No. 768,512. Patented August 23, 1904.

UNITED STATES PATENT OFFICE.

NORBERT CEIPEK, OF VIENNA, AUSTRIA-HUNGARY.

EXPLOSIVE COMPOUND.

SPECIFICATION forming part of Letters Patent No. 768,512, dated August 23, 1904.

Application filed March 17, 1904. Serial No. 198,631. (No specimens.)

To all whom it may concern:

Be it known that I, NORBERT CEIPEK, a subject of the Emperor of Austria-Hungary, residing at Vienna, Austria-Hungary, have invented certain new and useful Improvements in Explosive Compounds of High Shattering Power, of which the following is a specification.

The present invention relates to new explosives of high shattering or explosive power which are suitable to be employed in carrying out blasting operations in mines containing inflammable gases, while at the same time they are displaying intense blasting effects, without, however, igniting the gases.

The principal component of the new explosives is formed by ammonium nitrate, as is the case with the majority of the so-called "safety" explosives.

A suitable explosive compound of a high shattering power may be prepared by mixing ammomium nitrate with anilin nitrate, and viz., preferably eighty-seven parts, by weight, of the first-named substance with thirteen parts, by weight, of the latter. Although an explosive of the aforesaid composition yields satisfactory results as to its blasting effects, it is frequently desirable to counteract the deliquescence of the ammonium nitrate in order to afford the possibility of storing the explosive compound in a dry state. For this purpose to the explosive compound is added potassic nitrate, the proportion of the constituents being in such case eighty-five parts, by weight, of ammonium nitrate, eleven parts, by weight, of anilin nitrate, and four parts, by weight, of potassic nitrate.

If it should be desired to increase the shattering energy and the safety of the explosive compound against the ignition of inflammable gases, to the mixture consisting of ammonium nitrate and anilin nitrate is added not only potassic nitrate, but also picric acid. The proportions, by weight, of the constituents are in such case eighty parts of ammonium nitrate, ten parts of anilin nitrate, five parts of potassic nitrate, and five parts of picric acid.

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

1. An explosive compound consisting of ammonium nitrate, anilin nitrate, potassic nitrate and picric acid.

2. An explosive compound consisting of eighty parts by weight of ammonium nitrate, ten parts by weight of anilin nitrate, five parts by weight of potassic nitrate and five parts by weight of picric acid.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NORBERT CEIPEK.

Witnesses:
JOSEF RUBASCH,
ALVESTO S. HOGUE.