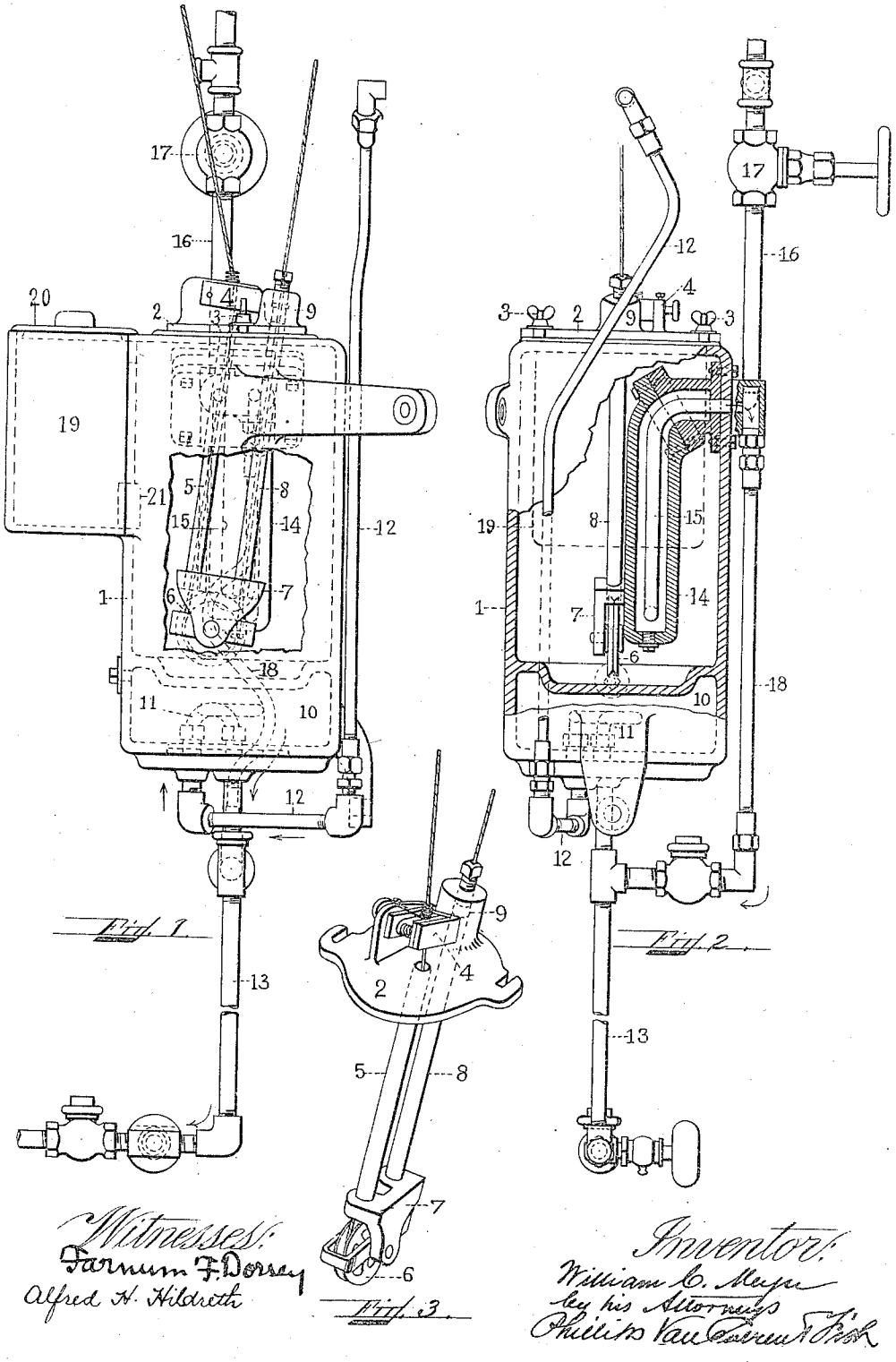
W. C. MEYER.

WAX POT FOR SEWING MACHINES.

APPLICATION FILED MAR. 1, 1906. RENEWED JULY 18, 1910.

1,011,224.

Patented Dec. 12, 1911.



Witnesses:
Farnum F. Dorsey
Alfred N. Hildreth

Inventor:
William C. Meyer
by his Attorneys
Phillips Van Santvoord & Fish

UNITED STATES PATENT OFFICE.

WILLIAM C. MEYER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

WAX-POT FOR SEWING-MACHINES.

1,011,224. Specification of Letters Patent. Patented Dec. 12, 1911.

Application filed March 1, 1906, Serial No. 303,604. Renewed July 18, 1910. Serial No. 572,583.

To all whom it may concern:

Be it known that I, WILLIAM C. MEYER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Wax-Pots for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wax pots for sewing machines.

