

No. 764,564.

PATENTED JULY 12, 1904.

A. DREYER.
INJECTION SYRINGE.
APPLICATION FILED AUG. 4, 1902.

NO MODEL.

Fig. 1.

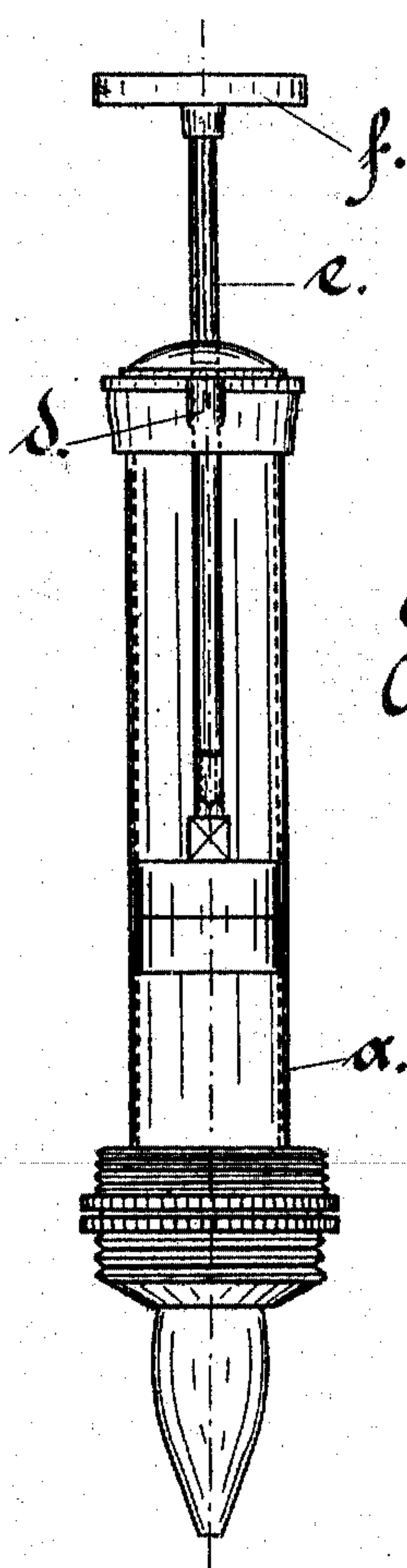
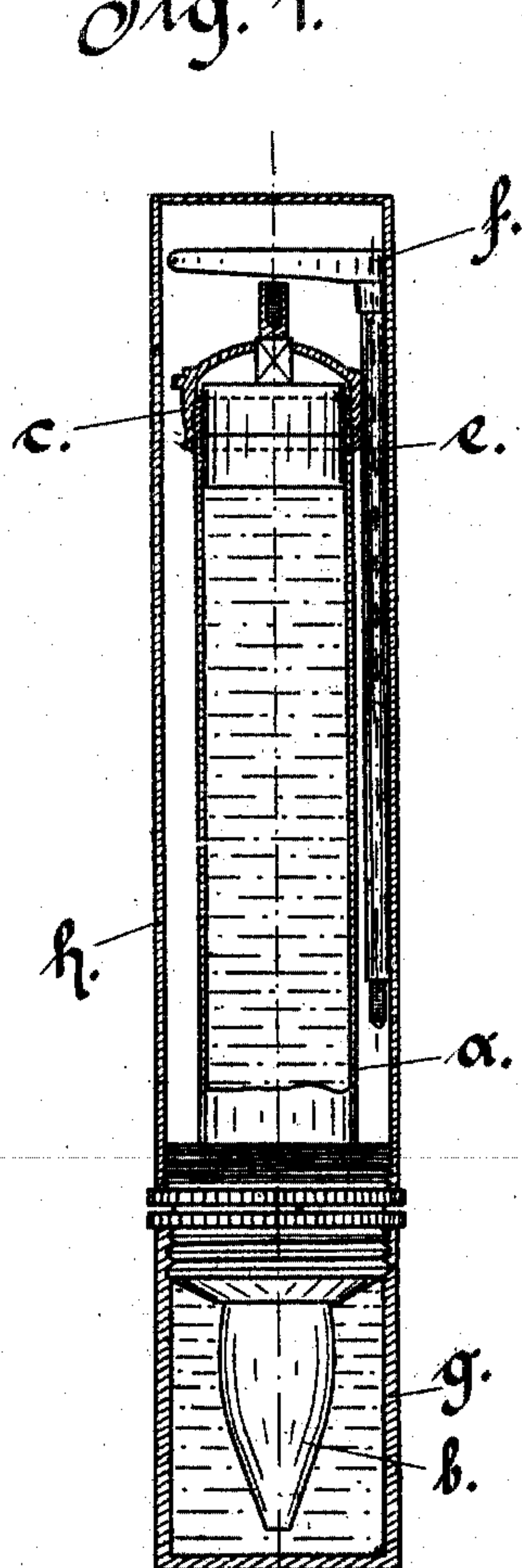


Fig. 2.

