention. Fig. 4 is a perspective from the opposite side of Fig. 3; and Fig. 5 is a plan view of the improved stitch made on my machine as applied to a fabric, said fabric being upturned at one end to show a bottom view of the stitch on the left and a top view on the right.

While I have herein shown the seam made on the present machine, it will be understood that the same is not herein claimed since it forms the subject-matter of an application filed by me on the 4th day of May, 1893, Serial No. 472,935.

In the accompanying drawings, A represents the frame of the machine, which is of ordinary construction, B is the main shaft, C the needle arm lever, D the needle bar actuated thereby, and *a* the looper co-operating with the needles to form the stitches. These parts are all of the construction shown in the well known Union Special machines, are actuated in the usual manner, and need not be herein specifically referred to. In

the present machine, I use three needles *b* which are secured to the needle bar in the customary manner, sewing three parallel rows of stitches, the loops in the needle threads which pass down through the fabric being secured on the under side thereof by the looper thread as shown in Fig. 5. There may be more than three needles used.

F, G represent oscillating thread carrying levers reciprocating back and forth across the line of the seam in front of the needles so as to lay the threads which they carry between the outer rows of stitches, the cross threads being bound both by said outer rows and the intermediate row, thereby avoiding the slack which exists if the cross threads are fastened merely at the outer edges of the seam. The thread carrier F is supported upon the end of a horizontal arm R which has a collar upon its inner end, embracing the vertical shaft H. The carrier G is supported upon the end of a horizontal arm R' which is driven by a segmental gear on the lower end of said shaft H. It will be understood that movement is imparted to the shaft H by suitable intermediate connections from the main shaft, and in movement of said shaft H the thread carriers F, G weave the threads 1, 2 across between the outer rows of stitches 3, 4 and are securely fastened thereby, and also by the central row of stitches 5 at the points where said threads 1 and 2 cross each other.

I have provided the machine with a throat plate K having openings for the passage of the side feed dogs as usual. It has also two rectangular openings *d* to allow of the passage of the central portion of the feed dog. Between the openings *d* the throat plate is provided with three slots *b'*, the slots being enlarged at their inner ends to allow for the passage of the needles as shown in Fig. 2. By providing these slots, therefore, two tongues *c, c*, are thus formed on the throat plate, the stitches being formed over these tongues and slipping off the same as the fabric feeds forward. It will thus be seen that the throat plate has one less tongue than there are needles, the enlarged inner ends of the



slots serving as guides for the needles, and the tongues being flat and the slots between them narrow, there is offered a firm base upon which the fabric may rest while the needles ; are passing through the same.

The seam made on my machine is shown in Fig. 5, in which N represents the fabric. The upper threads 3, 4 and 5 have a series of loops 6 passed down through the fabric and  
10 secured upon the under side thereof by the thread 7 carried by the looper *a*. Upon the upper side cross threads 1, 2 are laid between the outer rows of stitches by the thread carriers F, G, and are bound down to the fabric  
15 by the outer and intermediate rows. This seam, however, as above stated, does not form a part of the present invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—  
20

1. In a sewing machine in combination with two outer vertically reciprocating thread carrying eye pointed needles, an intermediate needle and complementary stitch forming  
25 mechanism, a throat plate having openings for the passage of the feed dogs, slots for the passage of the needles, and a plurality of

tongues formed by said slots, arranged parallel to each other, and a horizontally reciprocating thread carrying device oscillating back 30 and forth across the line of the seam, the thread carried thereby being secured by the outer and intermediate rows of stitches; substantially as described.

2. In a sewing machine in combination with 35 two outer vertically reciprocating thread carrying eye pointed needles, an intermediate needle, and a single looper co-operating with said needles to form three parallel rows of stitches, a horizontally reciprocating thread 40 carrying device oscillating across the line of the seam and adapted to deposit a thread so as to be secured by the needles, and a throat plate having a series of longitudinal slots corresponding in number to the needles, and parallel 45 tongues formed by said slots over which the threads are laid; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE D. MUNSING.

Witnesses:

A. C. PAUL,

C. G. HAWLEY.