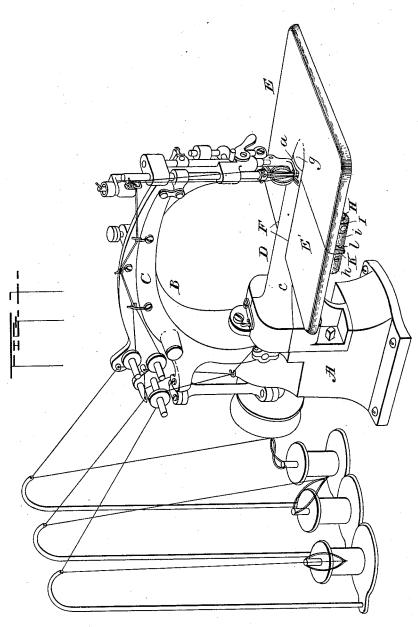
L. MUTHER. BED PLATE FOR SEWING MACHINES.

No. 523,917.

Patented July 31, 1894.



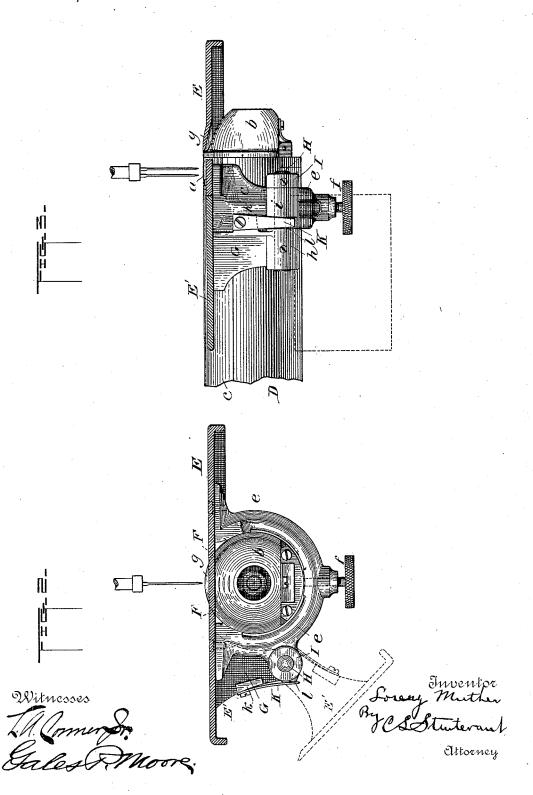
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UNITED STATES PATENT OFFICE.

LORENZ MUTHER, OF OAK PARK, ASSIGNOR TO THE UNION SPECIAL SEWING MACHINE COMPANY, OF CHICAGO, ILLINOIS.

BED-PLATE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 523,917, dated July 31, 1894.

Application filed October 6, 1893. Serial No. 487,379. (No model.)

To all whom it may concern:

Be it known that I, LORENZ MUTHER, a citizen of the United States, residing at Oak Park. in the county of Cook, State of Illinois, 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 of reference marked thereon.

My invention relates to sewing machines and particularly to that class known as cylinder machines in which the work to be sewed rests upon or over the end of a cylindrical bed plate, as for instance in sewing the vamps 15 of shoes and other similar work.

The object of the present invention is to provide an attachment for sewing machines of the above class whereby the machine can be converted into a flat bed machine and used 20 for ordinary work.

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

In the accompanying drawings which illus-25 trate my invention, Figure 1 is a perspective view showing the Union special cylinder vamping machine with my attachment applied. Fig. 2 is an end view partly in section

of my present invention, and Fig. 3 is a simi-30 lar side view.

In the drawings A represents the standard of the ordinary Union special cylinder vamping sewing machine, B the overhanging arm or gooseneck, and C the needle lever. The 35 needle bar, presser-foot, guide-foot, needles, &c., are all of ordinary and well known construction and need not be herein specifically

referred to.

