

UNITED STATES PATENT OFFICE.

R. OGDEN DOREMUS AND BERN L. BUDD, OF NEW YORK, N. Y.

IMPROVEMENT IN WATERPROOFING CARTRIDGES.

Specification forming part of Letters Patent No. 34,744, dated March 25, 1862.

To all whom it may concern:

Be it known that we, R. OGDEN DOREMUS and BERN L. BUDD, both of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Cartridges; and we do hereby declare that the following is a full, clear, and exact description of the same.

We have heretofore invented an improvement in the manufacture of cartridges, with or without attachment of the projectile thereto, consisting in the formation of cartridges of ordinary granulated gunpowder, by compacting the same, in dry condition, within molds, by pressure so applied as to condense said powder into requisite shape.

The object of the present invention is to render cartridges made according to the process hereinbefore referred to water-proof by varnishing the outside with shellac, collodion, or other material of similar nature which is not soluble in water.

In order to make such cartridges water-proof, we proceed as follows: After the powder is compacted into solid mass and delivered from the mold, we coat the said mass by dipping it into collodion, or by applying the collodion with a brush or otherwise. In case of the power being attached to the projectile, the

dipping should be carried on to an extent sufficient to cover the joint between the projectile and the powder, so as to prevent absorption of the moisture by capillary attraction at that point. The cartridge, after being coated, will readily dry, when it may be placed in zinc cases, or other suitable covering, to protect it in transportation.

It is obvious that the operation of coating or dipping may be repeated, to insure the work against imperfection.

Instead of collodion, other substances may be used, such as solutions of shellac or other resinous matter, or any other composition of matter not injurious to powder, yet impervious to water.

What we claim as our invention, and desire to secure by Letters Patent, is—

The waterproofing of compacted cartridges, made by compressing dry granulated powder, as set forth.

In testimony whereof we have signed our names to this specification before two subscribing witnesses.

R. OGDEN DOREMUS.
BERN L. BUDD.

Witnesses:

A. POLLAK,
EDM. F. BROWN.