2 Sheets—Sheet 1.

A. M. SAWYER.

Canister Shot.

No. 200,876. Patented March 5, 1878.

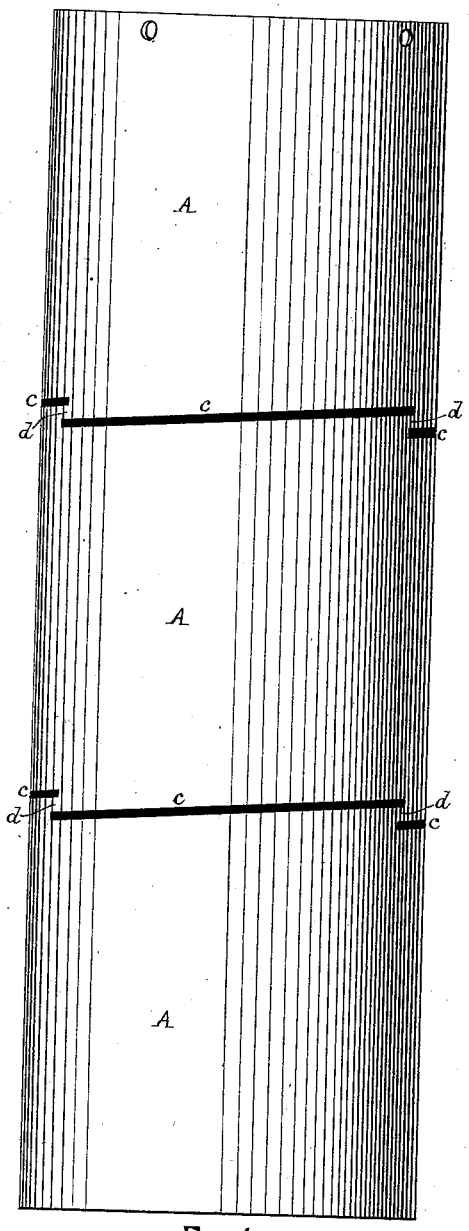

FIG. 1.

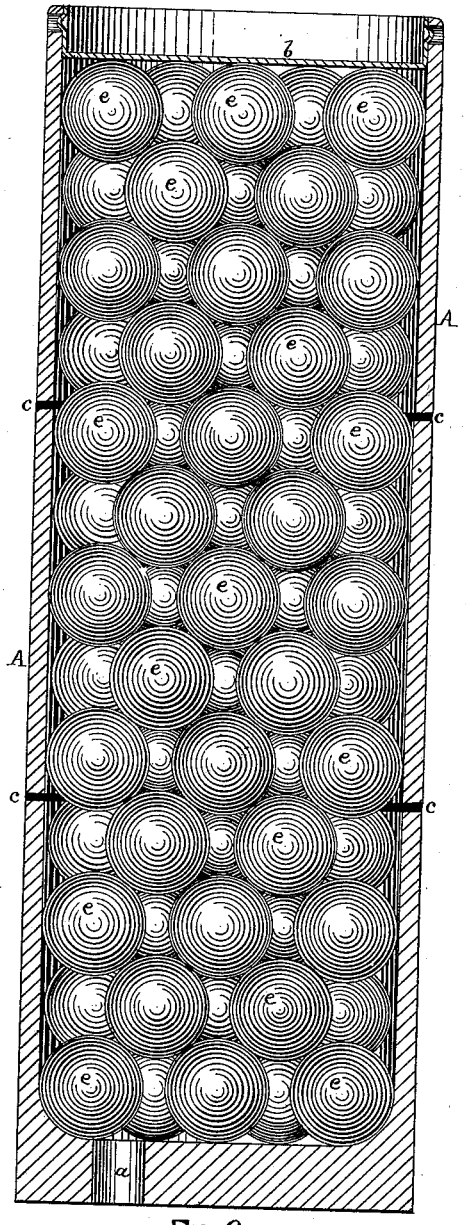

FIG. 2.

WITNESSES.

E. A. Hemmenway.

C. H. Dodd.

INVENTOR.

Addison M. Sawyer

by N. C. Lombard

his Attorney.