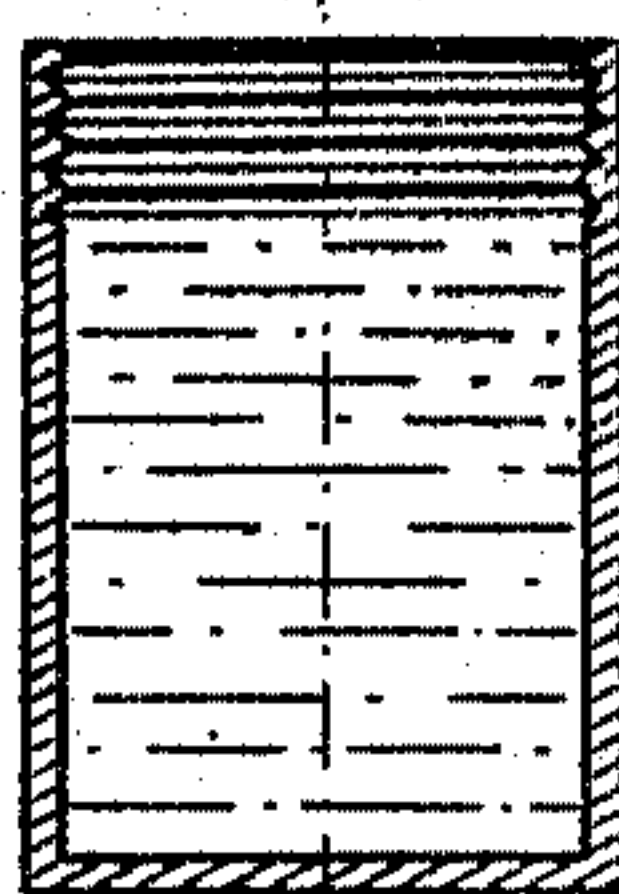


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT DREYER, OF COLOGNE, GERMANY.

INJECTION-SYRINGE.

SPECIFICATION forming part of Letters Patent No. 764,564, dated July 12, 1904.

Application filed August 4, 1902. Serial No. 118,372. (No model.)

To all whom it may concern:

Be it known that I, ALBERT DREYER, physician, a subject of the Emperor of Germany, and a resident of No. 5 Salomongasse, Cologne, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Injection-Syringes, of which the following is a specification.

This invention relates to a hypodermic syringe which is constructed in such a manner that the needle or cannula of the syringe if not in use is immersed in the disinfecting fluid. Instead of a separate disinfecting fluid the fluid to be injected may be used as a disinfectant. The improved hypodermic syringe is further provided with a detachable piston-rod, in consequence of which the syringe can be inclosed in a comparatively small sheath.

The improved hypodermic syringe is shown in the accompanying drawings.

Figure 1 is a longitudinal section through the syringe inclosed in its sheath. Fig. 2 shows the syringe ready for use without the sheath, and Fig. 3 shows in vertical section the sheath for the cannula.

The improved syringe consists, as usual, of the cylinder *a*, which is closed at the upper end by a cover and terminates in the needle or cannula *b* at the other end. At the lower end of the cylinder *a* two disks are fixed. On the upper disk a screw-threaded projection is provided, which serves for the reception of the lower screw-threaded end of the upper sheath *h*, and on the lower surface of the lower disk a screw-threaded projection is provided, which serves for the reception of the upper screw-threaded end of the lower sheath *g*. The piston *c*, which is provided, as usual, in the cylinder *a*, is fitted with a stud on its upper surface, which has a screw-threaded central boring adapted to receive the screw-threaded end of the piston-rod *e*. The handle *f* of the piston may consist of two parts connected by a joint, so that they can be folded together, as shown in Fig. 1.

The syringe may be made of any suitable material, and the upper sheath *h* as well as the lower sheath *g* are suitably made of ebonite, but can be also made of metal or any other suitable material.

At one side of the cover a lateral projection

is provided, which has a vertical boring adapted to receive the piston-rod.

The improved syringe is used as follows: When inclosed in the sheath, the piston rests at the upper end of the cylinder, the piston-rod is screwed out of the stud of the piston, the detached piston-rod is inserted in the vertical boring of the lateral projection of the cover. The upper sheath is screwed on the screw-threaded projection of the upper disk of the cylinder, and the lower sheath, filled with disinfecting or injecting fluid, is screwed on the screw-threaded projection of the lower disk, so that the cannula or needle is completely immersed in the disinfecting fluid.

To use the syringe, the upper sheath is first removed, the piston-rod screwed into the stud of the piston, the handle of the piston-rod is spread, and then the lower sheath is removed.

The lower sheath can be also used as a receptacle for the fluid to be injected, which is filled into the syringe from said receptacle.

I claim—

An improved hypodermic syringe, comprising in combination with the usual cylinder, piston and needle at the lower end of the cylinder, two disks fixed to the lower end of the cylinder above the needle, a screw-threaded projection on the upper disk and a screw-threaded projection on the lower surface of the lower disk, a stud with a screw-threaded boring on the upper surface of the piston and at the bottom of the piston-rod, a handle at the upper end of the piston-rod, a removable cover screwed to the upper end of the cylinder, a lateral projection on said cover, a sheath for the cylinder adapted to be screwed on the screw-threaded projection of the upper disk and a sheath for the needle adapted to be screwed on the screw-threaded projection of the lower disk, substantially as described and shown and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ALBERT DREYER.

Witnesses:

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