

UNITED STATES PATENT OFFICE.

JOHN HORSLEY, OF CHELTENHAM, ENGLAND.

IMPROVED NITRO-GLYCERINE COMPOUND FOR BLASTING.

Specification forming part of Letters Patent No. 98,382, dated December 28, 1869.

To all whom it may concern:

Be it known that I, JOHN HORSLEY, of Cheltenham, England, have invented or discovered certain new and useful Improvements in the Manufacture of Blasting-Powder or Explosive Compounds; and I do hereby declare that the following is a full, true, and exact description thereof—that is to say:

This invention consists in the incorporation of nitro-glycerine either with a powdered mixture of Aleppo or other foreign gall-nuts and chlorate of potash, or with a mixture of powdered galls, charcoal, and chlorate of potash; or with a mixture of powdered galls, cream of tartar, and chlorate of potash; or with a mixture of galls, hard sugar, and chlorate of potash, so as to form a powerful blasting-powder or explosive compound.

The manner in which my invention may be carried into effect is as follows: I incorporate from twenty to twenty-five per cent. of pure nitro-glycerine, free from acid, with any of the following explosive mixtures or powders, the incorporation being effected by working up four fluid ounces of pure nitro-glycerine with a pound of one of the mixtures or powders in a flat dish by means of a bone or wooden spatula until the nitro-glycerine is thoroughly absorbed.

Powder A.—Best Aleppo or other foreign galls, four ounces; chlorate of potash, twelve ounces.

Powder B.—Aleppo or other foreign galls, two ounces; alder-wood or other vegetable charcoal, two ounces; chlorate of potash, twelve ounces.

Powder C.—Aleppo or other foreign galls, two ounces; cream of tartar, two ounces; chlorate of potash, twelve ounces.

Powder D.—Aleppo or other foreign galls, two ounces; hard sugar of any kind, two ounces; chlorate of potash, twelve ounces.

The proportions hereinbefore given are what I find to answer well; but it will be understood that I do not limit myself thereto.

What I claim, and desire to secure by Letters Patent, is—

The manufacture of blasting-powder or explosive compounds by incorporating nitro-glycerine with any of the explosive mixtures or powders herein described, and in about the proportions herein set forth.

In witness whereof I, the said JOHN HORSLEY, have hereunto set my hand this 5th day of May, 1869.

JOHN HORSLEY.

Witnesses:

I. C. NEWBURN,
172 Fleet Street, London.

G. BACON,
172 Fleet Street, London.