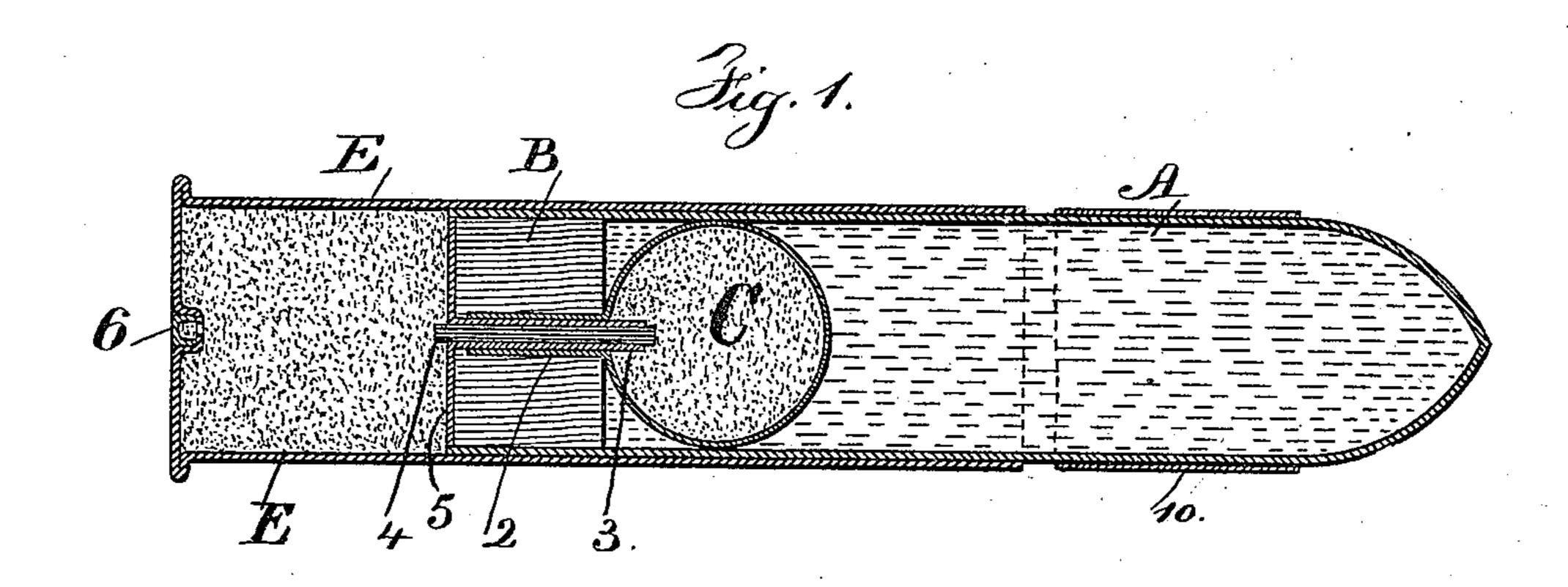
(No Model.)

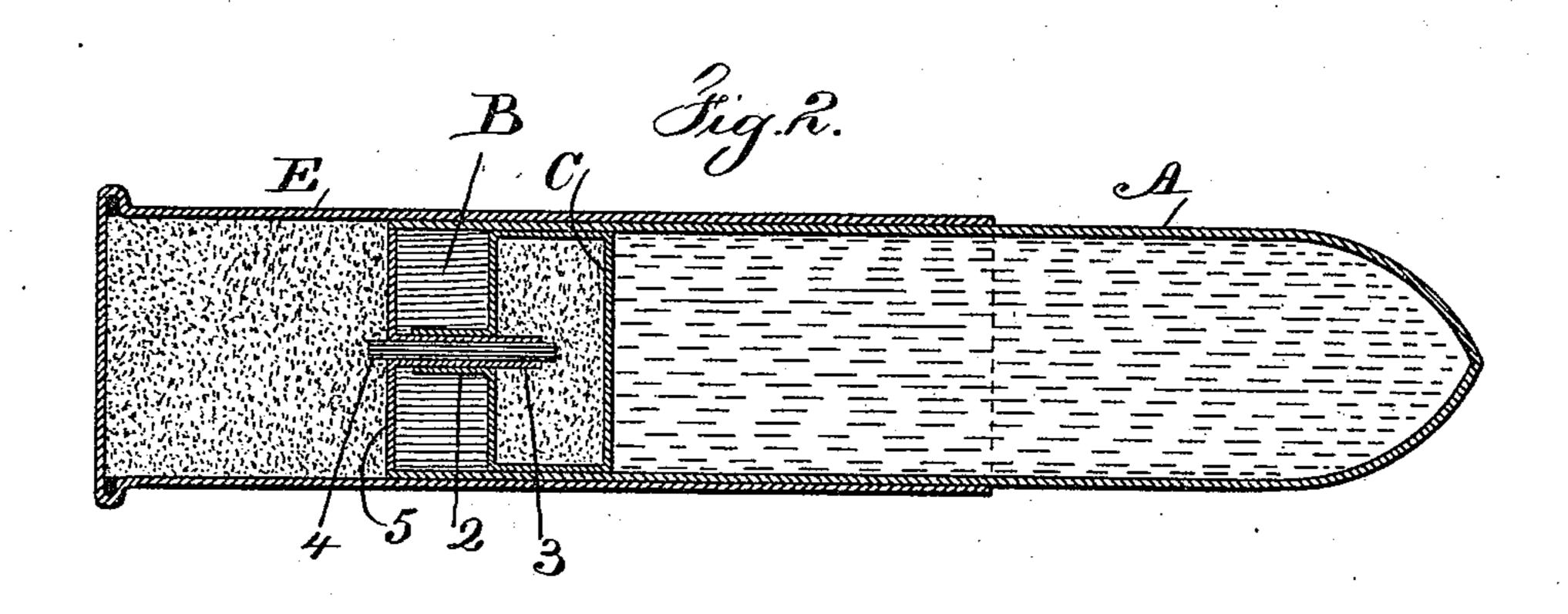
## A. LOCHER.

