

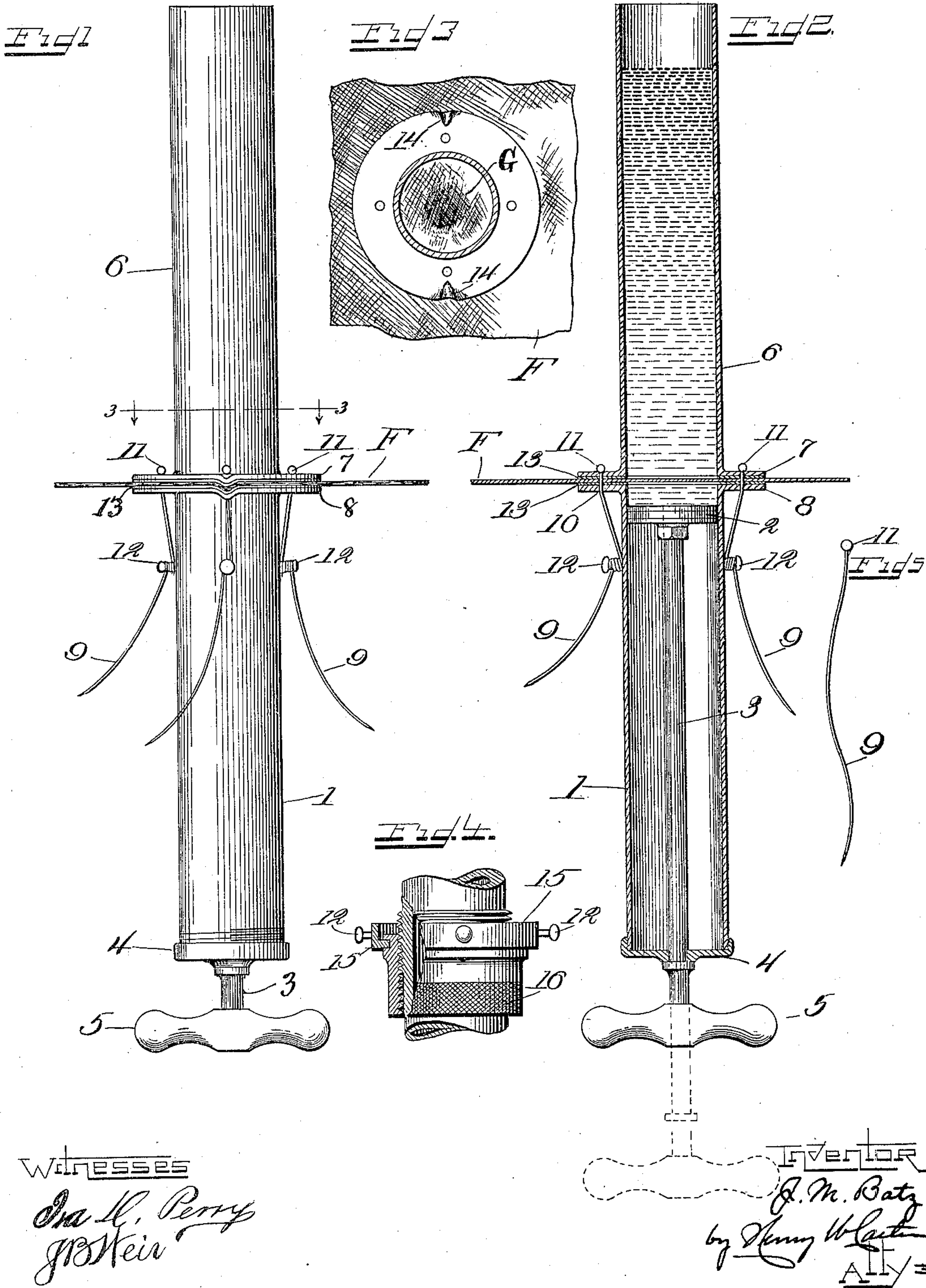
No. 656,802.

Patented Aug. 28, 1900.

J. M. BATZ.
GREASE SPOT REMOVER.

(Application filed Mar. 5, 1900.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHANNA M. BATZ, OF SUN PRAIRIE, WISCONSIN.

GREASE-SPOT REMOVER.

SPECIFICATION forming part of Letters Patent No. 656,802, dated August 28, 1900.

Application filed March 5, 1900. Serial No. 7,324. (No model.)

To all whom it may concern:

Be it known that I, JOHANNA M. BATZ, of Sun Prairie, county of Dane, and State of Wisconsin, have invented a certain new and useful Grease-Spot Remover, of which the following is a specification.

This invention relates to an improved device for removing grease or other dirt spots from garments or fabrics.

The object of the invention is to provide a simple and cheap construction in devices of this character which shall at the same time be more efficient for the purpose intended than anything heretofore known.

