

(No Model.)

2 Sheets—Sheet 1.

G. F. MILES.
SYRINGE.

No. 478,703.

Patented July 12, 1892.

Fig. 1.

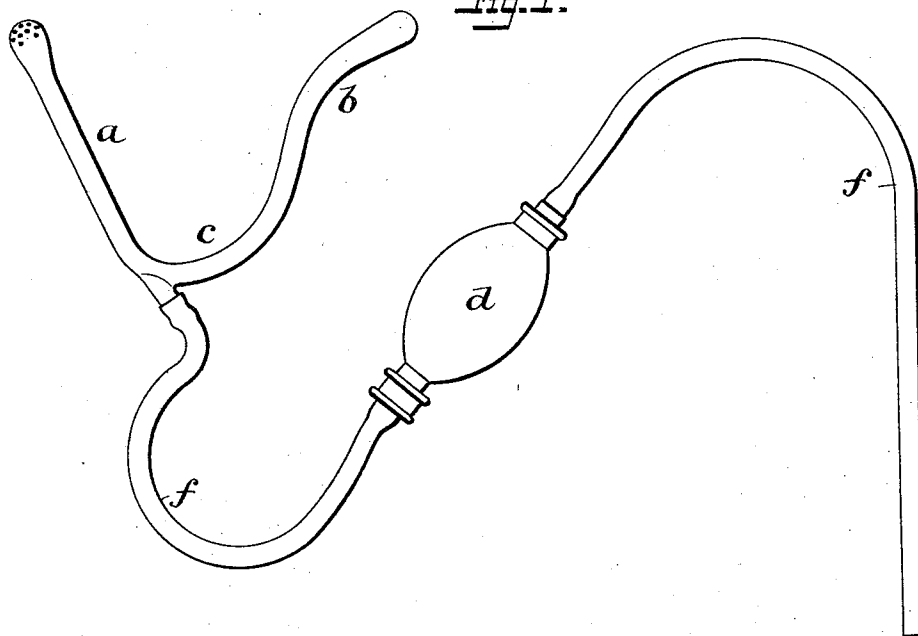
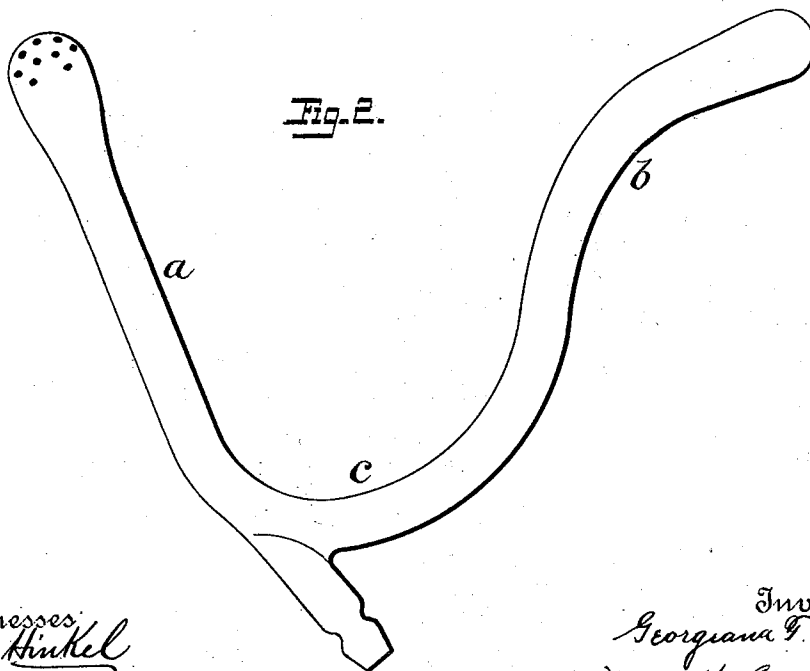


Fig. 2.



