

G. WOLSEY & L. FUSSEY.

BLASTING CARTRIDGE.

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939,886.

Patented Nov. 9, 1909.

Fig. 1.

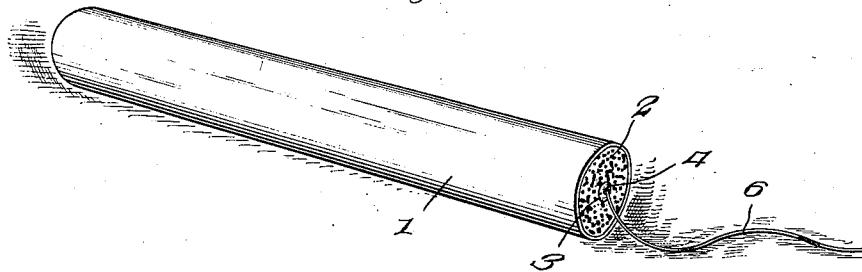


Fig. 2.

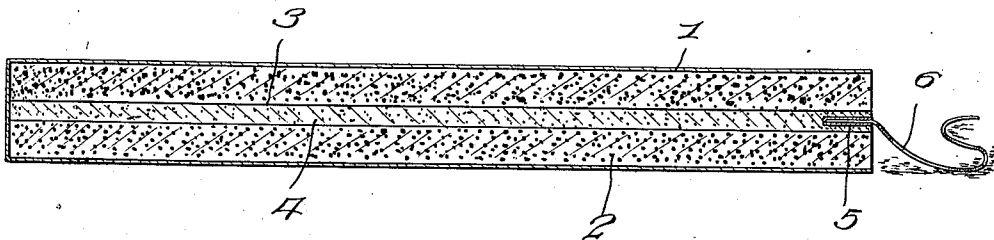
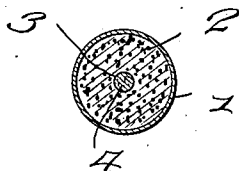


Fig. 3.



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BLASTING-CARTRIDGE.

939,886.

Specification of Letters Patent.

Patented Nov. 9, 1909.

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To all whom it may concern:

Be it known that we, GEORGE WOLSEY and LOUIS FUSSEY, citizens of the United States, residing at Alpena, in the county of Alpena and State of Michigan, have invented certain new and useful Improvements in Blasting-Cartridges; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to new and useful improvements in explosives and more particularly to that class adapted to be used for blasting purposes and our object is to provide means for forming the explosive into a solid body, whereby the same may be readily handled and applied to use.

A further object is to so treat the product forming the body, as to render the same of a low detonating quality and at the same time maintain its high explosive qualities and a still further object is to provide a suitable detonator of a high detonating quality and place the same in an opening extending through the body, whereby the detonator will be protected by the body.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claim.

In the accompanying drawings which are made a part of this application, Figure 1 is a perspective view of our improved form of explosive ready to be applied to use. Fig. 2 is a longitudinal, sectional view thereof, and Fig. 3 is a transverse sectional view thereof.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a casing, preferably formed of tin, or similar light metal, said casing being preferably tubular and closed at one end, in which is placed the body 2 of our improved explosive, said body being provided with a longitudinal, central opening 3, which preferably extends the full length of the body and is adapted to receive the detonator 4 and in order to explode the detonator, the usual or any preferred form of cap 5 is entered in the opening 3, at the open end of

the casing 1, to which is secured the usual form of fuse 6.

In forming the body 2 of the explosive, we employ picric acid, which is first melted and then poured into the casing 1, where the compound remains until it becomes cooled and hardened. The opening 3 is then formed lengthwise of the body in any preferred manner, as by boring with a bit or auger, said opening preferably extending the full length of the body and adapted to receive the detonating substance 4, the body when thus formed, while maintaining a high grade of explosive power, is of a low grade of detonating power, so that the explosive may be readily handled without exploding the same.

In constructing means for exploding the body, we provide a detonator of a high grade of detonating power and to this end we employ one part salt-peter, one part aqueous solution ammonia the strength of the ammonia being about 10 per cent. and three parts picric acid, unmelted, the solid ingredients being finely pulverized and thoroughly commingled with the liquid ingredients, after which the product so produced is entered into the opening 3 and said opening filled from end to end. After this is accomplished, the usual form of cap 5 and fuse 6 are placed in cooperation with the detonating substance, or, if preferred, any suitable form of electrical appliance may be employed for exploding the detonator.

It will thus be seen that we have provided a very strong explosive and at the same time provided means for preventing the casual explosion of the compound, thereby rendering the same safe to handle without the danger of a premature explosion and it will further be seen that by placing the low grade of detonating material around the high grade of detonating material, the same cannot be readily exploded, except by the use of the usual form of cap and fuse, or similar exploding devices.

What we claim is:

A blasting cartridge comprising an elongated tubular mass of a high explosive quality inclosing a core of explosive of a

low detonating quality, said core having a
detonator and fuse attached to one end
thereof, said cartridge being surrounded by
a tightly fitting water-proof casing, said cas-
5 ing having its end adjacent the detonator
and fuse open.

In testimony whereof we have signed our

names to this specification in the presence of
two subscribing witnesses.

GEORGE WOLSEY.
LOUIS FUSSEY.

Witnesses:

JACOB SVANG,
JOHN JENSEN.