Jan. 5, 1937. W. F. LUX 2,066,634

EXPLOSIVE CONTAINER

Filed Feb. 23, 1935

FIG. 1.

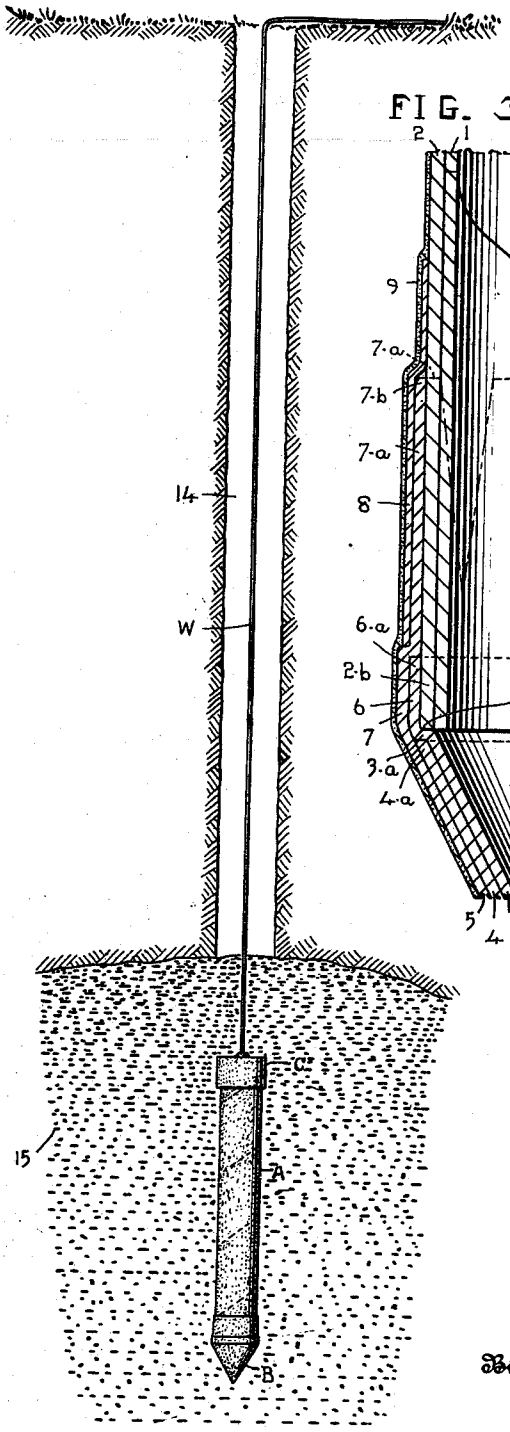
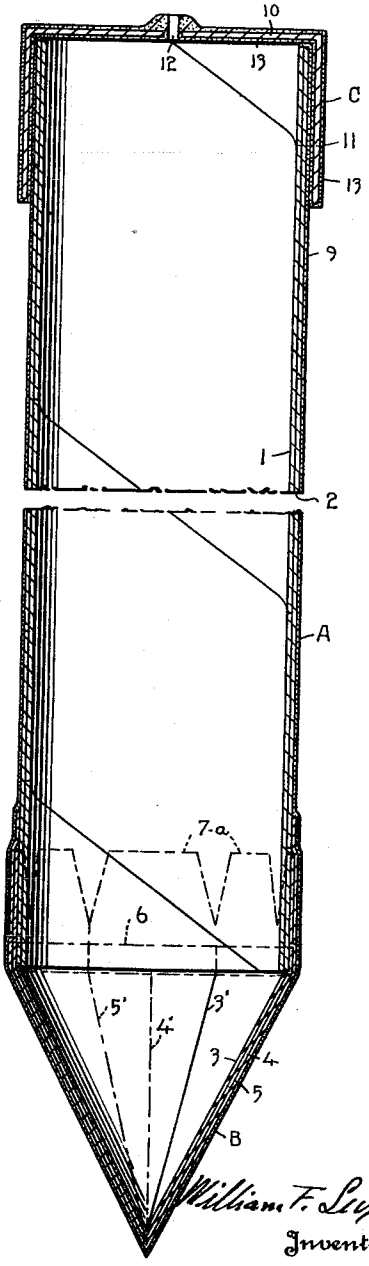


FIG. 3.