The invention consists in the matters hereinafter set forth, and particularly pointed out in the appended claims, and will be fully understood from the following detailed description of the device illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved cleanser in one form, the same being shown as operatively applied to a cloth or fabric which it is desired to clean. Fig. 2 is a sectional elevation thereof, and Fig. 3 is a top plan section taken on line 3-3 of Fig. 1. Fig. 4 is a partially-sectional detail of a modified device for tightening the clamping-wires. Fig. 5 is a detail of one of the clamping-wires removed.

In said drawings, 1 designates a lower pump chamber or cylinder within which a piston 2 is mounted to reciprocate by being secured upon the end of a piston-rod 3. The latter extends out through a central opening in the lower end cap 4 of the cylinder and is provided with a handle 5, by which the piston can be reciprocated at will.

6 designates an upper reservoir-chamber which is placed end to end with the pump-cylinder 1 and is in open communication therewith, flanges 7 and 8 being provided on their adjacent ends to enable them to be held in this relative position. The fabric F to be cleaned is placed between these flanges in such position as to locate the grease or other dirt spot G which it is desired to remove in line with the communicating chambers, as shown in Fig. 3. Suitable means are then provided for clamping the flanges 7 and 8 firmly together upon the fabric, so as to prevent any leakage between them. As here-

inafter shown, these devices conveniently consist of flexible needle-pointed wires 9, which are threaded through registering holes 10 in the flanges until the enlargements or heads 11 upon the ends of the wires opposite their needle-points come to rest against the upper flange. The wires are then secured upon the lower side of the flanges by being wrapped about studs 12, that project from the cylinder 1 at points suitable for the purpose, and in this manner the flanges can readily be drawn so tightly together upon the fabric that no leakage can ensue between the chambers, the inner faces of the flanges being furthermore provided with a lining 13 of rubber or the like, which aids in forming the water-tight joint. To enable the flanges to be more readily brought together with the holes 10 in exact alinement or register with each other, interfitting projections and depressions 14 are shown as suitably provided in their opposing faces, so that when these are brought together the holes 10 will be known to stand opposite each other. These projections and depressions are herein shown as crimped in the margins of the flanges and do not extend inwardly far enough to interfere with the tightening of the joint or materially distort the fabric. The passing of the wires 9 through the holes 10 of course involves the piercing of the fabric; but owing, however, to the fineness of the wires used and to the sharpening of their ends to needle-points this can be done without difficulty or in any way injuring the fabric. The device having been assembled in the manner thus described, a suitable cleansing fluid is poured into the upper chamber or reservoir until it fills the space above the piston 2. The latter is then reciprocated by means of the handle 5, and the fluid thereby forced first by suction and then by pressure back and forth through the fabric until the grease or dirt spot upon the latter is entirely removed. Any suitable cleansing fluid may be employed in this connection, but for removing grease-spots I have found hot soapsuds to be most efficient, and the present device is particularly designed with reference to their use. It is obvious if the grease or dirt spot cannot be removed by a single filling of the hot soapsuds the latter may be poured out and renewed as often

as necessary to fully accomplish the cleansing operation.

It will of course be understood that various changes may be made in the details of the construction shown without in any way departing from the broad spirit of the invention claimed. For example, in Fig. 4 I have shown a construction in which additional means are provided for tightening the wires after winding them upon the studs. In this construction the latter are shown as carried by a ring 15, which is mounted to rotate loosely upon an inner ring 16, that is screw-threaded upon the pump-cylinder, so that by turning the latter ring the stud-ring can be pulled down to tighten the wires 9 to any desired extent. Other devices for accomplishing a similar result or for otherwise clamping the chambers together may also obviously be devised, and my invention is therefore not limited to any particular construction except as made the subject of my more specific claims.

I claim as my invention—

1. A device for cleaning fabrics comprising a pump, a reservoir-chamber communicating with the pump-chamber, and means for detachably clamping the two chambers together upon opposite sides of the fabric to be cleaned, substantially as described.

2. A device for cleaning fabrics comprising a pump, a reservoir communicating with the pump-chamber, coating flanges upon their meeting ends, needle-pointed wires 9, and means for tightening said wires to clamp the flanges together upon an intervening fabric to be cleaned, substantially as described.

3. A device for cleaning fabrics comprising a pump, a reservoir communicating therewith, coating flanges on their meeting ends, clamping-wires 9 and studs 12, substantially as described.

4. A fabric-cleaning device comprising a pump and a separable reservoir-chamber in communication with the pump-chamber, flanges 7 and 8 at their meeting ends, provided with registering holes 10 and interfitting projections and depressions 14, and needle-pointed wires threaded through said holes and provided with heads 11, and wire-engaging studs 12, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two subscribing witnesses, this 24th day of February, A. D. 1900.

JOHANNA M. BATZ.

Witnesses:

HENRY W. CARTER,
N. R. BAILEY.