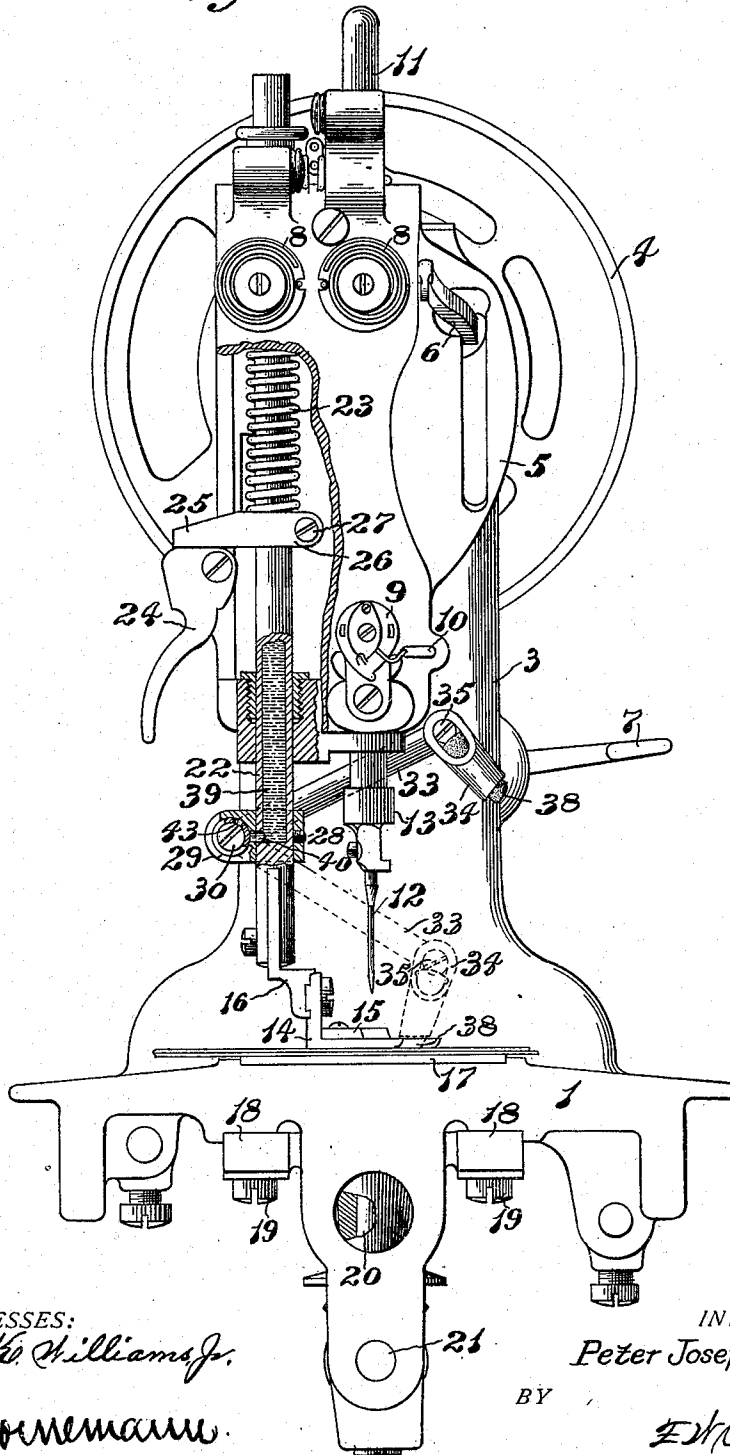


P. J. BLACK.
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APPLICATION FILED FEB. 8, 1908.

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Patented Oct. 19, 1909.
2 SHEETS—SHEET 1.

Fig. 1.



