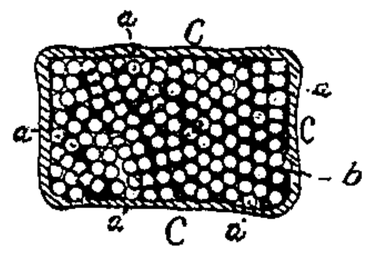
A. R. DAVIS.

Cartridge.

No. 12,545. Patented March 20, 1855.



UNITED STATES PATENT OFFICE.

ABBOT R. DAVIS, OF EAST CAMBRIDGE, MASSACHUSETTS.

IMPROVED SHOT-CARTRIDGE.

Specification forming part of Letters Patent No. 12,545, *dated March* 20, 1855.

To all whom it may concern:

Be it known that I, ABBOT R. DAVIS, of East Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Shot Cartridge; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawing, which exhibits a longitudinal section of one of the said cartridges when made of an elongated or cylindrical form.

In manufacturing such a cartridge, I mix the shot with wet clay, earth, or other plastic material, that when dry will readily crumble apart, using no more of such than will be sufficient to fill the cavities between the shot when they are laid together and in close contact. The mass of shot and plastic material is next to be worked into ball cylinders or such forms as it may be desirable for the cartridge to have. This done, the same is to be rolled in contact with fibers of wool, cotton, or other suitable material so as to cause them to compact, felt together, adhere to, and cover its external surface, and thereby form a coating or casing of sufficient strength or tenacity when dry to maintain the shot in place under transportation or while the cartridge is being rammed into a gun-barrel.

It is well not to cover the mass very closely with the felting, but to have the cover somewhat loose, in order that the cartridge may readily accommodate itself to the bore of the gun. The advantages of such a cartridge are: first, a saving of time in loading a gun, in comparison to what would be expended by using loose shot; second, there will not be so much scattering of the shot when a discharge takes place as would result when loose shot are employed; third, the cover of the cartridge serves the purpose of wadding.

In the drawing *a a* denote the shot, *b b* the plastic material between them, while *c* is the felted or fibrous cover.

The fibrous material used may be such as will readily felt together, or it may have size or an adhesive liquid applied to it to enable the fibers to adhere together.

The plastic material used should be such as can be readily crumbled to powder when it becomes closed in the cover after the cartridge has been made, the amount of tenacity of the material while the cartridge is being manufactured being only such as will serve to hold the shot together under the manipulations to which the mass is subjected during the process of covering it.

I am aware that a shot-cartridge has been made with a woven-wire frame filled with shot and loose sand and covered by paper pasted around it. I therefore do not claim such a mode of making a cartridge; but

What I do claim is—

An improved shot-cartridge made by mixing the shot in a plastic material or compound of the character as described, subsequently reducing the mass to the shape required for the cartridge, and covering its external surface with fibers of wool or other material felted or applied thereto, substantially as specified.

In testimony whereof I have hereunto set my signature this 12th day of January, A. D. 1855.

ABBOT R. DAVIS.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.