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POWDER PLACING SYRINGE

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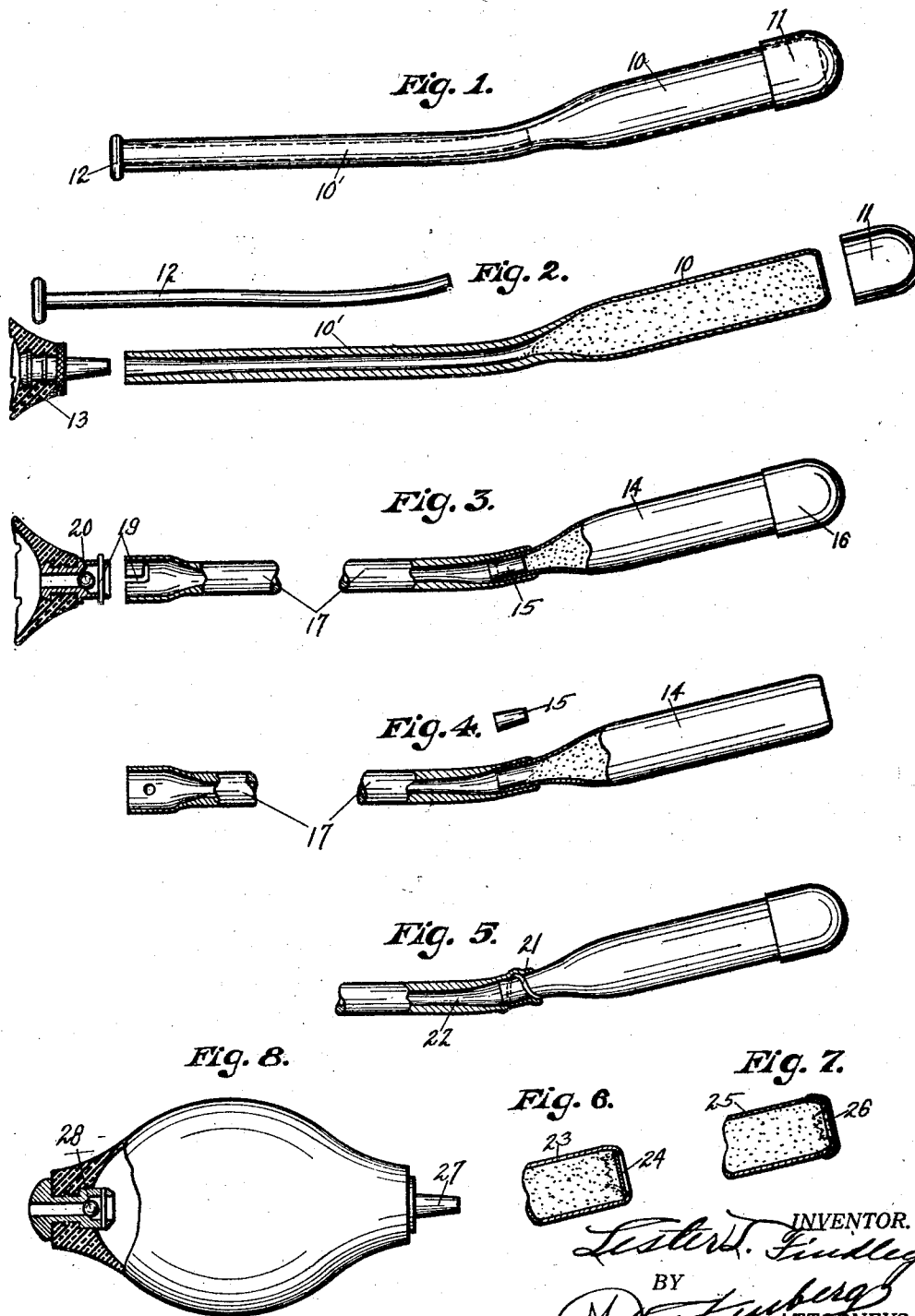


Fig. 6.

Fig. 7.

Fig. 8.

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POWDER PLACING SYRINGE

Application filed October 29, 1928. Serial No. 315,850.

