

# UNITED STATES PATENT OFFICE.

SANFORD O. GOTHAM, OF PETROLIA, PENNSYLVANIA.

## IMPROVEMENT IN EXPLOSIVE COMPOUNDS.

Specification forming part of Letters Patent No. **197,267**, dated November 20, 1877; application filed June 23, 1876.

*To all whom it may concern:*

Be it known that I, SANFORD O. GOTHAM, of Petrolia, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Compound for Blasting, of which the following is a specification:

The nature of my invention consists in the combining or the incorporation of nitro-glycerine with the compound hereinafter fully set forth.

The compound which I use in preparing my blasting-powder is substantially as follows: Chlorate of potash, ten ounces; nitrate of potash, two ounces; powdered oak-bark, five ounces.

In the preparation of my blasting-powder I take seventeen ounces of the above powder and incorporate therewith thirty to thirty-five per cent. of nitro-glycerine free from acid, and work the same until the nitro-glycerine is thoroughly absorbed. After the compound has been thus mixed it is to be sifted through a fine sieve. It is, of course, understood that the various ingredients must be thoroughly sifted before they are mixed.

I am aware that nitro-glycerine has been incorporated with various compounds, of which, however, Aleppo or other foreign galls form the

base or a component part. Such galls are expensive and otherwise disadvantageous on account of the smoke caused by them, as well as the evil effect upon the persons using such powder, and when exposed to the air it gets hard and is very dangerous to handle.

The powder above described is comparatively cheap, causes no extraordinary smoke, and no evil effects on the persons using it.

I do not confine myself to the precise proportions of the ingredients named, as they may, perhaps, be varied according to circumstances.

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

The within-described compound for blasting-powder, consisting of nitro-glycerine, chlorate of potash, nitrate of potash, and powdered oak-bark, in substantially the proportions described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SANFORD O. GOTHAM.

Witnesses:

JAS. F. DU HAMEL,  
M. J. SULLIVAN.