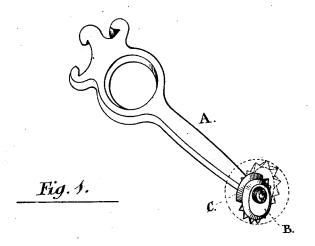
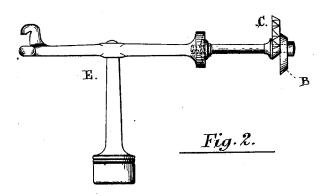
W. G. RAWBONE.

Implement for Extracting Cartridge Shells.

No. 197,291

Patented Nov. 20, 1877.





Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM G. RAWBONE, OF TORONTO, ONTARIO, CANADA.

IMPROVEMENT IN IMPLEMENTS FOR EXTRACTING CARTRIDGE-SHELLS.

Specification forming part of Letters Patent No. 197,291, dated November 20, 1877; application filed October 1, 1877.

To all whom it may concern:

Be it known that I, WILLIAM GEORGE RAW-BONE, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a new and useful Cartridge-Shell Extractor for Breech-Loading Guns, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of two independent beveled disks eccentrically mounted on the end, and forming the head of a suitable fingerbar. The outer of these disks is attached to the bar in a fixed position, while the inner disk is mounted upon a round pin, and is capable of rotation. A portion, say, two-thirds, of the circumference of the inner disk, is evenly notched to form teeth, which teeth, when the finger-bar is rotated, sink into the cartridge-case, securing a firm hold thereon.

In the accompanying drawings, Figure 1 is a perspective view of a cartridge-extractor fitted with my improved head. Fig. 2 is a view of my extractor when grouped with other gun implements in a single combined tool.

In Fig. 1, A is an ordinary finger-bar with claw-head of a shell-extractor, on one end of which the beveled disks B and C are eccentrically mounted. The disk B is secured firmly to the outer end of bar by a nut or other suitable means, while the disk C is loosely mounted on the finger-bar on the inner side of disk B, and is capable of rotation. Both disks are beveled in such manner that the arris of their beveled edges will sink into the cartridge-case when the extractor is turned. The periphery of the disk C, for a distance of two-thirds, more or less, is notched, forming teeth, which sink into the case when the finger-bar is turned. The disks being thus eccentrically mounted, and one being fixed and the

other loose, operate as a double wedge when the finger-bar is rotated, and, from their shape, permit the extractor to be used in small and large bores.

A special advantage that this construction of head has over all others is in the manner in which the disks spread apart and fit to the circular shape of the cartridge-case. In guns of smaller bores this is especially apparent.

In Fig. 2 the extractor-head is shown attached in a detachable manner, by means of a short threaded stem, to the loading-head of a combined gun implement, E, already patented by me, forming a valuable addition to the tools there grouped.

It is not necessary that both disks be eccentrically mounted. One disk mounted off the center would give a similar result; but the range of the head would not be so great. Nor is it necessary that either of the disks be notched; but I prefer the tool constructed as illustrated.

In operation, the head is inserted with the teeth of the loose disk downward and slightly pressed against the case, while the finger-bar with fixed disk is turned until the edges of both disks press into the case.

I claim as my invention, and desire to secure by Letters Patent—

A head for a cartridge-case extractor consisting of two beveled disks, both of which are eccentrically mounted on the end of an extractor-bar, and one of which is fixed and the other capable of being rotated, substantially in the manner shown, and for the purpose hereinbefore described.

W. G. RAWBONE.

Witnesses:

GEO. A. AIRD, H. WARREN.