United States Patent Office.

HEINRICH POETTER, OF DORTMUND, GERMANY.

EXPLOSIVE.

SPECIFICATION forming part of Letters Patent No. 751,807, dated February 9, 1904.

Application filed November 20, 1902. Serial No. 132,124. (No specimens.)

To all whom it may concern:

Be it known that I, Heinrich Poetter, engineer, a subject of the King of Prussia, German Emperor, residing at 50 Kaiser-Wilhelm Allée, Dortmund, Germany, have invented certain new and useful Improvements in the Manufacture of Explosive Substances, of which the following is a specification.

This invention relates to the manufacture of a safety explosive or blasting substance, and has for its object to provide a blasting material safe against the action of atmospheric changes and coal-dust and which is of high blasting power and only slightly sensitive to

15 the action of moisture.

According to the invention I make my improved blasting material of ammonium nitrate, dinitrobenzol, curcuma or turmeric, and oxalate of copper, these ingredients being inti-20 mately mixed—say in grinding-mills. The ingredients can be advantageously mixed in the following proportions: 82.7 per cent. of ammonium nitrate, one per cent. of dinitrobenzol, 11.5 per cent. of turmeric, 4.8 per cent. 25 of copper oxalate. The above proportions of the ingredients, however, are only given by way of example, as they can be varied according to whether it is required to obtain a greater or less blasting power and more or less pro-3° tection against the action of atmospheric influences.

"Curcuma or turmeric" are words used in a certain sense as substantial equivalents—that is to say, the action produced by either of these

substances for the purposes of this combina- 35 tion is analogous, and therefore either might be used according to circumstances. I have therefore used the words "turmeric-like substances" to indicate such as might have an action analogous to either or both curcuma or 40 turmeric.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is

I declare that what I claim is—

1. An explosive or blasting substance consisting of the following ingredients intimately mixed in the proportions indicated, eighty-two and seven-tenths per cent. of ammonium nitrate, one per cent. of dinitrobenzol, eleven 50 and five-eighths per cent. of turmeric, four and eight-tenths per cent. of copper oxalate.

2. An explosive or blasting substance, consisting of the intimate mixture of ammonium nitrate, dinitrobenzol, turmeric and oxalate of 55 copper, mixed substantially in the proportions

specified.

3. An explosive or blasting substance, consisting of the intimate mixture of ammonium nitrate, dinitrobenzol, turmeric and oxalate of 60 copper.

Signed at Barmen this 25th day of October,

1902.

HEINRICH POETTER.

Witnesses:

W. GOETHE, E. TÖGE.