

C. W. CURTIS.

Improvement in Manufacture of Gun Powder.

No. 120,862.

Patented Nov. 14, 1871.

Fig. 1.

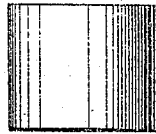
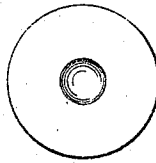


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES WILLIAM CURTIS, OF LONDON, ENGLAND.

IMPROVEMENT IN THE MANUFACTURE OF GUNPOWDER.

Specification forming part of Letters Patent No. 120,862, dated November 14, 1871.

To all whom it may concern:

Be it known that I, CHARLES WILLIAM CURTIS, of London, in England, have invented a new and useful Improvement in Gunpowder for use in Heavy Ordnance; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification.

My invention relates to the manufacture of gunpowder used in heavy ordnance, and known as "pellet" powder, which is usually made by compressing meal powder in molds, whereby it is formed into pellets of cylindrical form; and my improvement consists in splitting such pellets longitudinally into halves, forming grains of semi-cylindrical form, the result attained in use being a higher velocity of the projectile without increasing the strain on the gun.

I take unglazed pellet-powder, or powder compressed into short cylinders or pellets, the manufacture of which is completed with the exception of the glazing and stoving processes, and I subject each pellet to the action of a knife or other instrument, operated by hand or otherwise, whereby the pellet is fractured or split in a longitudinal direction. The split pellets are afterward glazed and stoved in the ordinary manner, which completes the process of manufacture.

Figure 1 represents a pellet of cylindrical form; Fig. 2, a pellet after it has been split, showing a rough or fractured surface.

Similar letters of reference indicate corresponding parts.

The pellets, when whole, instead of being cylindrical, as shown in Fig. 1, may be of other form, cubes or parallelopipedes, for instance, according to the shape of the molds in which the meal-powder is compressed, and the shape of the pellets when split will be varied accordingly, instead of being semi-cylindrical as in Fig. 2. In any case, each split pellet has one roughened or fractured surface, as above mentioned. The compression of the powder into pellets may be effected by the aid of any suitable machinery, as my present invention does not consist in the machinery for molding the powder, or in any particular construction of knife or other sharp or pointed instrument or machine for splitting the pellets, as any suitable instrument or machine may be employed for that purpose.

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

The improvement in the process of manufacturing gunpowder for use in heavy ordnance, such as the so-called "pellet" powder, the said improvement consisting in splitting each grain or pellet into halves, which are afterward stoved and glazed, as described.

The above specification of my invention signed by me this 18th day of August, 1871.

CHARLES WILLIAM CURTIS.

Witnesses:

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