No. 774,779.

PATENTED NOV. 15, 1904.

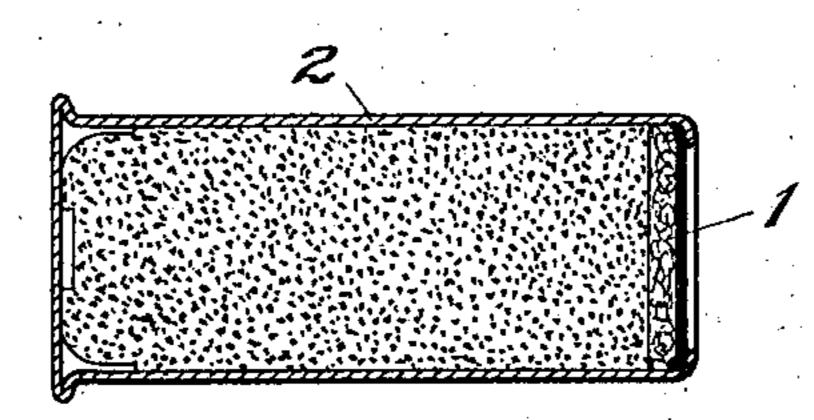
W. E. RANZ.

ASEPTIC CARTRIDGE, &c.

APPLICATION FILED OCT. 17, 1903.

NO MODEL.

F1G.1.



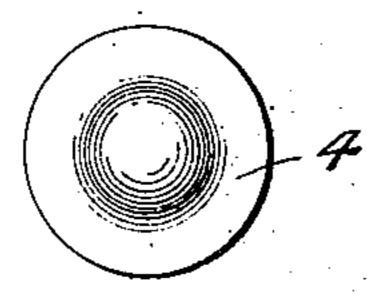


FIG.Z.

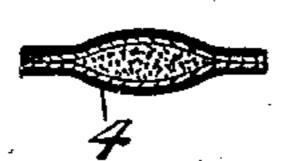
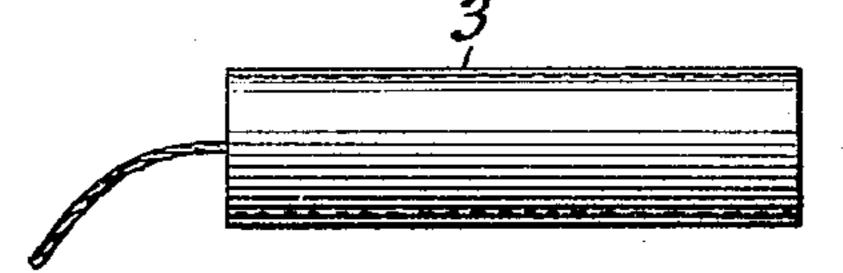
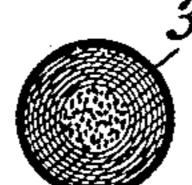


FIG.3.





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United States Patent Office.

WILLIAM E. RANZ, OF YOUNGSTOWN, OHIO.

ASEPTIC CARTRIDGE, &c.

SPECIFICATION forming part of Letters Patent No. 774,779, dated November 15, 1904. Application filed October 17, 1903. Serial No. 177,492. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. RANZ, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State 5 of Ohio, have invented or discovered certain new and useful Improvements in Aseptic Cartridges, &c., of which improvement the fol-

lowing is a specification.

As is well known in the medical profession ro tetanus and blood-poisoning are due to the entrance of septic germs into wounds and the failure to properly treat such infected wounds. The general use of toy pistols, &c., has resulted in a large number of deaths caused by 15 wounds produced by the wads or portions of the cartridges. As a general thing these wounds were slight and no attention was paid thereto, and hence the germs carried into the wounds when made or entering subsequently 20 were given full opportunity to develop and completely poison the system.

The invention described herein has for its object the application to the wound of an aseptic or an antiseptic material at the time the ²⁵ wound is made and by the instrument or sub-

stance making the wound.

The invention is hereinafter more fully de-

scribed and claimed.

In the accompanying drawings, forming a 3° part of this specification, Figure 1 is a sectional view of a blank cartridge having my improvement applied thereto. Fig. 2 shows a plan and an edge elevation of a cap for toy pistols, and Fig. 3 shows end and side eleva-35 tions of a fire-cracker treated in accordance with my invention.

In the practice of my invention the fibrous material—e. g., paper from which the wad 1 of the cartridge 2, the case 3 of the fire-cracker, o and the side pieces 4 of the cap are formed is rendered aseptic in any suitable manner known in the art, as by subjecting it to steam, dry heat, &c. Then the article is so treated. as to become a carrier of any suitable anti-5 septic known in the art—as, for example, bichlorid of mercury, any of the silver or cop-

per salts, carbolic acid, iodin, &c. The material from which the articles are formed may be impregnated with any of these antiseptics at any stage of its manufacture, so that any 50 subsequent treatment is unnecessary, the antiseptic filler rendering the material aseptic.

A convenient manner of applying the antiseptic is to apply to the surface of the explosive package or portion thereof, as the wad, fire- 55 cracker, cap, &c., a coacting of the antiseptic, which may be caused to adhere in any suitable manner, as by applying an adhesive material and then spreading the antiseptic substance thereon.

The invention is not limited to any particular manner of rendering the articles aseptic or causing them to become carriers of the antiseptic material.

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As the material of the articles are rendered 65 aseptic, particles thereof will produce no injurious effects in a wound, except, perhaps, irritation, and as the antiseptic material will be carried into the wound all septic germs will be destroyed and the wound maintained in a 70 healthy condition.

I claim herein as my invention—

1. An explosive package having portions of its containing-wrapper, which is partially destructible on the explosion of the charge, 75 sterilized, substantially as set forth.

2. An explosive package having a portion of its containing-wrapper, which is partially destructible on the explosion of the charge, charged with antiseptic material, substan- 80 tially as set forth.

3. An explosive package having a portion of its containing-wrapper, which is partially destructible on the explosion of the charge, sterilized and charged with the antiseptic ma- 85 terial.

In testimony whereof I have hereunto set my hand.

WILLIAM E. RANZ.

Witnesses:

W. H. ASHBAUGH, W. L. CARROLL.