Witnesses:
John Hinkel
J. A. Fairgrieve

Inventor
Georgiana F. Miles,
by *Joshua Freeman*
Attorneys

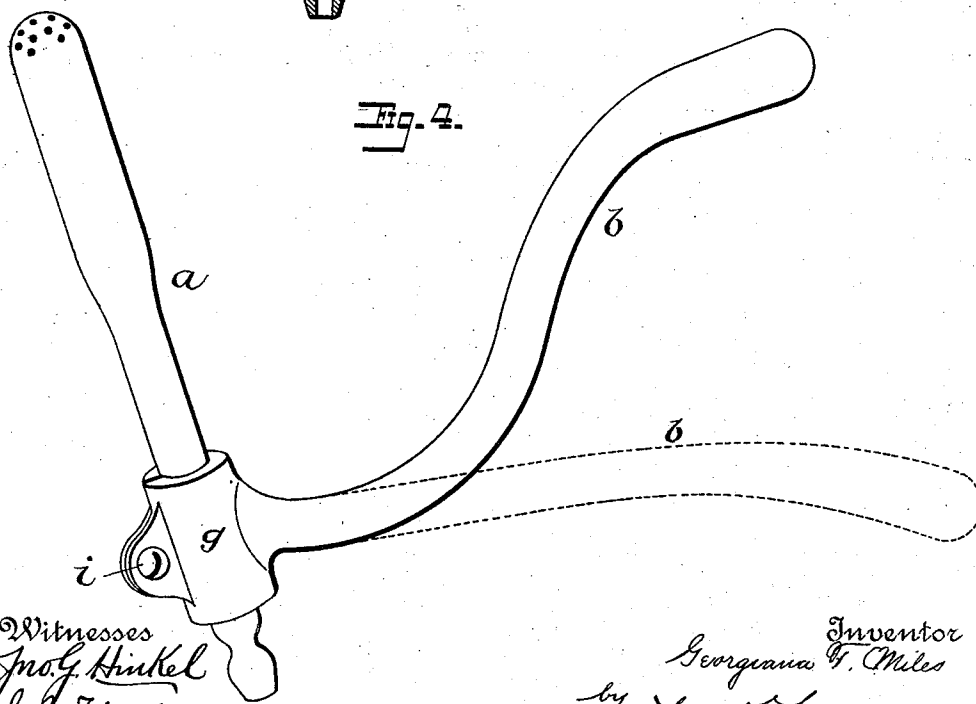
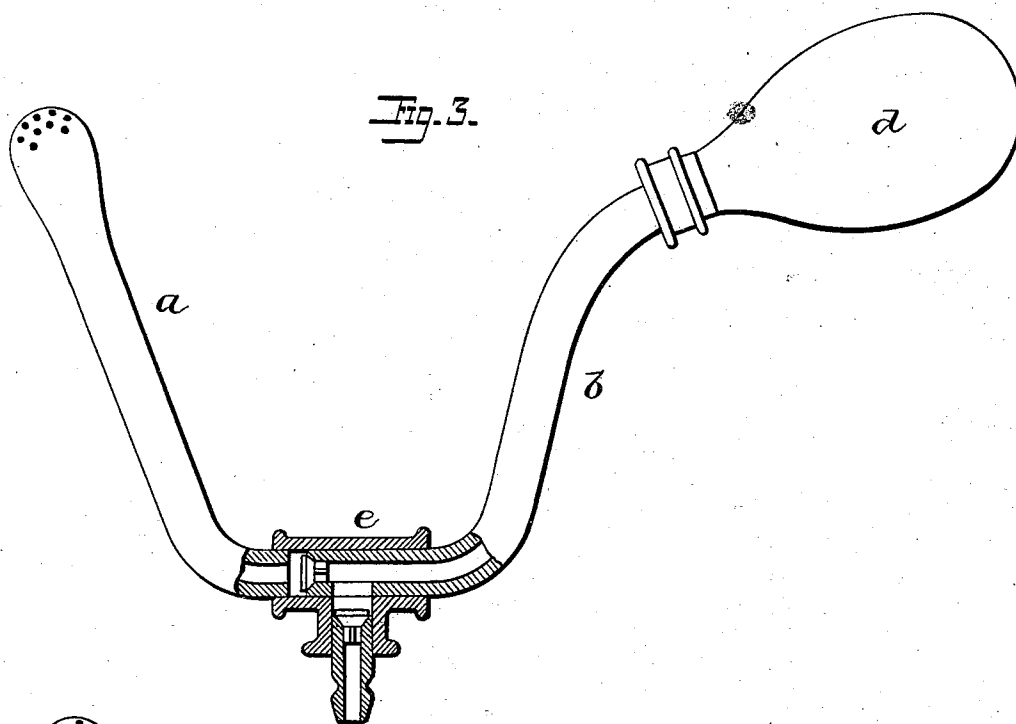
(No Model.)