FIG. 2.



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EXPLOSIVE CONTAINER

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2 Claims. (Cl. 102—4)

My invention consists in a new and useful improvement in explosive containers and is designed more particularly to provide a container for explosive charges, consisting of either sticks of dynamite or loose, granular explosive, to be inserted into the ground under conditions in which the bore prepared for the insertion of the charge becomes clogged or crowded by unstable matter, such as sand, gravel or muck flowing into the bore. Under the present practice, after drilling a bore for this purpose, it often happens that quick-sand and other unstable matter begins to crowd the bore shut again, so that when an ordinary stick of dynamite is pushed down into the bore, the interference in the bore has a tendency to tear the paper wrapping of the stick and disintegrate the explosive inside of the wrapper. My improved container consists in a tube of suitable size provided with a penetrative conical head and a closure cap, the whole being impregnated on its exterior with a waterproof coating. Now, if the stick of dynamite is encased in my pointed container, it is able to negotiate its passage through the bore without being disintegrated en route. This, of course, is due to the point at the end of the container, and also to the protection afforded by the body of the container.

While I have illustrated in the drawing filed herewith and have hereinafter fully described one specific embodiment of my invention, it is to be distinctly understood that I do not consider my invention limited to said specific embodiment, but refer for its scope to the claims appended hereto.

In the drawing:

Fig. 1 is a side elevation of the device, illustrating its insertion through a bore and into a yielding mass.

Fig. 2 is a vertical sectional view of the device.

Fig. 3 is an enlarged fragmentary section showing the junction of the body and head.

As illustrated in the drawing, my improved container comprises the cylindrical body A, the penetrative conical head B, and the closure cap C. The body A is composed of reversely twisted spirals of suitable material, such as card board, related by any suitable adhesive spread therebetween, to form the inner and outer walls 1 and 2 respectively. The head B is composed of three concentric cones of suitable material, such as heavy paper, to form the interior, intermediate, and exterior layers 3, 4 and 5, respectively, the sealing joints 3', 4' and 5', respectively, of these layers 3, 4 and 5 being in staggered relation. The base 3—*a* of the interior layer 3 abuts the edge 2—*a* of the outer wall 2, and is provided with a skirt 6 which embraces and is attached by suitable adhesive to the end portion 2—*b* of the outer wall 2. The base 4—*a* of the intermediate layer 4 abuts the base 3—*a* of the interior layer 3. The exterior layer 5 is provided at its base with a skirt 7 which embraces and is attached by suitable adhesive to the skirt 6 and passes over the edge 6—*a* of the skirt 6 and embraces and is attached by suitable adhesive to the outer wall 2. This skirt 7 has a plurality of wings 7—*a* attached by suitable adhesive to the outer wall 2. A band 8 surrounds the wings 7—*a*, extending over the edges 7—*b* of the wings 7—*a*, and embracing the wall 2, and is attached by suitable adhesive.

The body A and head B, after assembly, are exteriorly impregnated with a waterproof material, such as paraffine, to form a coating 9 thereover.

The cap C comprises a base 10 and skirt 11 which embraces the outer wall 2 of the body A. The base 10 is provided with a centrally disposed orifice 12 to afford passage of the detonating wires W. The cap C is impregnated both exteriorly and interiorly with suitable waterproof material, forming the coating 13 to insure tight contact between the cap C and the body A.

As illustrated in Fig. 1, it will be obvious that when my improved container is forced by any suitable means through the bore 14 and into an interfering mass 15 such as sand, gravel or muck, the head B will penetrate the mass 15 and permit the insertion of the container therein, without rupturing the container or causing injury to the explosive charge therein.

Having described my invention, what I claim is:

1. In an explosive container, the combination of a tubular body; a penetrative head composed of three layers; a skirt extending from the innermost layer bent outwardly over the end of the middle layer to form an abutment between the body and the end of the middle layer and embracing one end of the body; a skirt extending from the outermost layer and embracing the other skirt and the body; and a retaining band about and attached to the skirt of the outermost layer and the body, at their juncture.

2. In an explosive container, the combination of a body; a three-ply head; an extension from the innermost ply of said head bent outwardly over the middle ply and embracing one end of the body; a second extension from said head embracing the first extension and the body; and a band about and attached to said second extension and the body.

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