

UNITED STATES PATENT OFFICE.

SERGEY DARK SMOLIANINOFF, OF SAN FRANCISCO, CALIFORNIA.

DYNAMITE.

SPECIFICATION forming part of Letters Patent No. 372,338, dated November 1, 1867.

Application filed July 5, 1887. Serial No. 243,339. (No specimens.)

To all whom it may concern:

Be it known that I, SERGEY DARK SMOLIANINOFF, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented a new and useful High Explosive, of which the following is a specification.

My invention relates to improvements in high explosives; and it consists in the employment of nitro-glycerine absorbents which, when burned, will produce a high degree of expansion.

I employ asbestos, nitrate of potash, and chloride of potash, as follows: I take fibrous asbestos, carefully assorted, and saturate with a full solution of equal parts of nitrate of potash and chloride of potash. I dry the same carefully—stirring to dry evenly—then press into thin cakes and bake until fully dry and brittle. I then pulverize, by grinding to a fine powder, and mix it with pure nitro-glycerine, in proportion of seventy-four per cent. nitro-glycerine to twenty-six per cent. of the mixture of asbestos, nitrate of potash, and chloride of potash prepared as above described.

This compound may be packed closely, absorbs heat slowly, and is not easily affected by the action of the atmosphere. Its expansion by increased heat in burning is increased in its effectiveness above that of No. 1 dynamite. Asbestos is preferable to infusorial earth or wood pulp, for the reason that where the asbestos is employed there are no injurious gases, as a greater amount of oxygen remains than where it is required in the combustion of carbon or other substances which may be contained in the absorbent.

I do not confine myself to asbestos, as other absorbents may be substituted by retaining the other features of the compound.

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

The combination of asbestos, nitrate of potash and chloride of potash, and nitro-glycerine, as and for the purposes set forth.

SERGEY DARK SMOLIANINOFF.

Witnesses:

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