2 Sheets—Sheet 2.

G. F. MILES.
SYRINGE.

No. 478,703.

Patented July 12, 1892.



Witnesses
Jno. G. Hinkel
L. A. Fairgrieve,

Inventor
Georgiana F. Miles
by *John Freeman*
Attorneys

UNITED STATES PATENT OFFICE.

GEORGIANA F. MILES, OF NEW YORK, N. Y.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 478,703, dated July 12, 1892.

Application filed January 27, 1892. Serial No. 419,486. (No model.)

To all whom it may concern:

Be it known that I, GEORGIANA F. MILES, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Syringes, of which the following is a specification.

As heretofore made bowl-syringes have generally been provided with nozzles secured to one of the flexible tubes, the bulb being in line with the tube, or in some instances connected with the nozzle at an angle thereto; but in most constructions it is necessary for the operator to support the instrument by means of one hand placed upon or adjacent to the inner end of the nozzle. In other cases the nozzle tubes or supports have extended forward. As a result of the first construction, the hands are apt to be stained when the injecting-fluid is colored, and to be injured when the injecting-fluid is caustic or acid or greatly heated, as is frequently the case, and it is practically impossible for obese persons to make use of either form of instrument without the aid of others. To avoid these objections and otherwise improve the efficiency of the syringe, I construct the same as fully set forth hereinafter, and as illustrated in the accompanying drawings, in which—

Figure 1 is a view illustrating my improved syringe; Fig. 2, a full-sized view of the nozzle and handle. Figs. 3 and 4 are modifications.

The nozzle *a* is constructed of any suitable form, preferably with a slight curve toward the lower or inner end, and with the usual outlet-opening at the outer end, and with the said nozzle is connected the handle *b*, the lower or connecting portion *c* of which extends outward from its junction with the handle, preferably nearly at right angles, so as to support the handle at a suitable distance away from the nozzle, and the handle extends upward from its lower end, whereby when the syringe is in use the handle occupies a position in front of the operator or user at a point as

high as the end of the nozzle, approximately parallel thereto, and may be readily grasped at a point above the lower end of the nozzle, preventing absolutely any contact of the injecting-fluid with the hand that supports the nozzle, while the other hand may be employed for manipulating the bulb *d*, and the instrument may be used readily by obese persons. The said bulb may be in the line of the flexible pipe *f*, as shown in Fig. 1; or the handle *b* may be hollow and the bulb may be upon the end of the same, so that the handle may be grasped in one hand and the bulb manipulated by the other at a point above the outlet end of the nozzle, as indicated in Fig. 3. In such case the valve-chest *e* is preferably at the junction of the handle and the nozzle.

In the construction shown in Fig. 4 the handle *b* is detachable from the nozzle *a*, being secured thereto by suitable connecting means, as a split clamp *g* and clamping-screw *i*. This permits the handle to be connected to the nozzles of syringes not especially constructed in accordance with my invention.

Without limiting myself to the precise construction and arrangements of parts shown and described, I claim—

1. A syringe provided with a nozzle and with a handle attached to the nozzle by an intermediate connection *c*, supporting the handle at a distance from the nozzle, said handle extending upward from its junction with the connection *c*, approximately parallel to the nozzle, substantially as described.

2. The combination, with the nozzle of a syringe, of a projecting handle clamped to the nozzle, substantially as set forth.

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

GEORGIANA F. MILES.

Witnesses:

EDWARD P. MACLEAN,
WILSON P. BOYD.