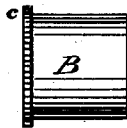


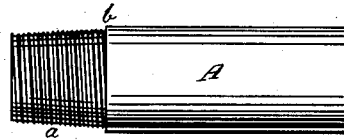
I. KINNEY.  
CARTRIDGE-SHELL.

No. 191,243.

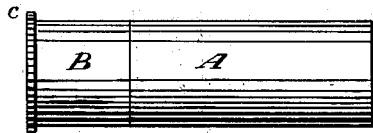
Patented May 29, 1877.



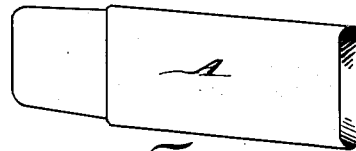
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

WITNESSES.

*Philip J. Edmund.*  
*Jas. D. Patterson.*

INVENTOR.

*Israel Kinney.*  
*per attorney*  
*Henry Beech*

# UNITED STATES PATENT OFFICE.

ISRAEL KINNEY, OF LONDON, ONTARIO, CANADA.

## IMPROVEMENT IN CARTRIDGE-SHELLS.

Specification forming part of Letters Patent No. **191,243**, dated May 29, 1877; application filed October 24, 1876.

*To all whom it may concern :*

Be it known that I, ISRAEL KINNEY, of the city of London, in the Province of Ontario, Canada, have invented certain new and useful Improvements on Cartridge-Shells; and I hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is a detachable cartridge-shell, the case or tube part being distinct from the base or back end, and to which it may be readily attached, so that after being used the case or tube may be detached from the base and thrown away, and a fresh case fitted to the old base, thereby preserving the most expensive portion of the shell, instead of throwing the whole away, as heretofore.

In the accompanying drawings, Figure 1 is a drawing of the base, detached. Fig. 2 is a drawing of the case, detached. Fig. 3 shows the two put together. Fig. 4 shows the case flattened for packing.

A is the case or tube, made of paper or other material, and which, in the first place, is wholly distinct from the base B. The latter is made of brass or other suitable material, and contains the percussion-cap. One end of the case has a thread or screw formed on the outside, and also a shoulder, *b*, as shown at Fig. 2. The base B has a corresponding or female thread formed on the inside to receive the threaded end of case A.

When the case is inserted and screwed into the base, the remaining portion of the case, from the shoulder *b* to the outer end, is exactly even with the outside of base.

This shoulder or flange is milled or roughened in order to act as a thumb-piece in screwing the two together.

When pliable material is used for the construction of the case, the act of screwing it on or in a threaded base will cause the formation of a thread sufficient to maintain it in position.

From the above description it will be seen that the case and base may be manufactured and supplied distinct from each other; and that any number of cases may be fitted to a single base, thereby effecting a material saving in cost, and as the cases may be flattened and packed closely together, Fig. 4, the bulk and weight, in transportation, will be reduced, and a large number may be carried on the person without inconvenience.

What I claim as my invention is—

The cup-shaped base B, provided with internal screw-threads, as described, in combination with the paper shell A, the two being secured together by screwing the end of the tube into the base, substantially as specified.

ISRAEL KINNEY.

Witnesses:

HENRY BEECH,  
THOMAS BEECH.