No. 656,009. Patented Aug. 14, 1900.

P. BERGERSEN.

IMPLEMENT FOR EXTRACTING CARTRIDGE SHELLS.

(Application filed Nov. 23, 1899.)

(No Model.)

Fig. 1.

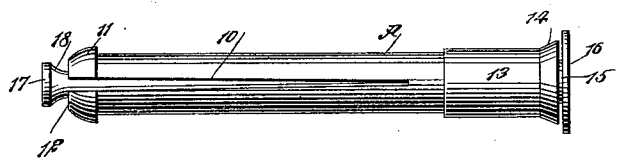


Fig. 2.

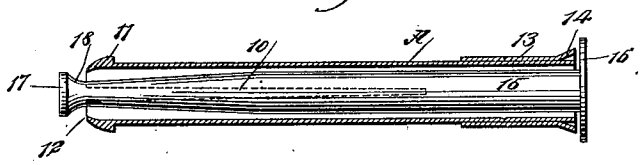
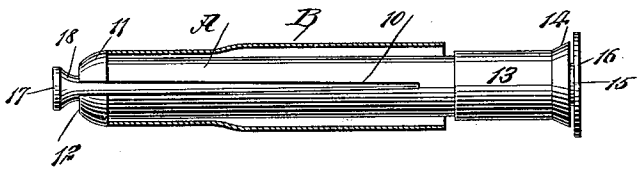


Fig. 3.



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IMPLEMENT FOR EXTRACTING CARTRIDGE-SHELLS.

SPECIFICATION forming part of Letters Patent No. 656,009, dated August 14, 1900.

Application filed November 23, 1899. Serial No. 738,050. (No model.)

To all whom it may concern:

Be it known that I, PETER BERGERSEN, a citizen of the United States, residing at Cheyenne, in the county of Laramie and State of Wyoming, have invented a new and Improved Implement for Extracting Cartridge-Shells, of which the following is a full, clear, and exact description.

One object of the invention is to provide a simple and effective device whereby headless or broken shells may be quickly extracted from a gun-barrel through the action of the ejector or extractor constituting a part of the firearm.

Another object of the invention is to provide a supplementary extractor which can be quickly introduced into a broken or mutilated shell and which will have such engagement with the muzzle of said shell that the shell and supplementary extractor will be simultaneously withdrawn.

A further object of the invention is to provide the supplementary extractor with an expanding member having a flange adapted to be engaged by the main extractor of the arm or piece of ordnance, which flange is of the same proportions as the head of the cartridge-shell and acts as a substitute for such head when the latter is missing.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved device. Fig. 2 is a longitudinal vertical section through the body portion of the device, the expander being shown in side elevation; and Fig. 3 is a side elevation of the improved device and a longitudinal section through a headless shell into which said device is introduced.

The body A of the device is in the nature of a tube, and the tube is constructed of a spring metal. This tube is of such diameter that it may readily enter into the reduced portion of the cartridge-shell B that is to be extracted from the firearm. The said body A is provided at opposite sides with a slot 10, extending from its forward end to a point near its rear end, whereby the body at its forward portion is practically in two sections, which sections may be contracted or expanded at will. A clutch-head 11 is formed at the forward end of the body A. This clutch-head is in the nature of an exterior flange, the rear portion of which flange is adapted to engage with the muzzle end of the cartridge B, as shown in Fig. 3. The forward end of the body A is also preferably slightly reduced in diameter by reason of the said end portion being contracted, as shown at 12 in the drawings. A sleeve 13 is secured in any suitable or approved manner on the rear end of the body A, and the said sleeve at its rear portion is provided with an outwardly sprung or inclined foot-section 14, so that the foot or rear portion of the body will fit in the larger section of the shell B to be extracted.

In connection with the body A an expander is employed, which expander consists of a rod 15, loosely fitted in the body A, and the said expander is provided at its rear end with a flange 16, which flange is practically of the same size as the size of the head of the cartridge-shell to be extracted, and is adapted to serve as a substitute for the head of the cartridge-shell when the said head is missing. The flange 16 of the expander is adapted to be engaged by the extractor or ejector, which constitutes a portion of the gun mechanism. The rod 15, forming the body portion of the expander, is of greater length than the length of the body A, and the said rod 15 is provided at its forward end with a head 17, connected with the said rod by a tapering surface 18, so that when the expander is drawn rearward the tapering surface 18 of the expander entering the forward end of the body A will expand the said body, and when the device is within the shell, as shown in Fig. 3, the flange 11 will be held firmly in engagement with the muzzle end of the shell by the action of the expander as it is drawn rearward by the ejector or main extractor of the firearm.

Under this construction it will be observed that a headless shell when lodged in the barrel of a gun may be readily withdrawn, since it is simply necessary to open the gun, place the device in the breech, and close the gun,

whereupon the device will be forced into the mutilated shell, and as the forward end of the body of the device passes out at the muzzle end of the shell the said forward end will expand and engage with the forward end of the shell, as shown in Fig. 3. At the same time the main extractor will engage with the flange 16 of the expander in the same manner as it would engage with the flange of a shell, and when the gun is again opened the extracting device will be withdrawn from the barrel, carrying with it the mutilated shell.

If it is impossible to withdraw the mutilated shell from the barrel through the medium of the improved device and the ejector belonging to the firearm, a rod of any description may be passed into the muzzle of the firearm and brought to an engagement with the head 17 of the expander, and by driving this rod rearward the device and the shell with which it engages will be driven out at the breech end of the barrel.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An implement for extracting cartridge-shells, consisting of an expansible tubular body, and an expanding-rod extending entirely through said body and having a tapered head at one end and a flange at the other, whereby when power is applied to said flange to withdraw the device the head will engage with and expand the tubular body, as set forth.

2. An implement for extracting cartridge-shells, the said implement consisting of a tube constructed of spring metal and provided with a slot extending from its forward end to a point near its rear end, together with an outer annular flange at its forward end, and an expander located within the said body, consisting of a rod having end movement in the body and provided at its rear end with a flange corresponding in dimensions to the head of a cartridge-shell, the said head being provided at its forward and opposite end with an expanding-head having a tapering connection with the body of the rod, as described.

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

PETER BERGERSEN.

Witnesses:
T. F. BURKE,
LOUISE S. SMITH.