J. PABAN.

FUSE FOR HAND GRENADES AND OTHER EXPLOSIVE ENGINES.

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1,315,857.

Patented Sept. 9, 1919.

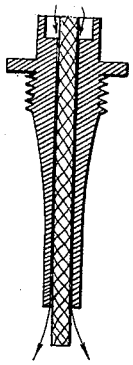


Fig. 1.

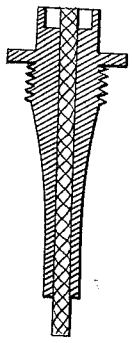


Fig. 2.

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FUSE FOR HAND-GRENADES AND OTHER EXPLOSIVE-ENGINES.

1,315,857. Specification of Letters Patent. Patented Sept. 9, 1919.

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To all whom it may concern:

Be it known that I, JEAN PABAN, a citizen of the Republic of France, residing at St.-Ouen, Seine Department, No. 27 Rue Lieutades, in the Republic of France, mechanical engineer, have invented certain new and useful Improvements in and Relating to Fuses for Hand-Grenades and other Explosive-Engines, of which the following is a specification.

In certain kinds of hand grenades used at present, the fuse comprises a tubular body that is adapted to be fixed in the eye of the grenade, and that incloses a slow combustion fuse cord designed to transmit the fire or the igniting device which is situated at its outer end to the detonator which is situated at its inner end.

Up to the present, the fuse cord has been simply slipped in the bore of the tubular body, and it has been connected to the detonator by a fixing joint which is not perfectly tight. This construction has the drawback that sometimes it is the cause of a premature explosion of the grenade, with the consequent occurrence of accidents, generally because the burning gases given off by the percussion cap or by the first portions of the fuse cord, penetrate between the latter and the wall that surrounds it as far as the detonator. Sometimes, also, the fuse cord is forced forward by the explosion of the percussion cap, and is thereby projected into the detonator and thus causes its premature detonation.

The present invention has now for its object to avoid that drawback and to this end it consists essentially in forming the tubular fuse body by casting a suitable material, such as for instance, a readily fusible metal or alloy, lead, &c., directly around the fuse cord. By this means not only is there between the fuse cord and the wall surrounding the latter, no interstice whatever which could allow the burning gases to pass through, but in addition the fuse cord is absolutely fixed in place thereby and therefore cannot be projected into the detonator.

In the accompanying drawings which are appended by way of example:—

Figure 1 shows a fuse body in which a Bickford fuse cord is simply slipped in the usual manner, and

Fig. 2 shows a fuse body of the same shape made by casting it around the fuse cord, the latter having itself served as the core in the mold that has been used for casting. It is to be understood that this invention is applicable to all kinds of explosive engines comprising a fuse cord.

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:—

1. The process of making the body of a fuse and affixing it to the fuse cord which it is to inclose, which process consists in casting the material that is to constitute the said body, directly around and upon the said fuse cord.

2. A fuse for a grenade or other like explosive engine of the type comprising a fuse cord and a body inclosing the said fuse cord, wherein the said body is cast directly around and upon the said fuse cord in such a manner as to make intimate contact and a tight joint with the surface of the said fuse cord.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JEAN PABAN.

Witnesses:
CHARLES BAUDRY,
CHAS. P. PRESSLY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."