My invention relates to powder placing syringes, of the type shown in my Letters Patent No. 1,685,280, issued to me September 25, 1928. This invention is the result of further study and experiment in connection with the general subject and it has among its salient objects to provide a charge containing device, made of cheap and inexpensive material and which can be used with a blast bulb or other blast device and then thrown away, that is, the charge-containing device complete with the charge therein is purchased in the open market, in any desired number and is ready for use with the simple removal of a cap and stopper or temporary closure to be thrown away, and after use the container is thrown away. This makes a single use device, thus making for a more sanitary condition, as well as for greater convenience, as the inconvenience of cleansing the article is eliminated.

In order to further explain my invention, I have illustrated the same on the accompanying sheet of drawings, which I will now describe.

Figure 1 is a side elevation of a charge-container as it would be sold in the market, containing a charge of the powder or other matter to be used;

Figure 2 shows the same device with the cap removed, the pin closure removed, and the container shown in longitudinal section, also showing the nozzle of the air bulb;

Figure 3 is a side elevation of a slightly modified form of the invention, the container being shorter and provided with a cap and small stopper in the small end;

Figure 4 shows the same container with cap removed and stopper removed and the small end inserted in a tube adapted to be connected with a blast bulb;

Figure 5 is a side elevation of a charge container provided at its small end or neck with a quick thread for connecting it to the tube;

Figure 6 is a fragmentary view of a container having a disc closure adapted to be pressed inwardly and fractured to permit discharge of the contents;

Figure 7 is a similar view of a container

having an outside cap-like closure adapted to be broken inwardly for discharge when it is to be used; and

Figure 8 is a side elevation of an air blast bulb which can be used with the charge container, being detachable.

Referring now to the drawings more in detail, Figs. 1 and 2, the charge container is designated 10, and is provided on its outer end with a cap 11, and with a pin closure 12, adapted to be inserted through the small or tubular portion 10' of the container. This is made of any suitable cheap and sanitary material, such as celluloid, paraffin paper, or other material which will serve the purpose for a single use. When desired for use, the cap 11 is removed and the pin closure 12 is withdrawn, and the nozzle of a bulb 13, is inserted into the end of the tubular portion 10', whereupon the charge can be blown from the container 10.

In Figs. 3 and 4, the container 14 is made without the tubular portion and is provided with a small cork stopper 15 and the outer cap 16. An intermediate tube 17 is provided for use with the bulb 18, and this connection is shown as a bayonet slot and pin at 19, with valve 20 in the bulb to prevent possible back flow of the contents of the container.

In Fig. 5, I have shown the container provided with a quick screw thread 21, as a means for quickly attaching it to the end of the tube 22, constructed to receive the same.

In Fig. 6 the container 23, is provided with an inside closure disc 24, adapted to be broken and pushed inwardly, as indicated in light broken lines, when it is desired to use the charge.

In Fig. 7, a similar container 25 is shown, but with an outside cap 26, adapted to be broken inwardly, as indicated when the contents are to be used.

In Fig. 8, I have shown an air blast bulb with discharge nozzle 27, and with air inlet valve 28, as will be understood, as this type of blast bulb is well known in the art.

I do not limit my invention to any specific form or embodiment, realizing that changes

can be made within the spirit of my invention, but intend that my protection will be to any form of single use charge container for material which is to be blown into the
5 place to be treated, said charge container being adapted for connection to the blast furnishing device at the time it is to be used and then thrown away after the contents have been blown therefrom.

10 What I claim and desire to secure protection for is:

1. A powder placing syringe comprising a tubular charge-container having one end reduced and adapted to be connected to a blast-furnishing device and having its other
15 end provided with a closure adapted to be opened for discharge of the contents, said charge-container itself being the insertible part of the syringe to be thrown away after a single use.

2. A powder placing syringe comprising a blast bulb with nozzle for connection to a container, a tubular charge-container having one end reduced formed for detachable connection with said bulb nozzle and its other
25 end provided with a closure to be opened when the contents are to be used, the charge-container being designed to serve as the insertible part of the syringe for directing the charge to the place to be treated.

30 Signed at Los Angeles, Los Angeles County, California, this 23rd day of October, 1928.

LESTER L. FINDLEY.

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