## UNITED STATES PATENT OFFICE.

EDWARD MONAKAY, OF MINEVILLE, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. TEFFT, OF SAME PLACE.

## IMPROVEMENT IN EXPLOSIVE COMPOUNDS.

Specification forming part of Letters Patent No. 203,482, dated May 7, 1878; application filed January 19, 1878.

To all whom it may concern:

Be it known that I, EDWARD MONAKAY, of Mineville, in the county of Essex and State of New York, have invented a new and valuable Improvement in Explosive Compounds; and I do hereby declare that the following is a full, clear, and exact description of the same.

The nature of my invention consists in an explosive compound composed of the following ingredients: Ashes, lamp-black, earth, (soft sandy loam,) nitrate of soda, borax, kerosene-oil, and nitro-glycerine; and its object is to combine with thenitro-glycerine usually employed in such explosive compounds a fluid diluent which has no explosive properties of itself, but which, when combined with nitro-glycerine, will dilute it so that it will be, in a measure, harmless, and when the nitro-glycerine is exploded, instead of acting therewith as an inert mass, will be converted into an explosive vapor, which will be fired with the nitro-glycerine, and thus contribute greatly to the effectiveness of the compound when used, and will at the same time so dilute and modify it as to obviate accidents before it is required for use.

I first mix equal parts of the ashes, lamp-black, earth, nitrate of soda, and berax, and to every pound of this mixture I add half a gill of kerosene-oil. When this has been fully absorbed in the mixture I add the nitroglycerine in sufficient quantity, according to the strength of the explosive compound required.

With this composition I obtain a stronger explosive compound with less quantity of nitro-

glycerine, because the nitrate of soda, borax, and kerosene-oil are explosive when mixed all together with nitro-glycerine. The ashes and earth absorb the oil, and hence make the compound comparatively dry.

It is obvious that the addition of the kerosene-oil to the compound will serve to give it a pasty consistency, and thereby render the mass in a desirable condition for handling, besides adding another explosive substance thereto.

I am aware that earth and nitrate of soda have heretofore been compounded with nitroglycerine, and therefore lay no claim to the invention thereof.

I am aware that infusorial earths and various inert absorbent powders, as well as absorbent pewders and compounds possessing explosive qualities of their own, have been employed heretofore, in conjunction with nitro-glycerine, to form explosive compounds, and this I do not claim; but-

What I do craim is-

A composition of matter or explosive compound consisting of nitreglycerine combined with a modifying liquid, hydrocarbon diluent, substantially as and for the purposes specified

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDWARD MONAKAY.

Witnesses:
John Roddy,
Joseph Timmons.