

No. 722,203.

PATENTED MAR. 10, 1903.

C. D. BROOKE.
HYPODERMIC NEEDLE.
APPLICATION FILED JULY 22, 1902.

NO MODEL.

Fig. 1.

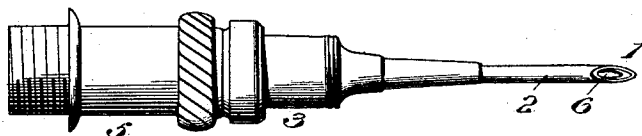


Fig. 2.

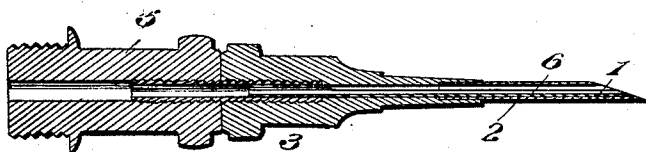


Fig. 3.

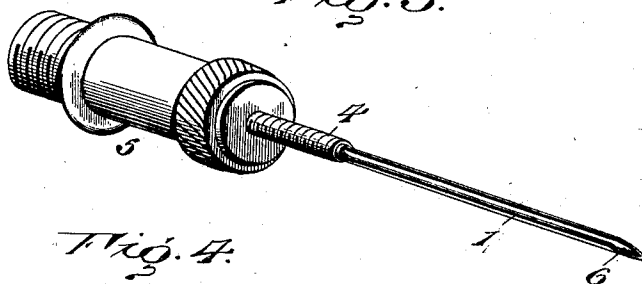
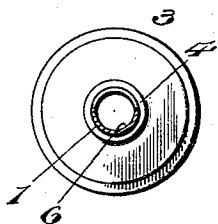


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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HYPODERMIC NEEDLE.

SPECIFICATION forming part of Letters Patent No. 722,203, dated March 10, 1903.

Application filed July 22, 1902. Serial No. 116,540. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. BROOKE, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Hypodermic Needles, of which the following is a specification.

The purpose of this invention is the provision of a needle for hypodermic syringes which may be readily cleansed and which will obviate the use of the hair-wire commonly required to keep the channel of the needle open and prevent sediment and foreign matter from clogging the canal and which hair-wire frequently becomes broken, thereby requiring the needle to be drilled or broached in order to remove the wire and other obstructing matter, thereby causing inconvenience, delay, and expense.

A further purpose of the invention is the provision of a hypodermic needle which can be thoroughly disinfected and perfectly cleaned in a moment's time, thereby preventing the transmission of contagious diseases after the instrument has been used upon a patient suffering from an infectious or contagious disease.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front view of a hypodermic needle embodying the invention, showing the parts on a large scale. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a detail view of the conductor. Fig. 4 is a transverse section thereof.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The needle is designed for use in connection with a hypodermic syringe-body of any make or design, and since the invention resides solely in the novel formation of the needle

the latter only is illustrated and comprises two parts, the conductor 1 and the shell 2, the latter being a minute tube having its penetrating end cut off on a bevel, so as to provide a penetrating-point for easy insertion through and beneath the skin. This shell is attached to a cap 3, longitudinally bored and internally threaded to screw upon the threaded stem 4 of the head 5 of the barrel or body of the syringe. (Not shown.) The cap 3 is provided with a milled portion to facilitate its rotation when screwing it upon or unscrewing it from the threaded stem 4. The conductor 1 fits within the shell 2 and is secured at its inner end to the threaded stem 4 and is grooved throughout its length, as shown at 6, to form a canal or passage for conveyance of the liquid or medicine to the selected spot of injection. The conductor may be of any formation so long as it serves to convey the liquid or medicine through the shell of the needle to the point thereof. The groove in the side of the conductor is closed by the shell when the parts 1 and 2 are assembled, and when the shell is removed from the conductor the latter is exposed for a thorough cleansing and disinfecting, which may be accomplished quickly in any convenient or selected way. The unscrewing of the shell from the conductor results in the removal of any matter tending to adhere to the inner walls of the shell. Hence the latter is prevented from clogging or fouling.

The parts of the needle may be of any metal—such as steel, gold, silver, aluminium, or the like—and the shell may be of one metal, as steel, and the conductor of a different metal—such as gold, platinum, or the like—whereby corrosive action of various liquids is guarded against.

Having thus described the invention, what is claimed as new is—

1. A hypodermic needle comprising a shell, and a conductor removably fitted within the shell and having a groove in its side, substantially as set forth.

2. A hypodermic needle comprising a shell, and a conductor removably fitted within the shell and having a groove formed in a side, whereby the conductor in transverse section is approximately of U form, substantially as set forth.

3. In a hypodermic needle, a syringe-head
provided with a tubular stem exteriorly
threaded, a conductor extended from the
stem and having a groove in a side, a cap
5 adapted to make screw-thread connection
with the said stem, and a shell applied to the
cap and adapted to inclose the conductor,
said shell and conductor constituting the es-

sentia] parts of the needle, substantially as
set forth. 10

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

CHARLES D. BROOKE. [L. S.]

Witnesses:

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