In wax pots for use in connection with sewing machines using waxed thread difficulty is encountered in maintaining the wax at the proper temperature to retain its fluid condition without its becoming overheated and injured or caused to boil over, and in the use of a wax pot as usually constructed, in which the wax receptacle is heated by a heating chamber contiguous thereto provided with steam or hot oil or other hot fluid, frequent attention is necessary on the part of the operator to control the operation of the heating device so as to maintain the proper temperature in the wax. When heat is first applied to the cold wax in the wax pot in order to start the operation of the wax pot and the sewing machine some time must elapse before the wax is sufficiently warmed for use. The operator therefore turns on all the available steam or other heating material in order to expedite the melting of the wax. After the wax has been melted, however, the supply of steam must be greatly reduced or the wax will be overheated, and it is difficult to ascertain the proper adjustment of the valves or other controlling devices to secure the proper amount of heat to maintain the wax in fluid condition.

One object of the present invention is to produce a wax pot in which the wax receptacle is provided with a heating device which is sufficient to maintain the wax in fluid condition during the operation of the sewing machine, without the possibility of overheating or boiling the wax, and with auxiliary heating means, which may be thrown temporarily into operation when heat is first applied to the wax pot, in order to facilitate the melting of the cold wax therein, the auxiliary heating means being shut off by the operator after the wax has become melted.

Other objects of the invention will be noted in connection with the description of the illustrated embodiment thereof.

The invention consists in the improved wax pot hereinafter described and defined in the claims.

In the drawings Figure 1 is a side elevation of a wax pot embodying the present invention, with parts broken away to show the interior construction; Fig. 2 is an elevation, partly in section, looking from right to left in Fig. 1; Fig. 3 is a perspective view of the thread-guiding devices.

The illustrated embodiment of the invention is constructed as follows:—The supply of melted wax is contained in a receptacle 1 provided with a cover 2 secured thereto by thumb screws 3. A dry-thread tension 4 of ordinary form maintains the thread under slight tension, and from this tension device the thread passes through a tube 5 fixed at its upper end in the cover 2, to a pulley 6 which is journaled on a hanger 7 fixed to the lower end of the tube 5. After passing about the pulley the thread passes upward through a tube 8 to a stripper 9, of ordinary form, and thence to the sewing machine. The pulley 6, being located near the bottom of the wax receptacle 1, causes the thread to pass through the body of melted wax so as to become waxed, and the stripper 9 removes the surplus wax in the usual manner. The thread-guiding devices are set at a slight angle, as shown in Fig. 1, in order that the thread delivered from them may lead directly to the sewing machine.

The receptacle 1 is normally heated, during the operation of the sewing machine, by a heating chamber 10 formed integral with the bottom of the wax receptacle. The heating chamber contains oil which is heated by a steam coil 11. The steam coil 11 is fed by a pipe 12, which is preferably connected with the heating devices of the sewing machine so as to receive exhaust steam therefrom. The steam after passing through the steam coil 11 is exhausted through a pipe 13. By using exhaust steam in this manner the heating of the wax pot is economically performed, and the heating chamber is so proportioned to the wax receptacle that it cannot overheat the wax or cause it to boil.

The auxiliary heating device for expediting the melting of the cold wax when the wax pot is first put into operation comprises a heating chamber 14 which is fixed at its upper end to the wall of the wax receptacle 1 and bends downwardly so as to depend into and be entirely surrounded by the wax in the wax receptacle. The auxiliary heating chamber is filled with oil, which is heated by a steam coil 15 fed with live steam through a pipe 16 controlled by a valve 17. The exhaust steam from the coil 15 passes through a pipe 18 to the exhaust pipe 13. As shown in Fig. 1, the pipe 18 is curved to permit it to expand and contract freely without straining the joints.

In order that the fresh unmelted wax which is supplied to the wax pot from time to time during the continued operation of the wax pot may not come in contact with the thread, a separate receptacle 19 is provided with a loose cover 20, the two receptacles being connected by an opening 21 at the bottom of the receptacles 19. The cold wax is put into the receptacle 19 and as it melts it flows into the receptacle 1 through the opening 21.

In the operation of the wax pot above described the operator at first turns on the auxiliary heating device by means of the valve 17. As soon as the wax in the wax receptacle 1 has become melted the operator turns off the valve 17, and the wax pot is thereafter kept heated to the proper temperature by the heating chamber 10, without attention on the part of the operator.

The present invention is not limited to the details of construction and operation of the illustrated embodiment, but may be embodied in other forms broadly defined in the claims.

Having now described the invention, what is claimed is:—

1. A wax pot for sewing machines, having, in combination with a sewing machine and steam heating devices therefor, a receptacle for melted wax, a heating chamber therefor fed with exhaust steam from the heating devices of the sewing machine, an auxiliary heating chamber fed with live steam, and a valve for shutting the steam off from the auxiliary chamber when the wax has become melted, substantially as described.

2. A wax pot for sewing machines, having in combination a receptacle for melted wax, a heating device extending into the wax pot so as to be surrounded by the wax, and a heating device located outside of the wax pot, substantially as described.

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

WILLIAM C. MEYER.

Witnesses:
FARNUM F. DORSEY,
HORACE VAN EVEREN.