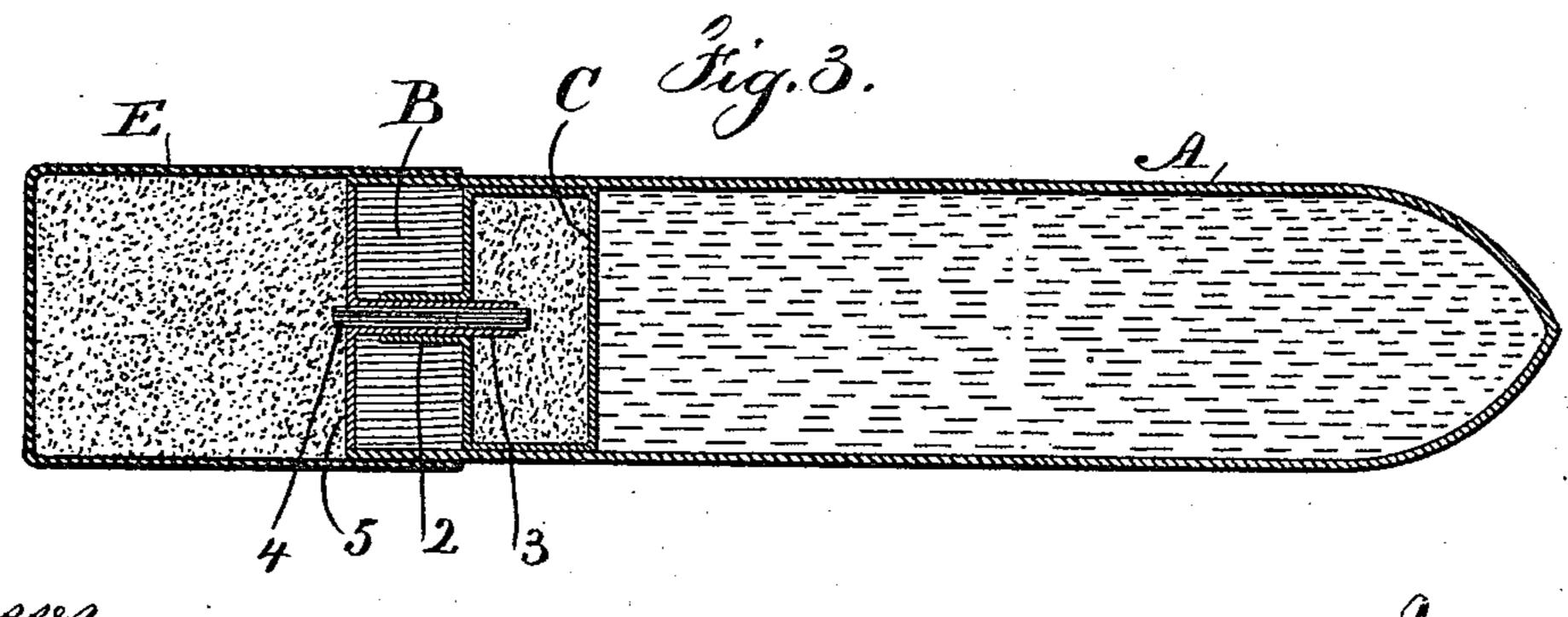
SEA OILING CARTRIDGE.

No. 413,346.

Patented Oct. 22, 1889.







Witnesses

Chalt-Smith J. Stail Anventor August Locher. Lemuel W. Lerrell.

att

## United States Patent Office.

AUGUST LOCHER, OF TOMPKINSVILLE, NEW YORK.

## SEA-OILING CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 413,346, dated October 22, 1889.

Application filed December 13, 1888. Serial No. 293,436. (No model.)