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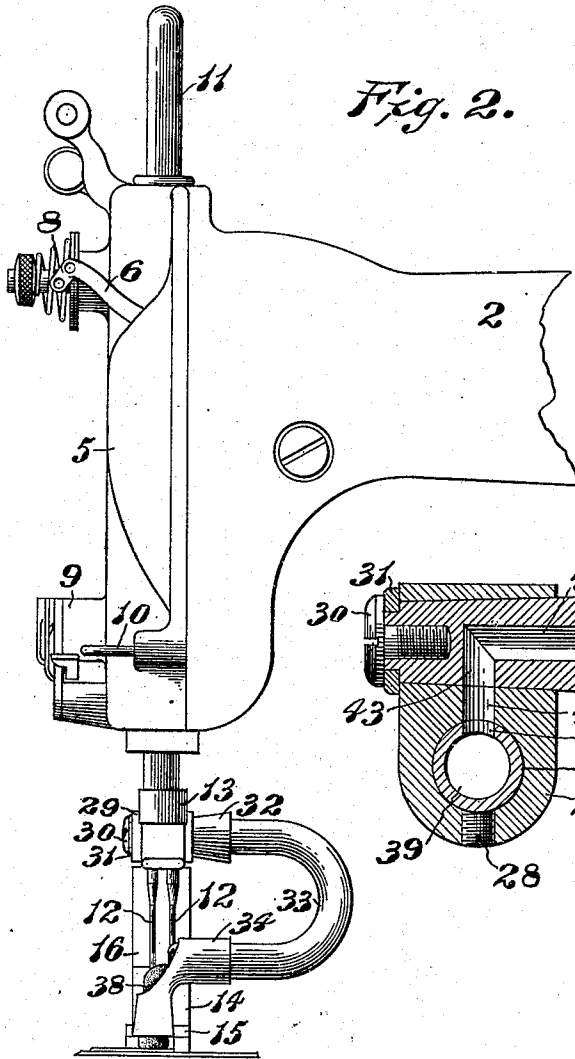


Fig. 2.

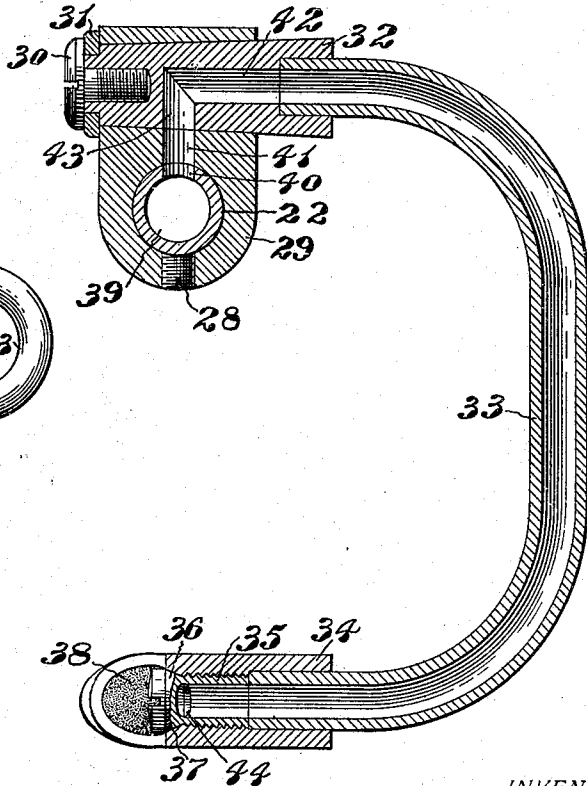


Fig. 3.

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UNITED STATES PATENT OFFICE.

PETER J. BLACK, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

SEWING-MACHINE-LUBRICATING DEVICE.

937,045.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed February 8, 1908. Serial No. 414,858.

To all whom it may concern:

Be it known that I, PETER J. BLACK, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Sewing-Machine-Lubricating Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improved means for storing, conducting and applying lubricants to materials in advance of and in line with the seam formation, and has for its object to provide a simple and easily manipulated device.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a view in front end elevation of a sewing machine equipped with my improved mechanism, the latter being shown partially in section to better illustrate the valve mechanism for controlling the flow of the lubricant. Fig. 2 is a front side elevation of the front end portion of the overhanging arm of the sewing machine together with my improved mechanism, the latter being shown adjusted to its operative position relatively to the seam formation. Fig. 3 is an enlarged view of my improved mechanism, mainly in central section, illustrating the means employed for conducting the lubricant from the source of supply to the felt or material employed for delivering it directly to the surface of the material being stitched.

In describing my improvement, only such limited reference will be made to the usual well known parts of the sewing machine as is deemed necessary for a proper understanding of my invention.

Referring to the figures, 1 is the bed-plate of the sewing machine, 2 the overhanging arm, 3 the arm standard, 4 the band wheel, 5 the arm face plate, 6 the take-up, 7 the stitch-adjusting lever, 8 the needle-thread tensions, and 9 and 10 the thread controller and thread leader, respectively. 11 is the needle-bar, 12, 12 the needles carried by said bar, 13 the needle-bar thimble, 14 the cloth-presser, 15 the needle guard plate, 16 the cloth-presser bar bracket, 17 the cloth-support and 18 the loop-taker bracket secured by screws 19, 19, to the underside of the bed-plate 1, and into said bracket is mounted the vertically arranged loop-taker-driving shaft

20, carrying at its upper end the commonly employed loop-taker (not shown), said shaft being driven, through the commonly employed gears (not shown) and counter shaft 21, from the commonly employed lower or hook-driving shaft (not shown).

