

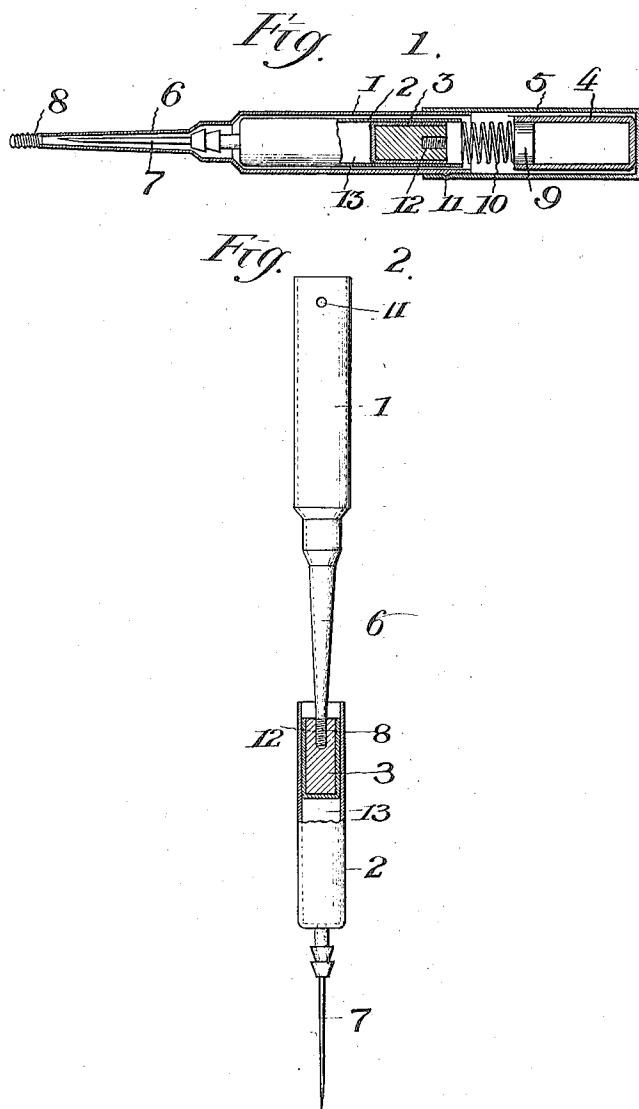
Oct. 14 , 1924.

1,511,768

M. NAKAI

CONSTRUCTION OF INJECTORS

Filed March 27 , 1923



Inventor

Muraji Nakai

By *Langmuir, Perry, Ward & Langmuir*

Attorneys.

UNITED STATES PATENT OFFICE.

MURAJI NAKAI, OF HYOGO-KEN, JAPAN.

CONSTRUCTION OF INJECTORS.

Application filed March 27, 1923. Serial No. 628,145.

To all whom it may concern:

Be it known that I, MURAJI NAKAI, a subject of the Emperor of Japan, residing at 125 Hieta, Nishinada-Mura, Muko-Gun, Hyogo-Ken, Japan, have invented certain new and useful Improvements in the Construction of Injectors, of which the following is a specification.

This invention relates to improvements in the construction of injectors in which a piston having a central screw hole is arranged in the rear part of an injector tube to reserve a space for containing injection medicament therein and the injector tube is enclosed by a separate casing having a screw end which is adapted for engagement with the thread of the screw hole in the piston, if desired, said casing being covered with a cap which is adapted to hold therein a container of disinfectant.

In the accompanying drawings:

Fig. 1 is a longitudinal sectional view of one embodiment of this invention, and

Fig. 2 shows the device in use.

Referring to the drawings, 2 designates an injector tube having an injection needle 7. 3 is a piston slidably fitted in the injector tube. Injection medicament is contained in an enclosed space 13 formed by the piston tightly fitted in the tube so as to prevent any leakage from the tube. The piston is also provided with a central threaded hole 12 at its rear end. The injector constructed as above is inserted into a separate casing 1. The casing is extended to form a slender tube 6 having a screw threaded end 8, which can be engaged in the thread of the central hole 12 when the device is to be used. A tubular cap 5 is mounted on one end of the casing 1, and secured thereto by any suitable manner, such as a projection 11. The cap 5 receives a disinfectant bottle 4 having a cork plug 9, on which a spring 10 is arranged to bear against the edge of the injector tube 2, to securely support the bottle inside the cap when not in use.

In use, the injector tube 2 is removed from the casing 1 by removing the cap 5, and the screw end 8 of the said casing 1 is then brought into connection with the central threaded hole 12 of the piston 3 as clearly shown in Fig. 2. Then the medicament is ejected through the needle 7 by forcing the piston forward in the injector tube, using the casing as a handle.

It is a feature that the injector has not only a cartridge-like form of relatively small size, having space to hold disinfectant and medicament, but that it is adapted to immediate preparation for use, when required.

Having now described and ascertained the nature of this invention, what I claim is:

1. An injector, comprising a casing, an injector tube receivable in the casing, a piston positioned in the injector tube, a hollow cap fitting on the casing, and a disinfectant container contained in the cap, the casing being connectible with the piston, to form a handle therefor, when the injector is in use.

2. An injector according to claim 1, said casing being generally cartridge-shaped, and having a threaded end, said piston having a central threaded hole at its rear end for receiving the threaded end of the casing.

3. An injector according to claim 1, said casing being generally cartridge-shaped, and having a threaded end, said piston having a central threaded hole at its rear end for receiving the threaded end of the casing, said casing wholly receiving the said injector, and said cap wholly receiving said disinfectant container, whereby the injector, when not in use, is substantially but one-half the length of the injector when ready for use.

In testimony whereof I have signed my name to this specification.

MURAJI NAKAI.