

UNITED STATES PATENT OFFICE.

LEWIS BROWN, OF LANDING, NEW JERSEY, ASSIGNOR TO THE AMERICAN
FORCITE POWDER MANUFACTURING COMPANY, OF NEW YORK, N. Y.

NITRO-GLYCERINE BLASTING-POWDER.

SPECIFICATION forming part of Letters Patent No. 478,844, dated July 12, 1892.

Application filed September 5, 1891. Serial No. 404,886. (No specimens.)

To all whom it may concern:

Be it known that I, LEWIS BROWN, of Land-
ing, in the county of Morris and State of New
Jersey, have invented a new and useful Im-
provement in Mixtures for use in the Manu-
5 manufacture of Nitro-Glycerine Blasting-Powder;
of which the following is a specification.

My invention relates to an improvement in
mixtures for use in the manufacture of nitro-
10 glycerine blasting-powder for the purpose of
grading the quickness and energy of its ex-
plosive force and protecting it from deteriora-
tion under the influence of the weather.

The auxiliary mixture used for the purpose
15 of absorbing the nitro-glycerine and prepar-
ing it to receive the grading and coating mix-
ture forms the subject-matter of a separate
application filed of even date herewith, Serial
No. 404,885, the present application embrac-
20 ing only the grading and coating mixture.
The formula for this grading and coating
mixture may be stated as follows: seventy-
three parts, by weight, of nitrate of soda; one
part, by weight, of wood pulp; twelve parts, by
25 weight, of sulphur; eleven parts, by weight, of
rosin; three parts, by weight, of paraffine.
When the above-named ingredients have been
assembled in powdered form and thoroughly
30 mixed into a homogeneous mass under the in-
fluence of sufficient heat to render the par-

affine liquid, it possesses the properties re-
quired for grading the energy and quickness
of the explosion. The wood pulp serves as a
pore-maker, enabling the rosin and paraffine
to come into more perfect contact with the
35 entire mass of the nitrate of soda and sul-
phur. The rosin serves as a binder and the
paraffine forms a water-proof coating, prevent-
ing deterioration of the mixture while await-
ing use. In practice a portion of this mix-
40 ture, depending upon the grade of energy or
quickness required, is incorporated with the
mixture which holds the nitro-glycerine ab-
sorbed therein, to complete the powder for the
market and for use.

While the above-stated proportions are at
present preferred, variations therefrom may
be made with more or less successful results.
I do not, therefore, wish to limit myself to the
exact proportions named; but
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What I claim is—

The grading and coating mixture compris-
ing nitrate of soda, wood pulp, sulphur, rosin,
and paraffine, combined in the proportions
substantially as set forth.

LEWIS BROWN.

Witnesses:

FREDK. HAYNES,
GEORGE BARRY.