

UNITED STATES PATENT OFFICE.

WILLIAM M. SPORE, OF ARGENTA, ILLINOIS

EXPLOSIVE COMPOUND.

SPECIFICATION forming part of Letters Patent No. 762,446, dated June 14, 1904.

Application filed October 16, 1903. Serial No. 177,347. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM M. SPORE, a citizen of the United States, residing at Argenta, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Explosive Compounds, of which the following is a specification.

It is desirable for small-arms to provide an explosive to take the place of the ordinary black powder which will burn rapidly, give off little or no smoke, minimize the recoil, and enable a very much less quantity being used, so as to be pressed into a shell to occupy about the same space as the highly-explosive and dense powders.

The powder is prepared by mixing chlorate of potash and pith of cornstalks or other cellulose material in about the proportions hereinafter stated and adding thereto a nitrated-turpentine binder composed of nitric acid and turpentine treated in the manner presently to be described.

The corn-pith or cellulose material and the chlorate of potash are finely ground or pulverized and are mixed in about the proportion of one pint of chlorate of potash to two and one-half pints of the pith or cellulose.

The nitrated-turpentine binder consists of nitric acid (the commercial article) one part

and turpentine twenty parts, either by weight or bulk, mixed and allowed to come slowly to a boil or semispontaneous combustion. The chlorate of potash and corn-pith or cellulose are mixed with the prepared binder in quantity sufficient to form a plastic mass, which is permitted to dry and harden and is then crushed or reduced to granular form of required fineness and is then ready for use, being admirably adapted for sporting-arms.

Having thus described the invention, what is claimed as new is—

1. An explosive composed of cellulose material, chlorate of potash and a nitrated-turpentine binder, the latter formed by combining nitric acid and turpentine in about the proportions stated.

2. An explosive composed of corn-pith, chlorate of potash and a nitrated-turpentine binder, the latter formed by combining nitric acid and turpentine in about the proportions stated.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM M. SPORE. [L. S.]

Witnesses:

T. P. NOBLE,
HARRY PARR.