All the foregoing descriptive matter pertains to commonly employed means which may be as herein pointed out or of any approved form of construction for effecting the stitch formation and for advancing the material to the action of the needle.

22 is the cloth-presser bar mounted in the usual manner in the forward or free end of the overhanging arm and yieldingly held in its depressed position by the commonly employed spring 23, and moved, at the will of the operator, in the opposite direction through the commonly employed presser-lifting lever 24 acting on the lug 25 of the pinch collar 26, which latter is secured upon said presser-bar by a pinch screw 27.

To the lower end of the cloth-presser bar is secured by screw 28 a bracket 29 which, in turn, has secured in it, by screw 30 and washer 31, a spigot 32 of the usual tapered form, thus effecting the ordinary spigot joint between the spigot 32 and bracket 29.

33 is a conduit which at one end is secured, in the present instance, by soldering, in the spigot 32, its opposite end being secured, in like manner, in an absorbent receiver 34 which has threaded into it a screw 35 provided with a beveled wall 36 adapted to coact with a beveled wall 37 formed on the inner surface of the absorbent receiver 34, which latter is provided with a suitable absorbent 38, as felt, leather, wicking, etc., which acts to distribute a thin film of lubricant over the surface of the material being acted upon, and in line with the seam formation.

39 is a receptacle for storing the supply of lubricant, and is formed by tubing the cloth-presser bar 22 to within a short distance of its lower end, said receptacle being provided at its lower end with a duct 40 arranged in alinement with a duct 41 formed in the bracket 29. The spigot 32 is provided with transversely arranged intersecting ducts 42 and 43 the former of which is arranged in line with the conduit 33, and the latter, when the absorbent receiver 34 is adjusted to its operative position as illustrated in Fig. 2, is in alinement with the ducts 40 and 41, thus

forming a spigot joint for permitting or preventing the flow of the lubricant into the conduit 33, at the will of the operator, by the adjustment of said conduit and attached parts into and out of operative relationship with the material being stitched, as shown by dotted and full lines, respectively, Fig. 1.

To control the amount of lubricant delivered to the absorbent 38, the screw 35 is tubed for a portion of its length and provided at its inner end with an outlet 44 which, when the screw is turned slightly out, permits the lubricant to flow between the beveled surfaces 36 and 37 to the absorbent 38, the amount of lubricant required being controlled by the relative adjustment of said beveled surfaces.

While I have illustrated and described my invention as applied to a two-needle sewing machine, it is to be understood that it is equally applicable to sewing machines for effecting either single or multiple lines of stitching, dependent upon the nature of the production required.

What I claim is:—

1. In a device for sewing machines for lubricating the material being stitched, a cloth-presser bar provided with a receptacle for lubricant and having a duct, a spigot, a conduit provided with an absorbent receiver and adjustably connected through said spigot with said duct, substantially as described.

2. In a device for sewing machines for lubricating the material being stitched, a lubricant receptacle mounted in the free end of the overhanging arm of the sewing machine and provided with a duct, a spigot, a conduit provided with an absorbent receiver and adjust-

ably connected through said spigot with said duct, in combination with adjusting means for controlling the amount of lubricant required, substantially as described.

3. In a device for sewing machines for lubricating the material being stitched, a lubricant receptacle mounted in the free end of the overhanging arm of the sewing machine and provided with a duct, a bracket secured upon said receptacle and provided with a co-acting duct, a spigot capable of axial movements mounted in said bracket and provided with transversely arranged coacting ducts, a conduit carried by said spigot and provided with an absorbent receiver capable of adjustment about the axis of said spigot, substantially as described.

4. In a device for sewing machines for lubricating the material being stitched, a spigot, a lubricant receptacle consisting of the commonly-employed partially tubed cloth-presser bar, said bar being mounted in the usual manner and capable of vertical movements in suitable bearings located in the overhanging arm of the sewing machine and provided at its lower end with a duct, and a conduit adjustably connected through said spigot with said duct and provided with an absorbent receiver, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

PETER J. BLACK.

Witnesses:

A. M. DONIHUE,
J. S. FINCH.