D represents the cylindrical bed of the ma-40 chine having the curved throat plate a and the tapering hinged end cap b through which access is gained to the end of the machine. This cylindrical bed D is a casing within which is supported the looper, looper rock shaft, 45 looper rocker arm, feeding mechanism, main shaft and take up, and it is provided with a removable top plate c through which access is had to the machine for threading the looper, adjusting the throw of the feed bars and the 50 like.

whereby the cylindrical bed machine can be converted into a flat bed machine it is desirable so to construct the plate that although to all intents and purposes the cloth plate 55 will be flat yet there must be ready access to the looper and feeding mechanism and this too without necessitating the expenditure of time sufficient to remove the entire attachment, and it will be noticed hereinafter that 60 this object is accomplished by my device. This attachment is formed in the shape in outline of the ordinary bed plate of the machine and consists of a flat rectangular plate E provided with a longitudinal slot F to fit 65 over the upper portion of the cylindrical bed plate as shown in Fig. 1, it being slid into position longitudinally. To the under side of the plate E is secured by means of screws d (shown in Fig. 2) the yoke e curved to con- 70 form to the shape of the cylinder which latter passes through the yoke, a set screw f passing through the bottom part of the yoke up into the under side of the cylinder thereby securing the flat bed plate in proper position, the 75 sides and outer end of the slot resting upon and partly inclosing the top part of the cylinder, and in order to insure the more even resting of the plate I preferably form it with a slight tapering bulge g to conform to the 80 shape of the end cap of the cylinder.

As hereinafter stated the longitudinal slot in the flat plate is narrower than the transverse diameter of the cylinder, being of width sufficient to allow the throat plate to project 85 through and to allow free action of the feed dogs, &c. Hence said plate partially covers the cylinder, and in order to provide an easy entrance to the looper and feeding mechanism the part E' of the flat plate is hinged so go that, although when in position for use it partially covers the removable top plate of the cylinder, when swung to the position shown in dotted lines in Figs. 2 and 3 it frees the top plate and allows the same to be removed. 95 It will be noticed that this is an important advantage in my machine for in order to thread the looper, &c., it is not necessary to remove the attachment. This hinged part E' has a web G extending downwardly from its 100 under side on the end of which is a sleeve h rig-In providing an attachment such as mine, I idly secured to a pivot bolt or shaft H which

passes through and is free to turn in a sleeve | i fixed to the yoke. Upon the other end of the shaft a collar I is secured.

A lug k attached to the web G has secured 5 to it a plate spring K the lower end of which rides upon the inclined cam l on the sleeve iwhereby the spring holds the cover E' in either open or closed position.

Having thus described my invention, what 10 I claim as new, and desire to secure by Letters

1. In a sewing machine having a cylindrical casing forming the bed plate, and inclosing certain of the working parts, a supple-15 mentary work plate supported by said casing and removably secured thereto, and having a hinged section adapted to be swung back to expose the casing without removing the entire plate, substantially as described.

2. In combination with a sewing machine having a cylindrical bed plate, a flat bed plate having a longitudinal slot adapted to fit upon the cylinder, the sides of said slot embracing the cylinder, and a yoke supported from the 25 flat bed plate and adapted to receive the cylinder, with means for securing the cylinder and yoke together; substantially as described.

3. In combination with a sewing machine having a cylindrical bed and a removable top 30 plate therefor, a flat bed plate removably secured to said cylinder, and having a hinged

portion partially covering the removable top plate whereby access can be had to the cylinder for the purpose of removing the top plate; substantially as described.

4. The herein described attachment for converting a cylinder sewing machine into a flat bed machine comprising a flat plate having a hinged portion, a yoke for receiving the cylinder, and means for securing the flat plate 40 to the cylinder, said plate being slotted, for the upper part of the cylinder to project through and thus to form part of the work plate; substantially as described.

5. The herein described attachment for con- 45 verting a cylinder sewing machine into a flat bed machine comprising a plate, a yoke secured to the under side thereof and provided with a screw to pass into the under side of the cylinder, a sleeve attached to one side of 50 said yoke, and having a cam thereon, a shaft passing through said sleeve, and a hinged portion of the plate provided with a sleeve secured to the shaft and having a spring adapted to ride on the cam; substantially as described. 55

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

LORENZ MUTHER.

Witnesses: CHESTER MCNEIL, W. P. NORTH.