To all whom it may concern:

Be it known that I, August Locher, of Tompkinsville, in the county of Richmond and State of New York, have invented an Improvement in Marine Oil-Cartridges, of which the following is a specification.

The use of oil in allaying the energy of waves at sea is well known, and various devices have been made for scattering the oil upon the surface of the water, and shells have been proposed containing within one case the powder for projecting the case, the oil to be scattered, and a cartridge to be exploded by a fuse for bursting the oil-shell; but the explosion of the first charge of powder is liable to break the oil-container of the shell and render the cartridge inefficient.

In my improvement the oil-containing shell is entirely independent of and separate from the powder-holder by which it is projected, and the par's are constructed in such a manner as to prevent the fuse by which the second charge is exploded being blown into the second powder-chamber by the first explosion.

In the drawings, Figure 1 is a longitudinal section of the oil-cartridge. Fig. 2 is a similar view with a cylindrical chamber for the second charge of powder, and Fig. 3 is a modification of the holder for the first charge of powder.

The oil-holding shell A is preferably of sheet metal, with an open rear end, into which is inserted an oil-tight plug or cork B, after the oil and the powder-chamber C have been introduced. This powder-chamber C preferably contains gunpowder within a thin sheet-metal case having a tubular neck 2 passing into the plug B, and within this tubular neck 2 is a similar tube 3, having within it a suitable fuse 4, and to the tube 3 a plate 5 is attached, which plate 5 is sufficiently large to cover the plug B, or nearly so, and its edges may lap upon the edges of the sheet metal of the oil-cartridge A.

It is to be understood that the tubular neck 2 of the powder-chamber C is to be introduced into the plug B either before or after powder has been inserted into such powder-50 chamber C, and thereafter the tube 3, con-

taining the fuse 4, is passed in through the neck 2, and the plate 5 rests against the plug B, and this plug B is inserted into the case A after the oil has been introduced, and said plug is adapted to close the oil-holding cartridge A tightly. In this form the oil-holding cartridge is complete in itself, regardless of the character of the explosive material made use of to explode the same, or the firearm with which it may be used.

In Fig. 1 I have shown the oil-holding cartridge as introduced within the shell E, that is adapted to a breech-loading gun having a central fire, and at 6 is an explosive pellet, and powder is to be introduced between the 65 same and the rear end of the oil-holding cartridge A, and when the powder in the shell E is exploded the oil-holding cartridge A is projected therefrom with the desired velocity. and the flame ignites the fuse 4, so that the 70 powder in the chamber C will be ignited before the cartridge strikes the water and will scatter the oil upon the surface of the waves, and the shell E can be reloaded and used with another oil-holding cartridge, as usual 75 in sporting-cartridges.

In Fig. 2 the same oil-holding cartridge A is represented, but the powder is inclosed in a cylindrical case C, instead of a globular case, the other parts being the same; but I 80 have shown a shell E adapted to a rim-fire fire-arm instead of a center-fire gun. In Fig. 3 the oil-holding cartridge is shown corresponding to that in Fig. 2, but the powder is represented as within a paper case, such as is 85 usual with muzzle-loading fire-arms.

It is to be understood that this oil-holding cartridge is to be adapted in size to the firearm or gun with which it is to be used, and it is preferable to employ only sufficient powder to project the oil-cartridge a few hundred feet in advance of the vessel, or in whatever direction may be desired, for stilling the waves as they come toward the vessel.

The powder in the shell or holder E may 95 be fired in any desired manner, such as by a pin acting at one side of the cylindrical portion and against the fulminate, as common in some kinds of fire-arms.

A strip of paper or fabric may surround 100

the oil-holding shell, as at 10, to fill any through the same, a metallic powder-chamber 2 space between the cartridge and the bore of the gun.

I claim as my invention—

5 1. The combination, with the oil-holding shell A, of the plug B to close the rear end of such shell, a powder-chamber within the oil-holding chamber, a fuse passing through the plug into the powder-chamber, a shell E around and inclosing the shell A, and a separate independent charge of explosive material within the shell E and between the same and the rear of the oil-holding cartridge, and by which such oil-holding cartridge, and by which such oil-holding cartridge is projected from the shell E and firearm, substantially as set forth.

2. The combination, with the oil-holding shell A, having an open rear end, of the plug B for closing such end, and having a hole

through the same, a metallic powder-chamber C within the oil-holding shell, and having a tubular neck 2 passing into the hole in the plug B, and a fuse inserted into such tubular neck, and by which such cartridge is exploded, substantially as set forth.

3. The combination, with the oil-holding shell A and the plug B for closing its rear end, of the powder-chamber C, having a tubular neck 2, a plate 5, and tube 3 attached thereto and inserted into the tubular neck 2, 30 and a fuse passing through the tube 3, substantially as set forth.

Signed by me this 10th day of December,

1888.

AUGUST LOCHER.

Witnesses:

GEO. T. PINCKNEY, WILLIAM G. MOTT.