J. S. SHINN
Cartridge Extractor.

No. 209,989. Patented Nov. 19, 1878.

Fig. 1

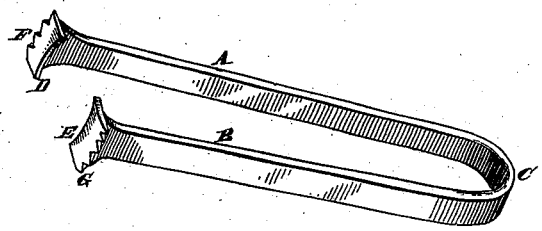
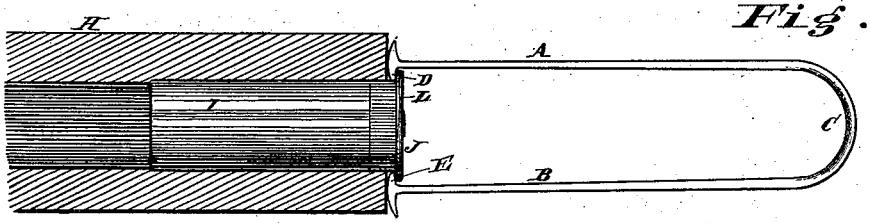


Fig. 2



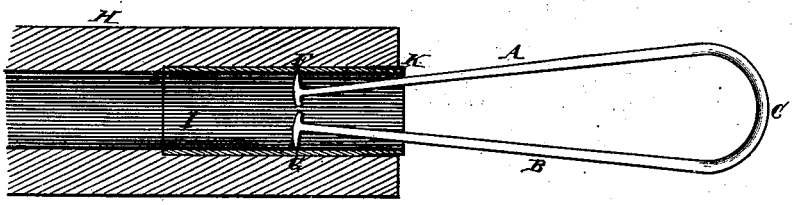
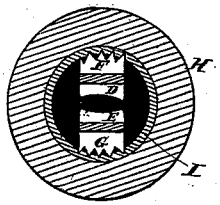


Fig. 3

Fig. 4



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JAMES S. SHINN, OF ATLANTIC CITY, NEW JERSEY.

IMPROVEMENT IN CARTRIDGE-EXTRACTORS.

Specification forming part of Letters Patent No. **209,989**, dated November 19, 1878; application filed October 19, 1878.

To all whom it may concern:

Be it known that I, JAMES S. SHINN, of Atlantic City, in the county of Atlantic and State of New Jersey, have invented an Improvement in Cartridge-Extractors, of which the following is a specification:

My invention relates to that class of articles which are used in removing blank cartridges from the barrel of a breech-loading gun.

It consists in simply having two arms, which join at one end, forming a spring, while at the other they are tipped with small jaws and teeth, whereby they can hold onto the cartridge whether the brass head be displaced or not, and by pulling upon the arms the cartridge can be removed.

The object of my invention is to remove a cartridge-shell from the barrel of a breech-loading gun when it cannot be removed by any of the ordinary means.

Cartridge-shells often stick in the barrel by expanding either the pasteboard ring or the metallic cap. When such is the case, the hunter is put to considerable inconvenience and loss of time, not to say anything about loss of game, if he has not some ready means at hand to remove the fouling cartridge.

This invention may be used for any size cartridge, whether it be No. 10, 12, or 14. It is just as applicable to one as to another. It does not make a particle of difference whether the cartridge is center-fire or pin-fire; it is as good for one as for the other.

Referring to the accompanying drawings, Figure 1 is a perspective view of the article embodying my invention. Fig. 2 is a plan of the cartridge-extractor and cartridge, and section of the gun-barrel, and shows the method of drawing a cartridge when the metallic cap is on the cartridge. Fig. 3 is a plan of the cartridge-extractor, and section of the cartridge and gun-barrel, and shows the method of drawing a cartridge when the metallic cap has been torn off. Fig. 4 is a cross-section of the barrel, cartridge, and cartridge-extractor.

A and B are two arms or legs. They are joined at one end by the circular portion C. Upon the other ends of the arms A and B there are jaws D and E, and teeth F and G. The jaws, teeth, arms, and part C are all made in one piece by forging. It is not essential that such should be the case to constitute my invention; but it is advisable to do so for strength.

The arms A and B and the circular part C constitute a spring, whereby the jaws can be spread or brought together. The main springing force is given by the circular portion C.

The jaws D and E are slightly curved, so as to fit the cartridge, and thereby get as strong a hold as possible. This is shown in Figs. 1 and 4. The teeth F and G are also slightly curved, so as to fit the interior of the cartridge-shell, as shown in Figs. 3 and 4.

Operation: Suppose the cartridge I, with the metallic cap J, be fast in the gun-barrel H. To remove it, I spread the arms A and B, thereby spreading the jaws D and E until they pass over the projection L of the metallic cap J. The jaws D and E then clamp the cap J tightly and firmly. The finger is then inserted through the ring portion C, and by pulling the cartridge may be withdrawn from the barrel. This is shown in Fig. 2.

Should the metallic cap J be torn off at K, the next thing to do is to press the arms A and B together until the teeth F and G can pass into the cartridge-shell I, and when inserted, as shown in Fig. 3, remove the pressure from the arms A and B, and pull, as before, at C. The teeth F and G cut into the shell I, and with a proper amount of force the cartridge-shell is withdrawn. This is shown in Figs. 3 and 4.

I do not limit myself to making the cartridge-drawer with a spring at C, as that part can be made into a handle, while all the spring comes from the arms A and B.

I claim—

1. A cartridge-extractor having springing arms A and B, supplied at the ends with the jaws D and E, and teeth F and G, substantially as and for the purpose specified.

2. A cartridge-extractor having rigid arms A and B, supplied at the ends with jaws D

and E, and teeth F and G, in combination with the spring C, substantially as and for the purpose specified.

3. A cartridge-extractor having springing arms A and B, supplied with jaws D and E, and teeth F and G, in combination with the spring C, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

JAMES S. SHINN.

Witnesses:
THOS. H. SMITH,
EDWIN T. COXE.