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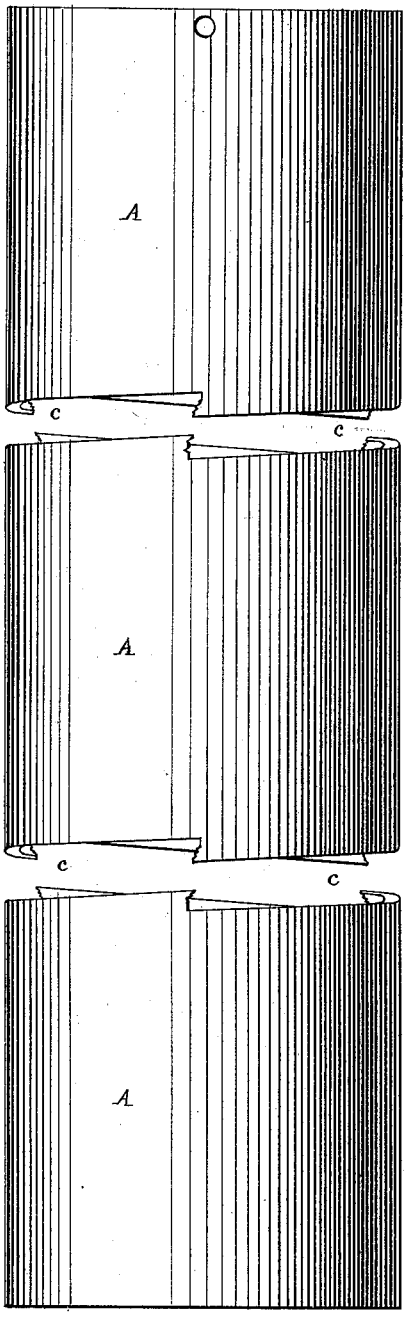

FIG. 3.

WITNESSES.

E. A. Hemmenway

C. H. Dodd.

INVENTOR.

Addison M. Sawyer

by N. C. Lombard

his Attorney

UNITED STATES PATENT OFFICE.

ADDISON M. SAWYER, OF ATHOL, MASSACHUSETTS.

IMPROVEMENT IN CANISTER-SHOT.

Specification forming part of Letters Patent No. **200,876**, dated March 5, 1878; application filed January 11, 1878.

To all whom it may concern:

Be it known that I, ADDISON M. SAWYER, of Athol, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Canister-Shot for Ordnance, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to the construction of canister-shot, and more especially to that class of such shot in which a rigid casing is used of such strength that it shall neither be crushed by the discharge of the piece nor be forced outward by the impact of the balls contained therein against the bore or into the grooves of the gun, as described in Letters Patent No. 33,754, granted to me November 19, A. D. 1861; and it consists in making said rigid casing in two or more sections, nearly divided transversely, and held together by one or more connecting bars, bands, or ties of sufficient strength to hold the sections together till placed in the gun, but too weak to resist the force of the explosion of the charge of powder which discharges the shot from the gun, so that the casing, while being discharged from the gun, will be broken or separated transversely into two or more sections, each containing a portion of the small shot with which the casing was filled.

By this construction a great advantage is obtained over the canister-shot now in use, for the reasons that a longer shot can be used with a certainty that a very much larger proportion of the small balls contained therein will be made effective, and at the same time the shell or casing, by virtue of its sectional construction, is separated into two or more parts, and serves as so many solid shot, as has been demonstrated by actual tests.

Figure 1 of the drawings is an elevation of my improved canister-shot, showing the casing made in one piece, except the sheet-metal cover at the forward end, and cut transversely, so as to nearly divide it into three sections of nearly equal length. Fig. 2 is a central longitudinal section of the casing, and showing the interior balls in elevation. Fig. 3 represents the appearance of the same casing after having been discharged from the gun.

A is the casing, made of malleable iron, in one piece, in the form of a hollow cylinder, having one end closed by a head cast therewith, through which head is formed one or more small holes, *a*, through which a portion of the gas occasioned by the explosion of the charge of powder behind the shot enters the same, and by its expansion causes the small shot *e* contained in the casing to be moved forward therein, thus disengaging the thin sheet-metal cover *b* placed in the forward end of the casing to hold the contents in position till placed in the gun, and releasing said small shot from confinement.

The casing has cut through its walls one or more series of oblique slits, *c c*, the end of each slit slightly overlapping the end of the next slit in the same series, thus nearly severing the casing into two or more sections, said sections being held together only by the narrow bars of metal *d d* between the contiguous ends of two slits, *c c*, as shown in Fig. 1, which bars are sufficiently strong to withstand the ordinary shocks of handling and transportation, but not strong enough to resist the shock of the explosion of the charge of powder in the gun, so that, when the shot is discharged from a gun, the cover *b* is stripped from the mouth of the casing, and the casing is broken into two or more sections, from which the small shot *e* are more readily and completely discharged than they would be if the casing remained intact; and each of said sections of the shell serves as a solid shot, doing greater execution than could be done were the shell to remain in one piece.

I claim as new and desire to secure by Letters Patent of the United States—

1. A canister-shot provided with a casing of malleable iron or other hard metal, of such strength that it will not be forced outward against the bore or into the grooves of the gun, nearly divided transversely into two or more sections, connected together by one or more connecting bars, bands, or ties of sufficient strength to hold the sections together till placed in the gun, and too weak to resist the force of the explosion of the charge of powder which discharges the shot from the gun, substantially as and for the purposes described.

2. In a canister-shot, the casing A, made in one piece of malleable iron or other hard metal, and nearly divided transversely into two or more parts by one or more series of cuts or slits, *c c*, arranged, relative to each other, substantially as described, and for the purposes described.

Executed at Boston, Massachusetts, this 8th day of January, A. D. 1878.

ADDISON M. SAWYER.

Witnesses:
N. C. LOMBARD,
E. A. HEMMENWAY.