D. M. MEFFORD.

Cartridge.

No. 47,317. Patented Apr. 18, 1865.

Fig 1

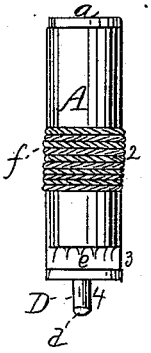


Fig 2

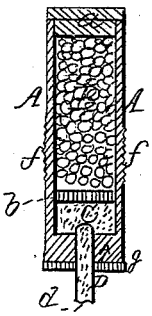


Fig 3

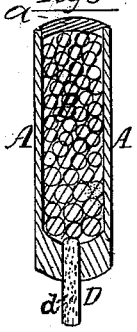
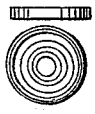


Fig 4.

Fig 5



J. R. Woodruff
J. H. Harrison

} Witnesses.

INVENTOR.
David M. Mefford

UNITED STATES PATENT OFFICE.

DAVID M. MEFFORD, OF CINCINNATI, OHIO.

IMPROVEMENT IN CARTRIDGES FOR SMALL-ARMS.

Specification forming part of Letters Patent No. 47,317, dated April 18, 1865.

To all whom it may concern:

Be it known that I, DAVID M. MEFFORD, of the city of Cincinnati, in the county of Hamilton, State of Ohio, have invented a new and useful Improvement in Explosive Cartridges for Small-Arms; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a finished cartridge. Fig. 2 shows a section through the explosive cartridge, shot, sabot, powder and fuse-tube. Fig. 3 is a section through, showing the shot and powder filling the interstices all together. Fig. 4 shows the rear end of cartridge and fuse-tube. Fig. 5 shows an edge face view of wad.

The object of my invention is for sporting purposes; and consists in the construction of a light wood case to contain a charge of shot and a small quantity of powder, in combination with a fuse-tube of such length (at its rear end) that it will be deeply embedded in the charge of powder put in to load the gun, when rammed down, so that the fuse-powder is sure to be ignited by the discharge of the piece, and will explode the case and scatter the shot at any desired distance within its range.

For the purpose of keeping a charge of shot in a compact body, when discharged from a gun, until they come in close proximity to the object at which they are aimed, I make a light tube or case, A, of wood, in which I inclose a charge of shot, B, and a small quantity of powder, C, which may be placed in the rear end of the case, so as to be in contact with the fuse-powder *d* in the fuse-tube, D. The powder C may be kept separate from the shot B by placing a sabot, *b*, between, as seen in Fig. 2, or the powder may be put in to fill up the interstices among the shot, as seen in Fig. 3. The rear or fuse-tube end of the case should be thicker than the sides or front end, to give base and solidity to support the fuse-tube D, so that when the charge of shot in the case A is being rammed down, the fuse-tube D will penetrate into the charge of powder its length, which may be half or an inch, more or less, when it reaches sufficiently near to the center of the charge to cause the fuse-powder *d* to ignite before the shot and powder case is ejected from the muzzle of the piece. The time and distance the missive will reach before the explosion may be determined by the length of the fuse-tube D, and the tamping of the fuse-powder *d*. When the fuse is prepared, and the powder and shot put into the case A, the upper end may be closed by the cap or plug *a*. I make the case A of light, brittle wood, and wind around the middle portion of it a strong twine or cord, *f*, for the purpose of giving strength to that particular portion of the case, so that the shot B, being within and forward of the cord, will scatter more in that direction, and the effect in firing into flocks of ducks, pigeons, or other small game, is much greater than when the shot are put loosely into the gun. On the rear end of the wood case A, I fit a metal cap, *e*, to give base to the small charge of powder put in to explode it, and also to support the fuse-tube D, so that it will keep its position when rammed down into the charge of powder put in to load the gun, and also to prevent the case exploding in the gun.

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

The combination of the wood case A, the binding-cord *f*, the metal cap *e*, and the fuse-tube D, for explosive cartridges, as herein described, for the purposes set forth.

DAVID M. MEFFORD.

Witnesses:

J. B. WOODRUFF,

J. H. HARRISON.