

(No Model.)

I. SCHLENKER & T. PUSKAS.
SUBMARINE CARTRIDGE.

No. 450,774.

Patented Apr. 21, 1891.

Fig. 1.

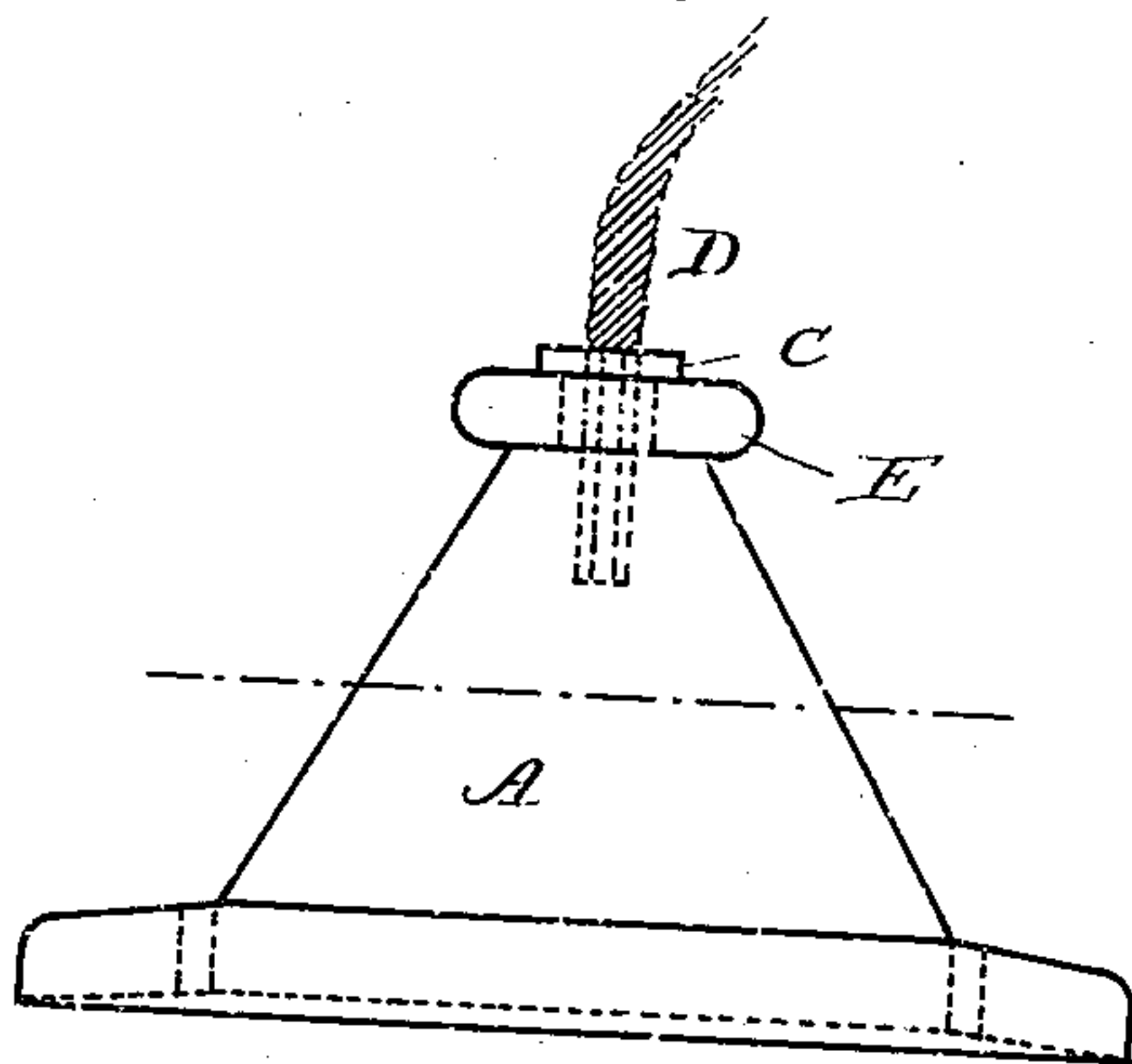


Fig. 2.

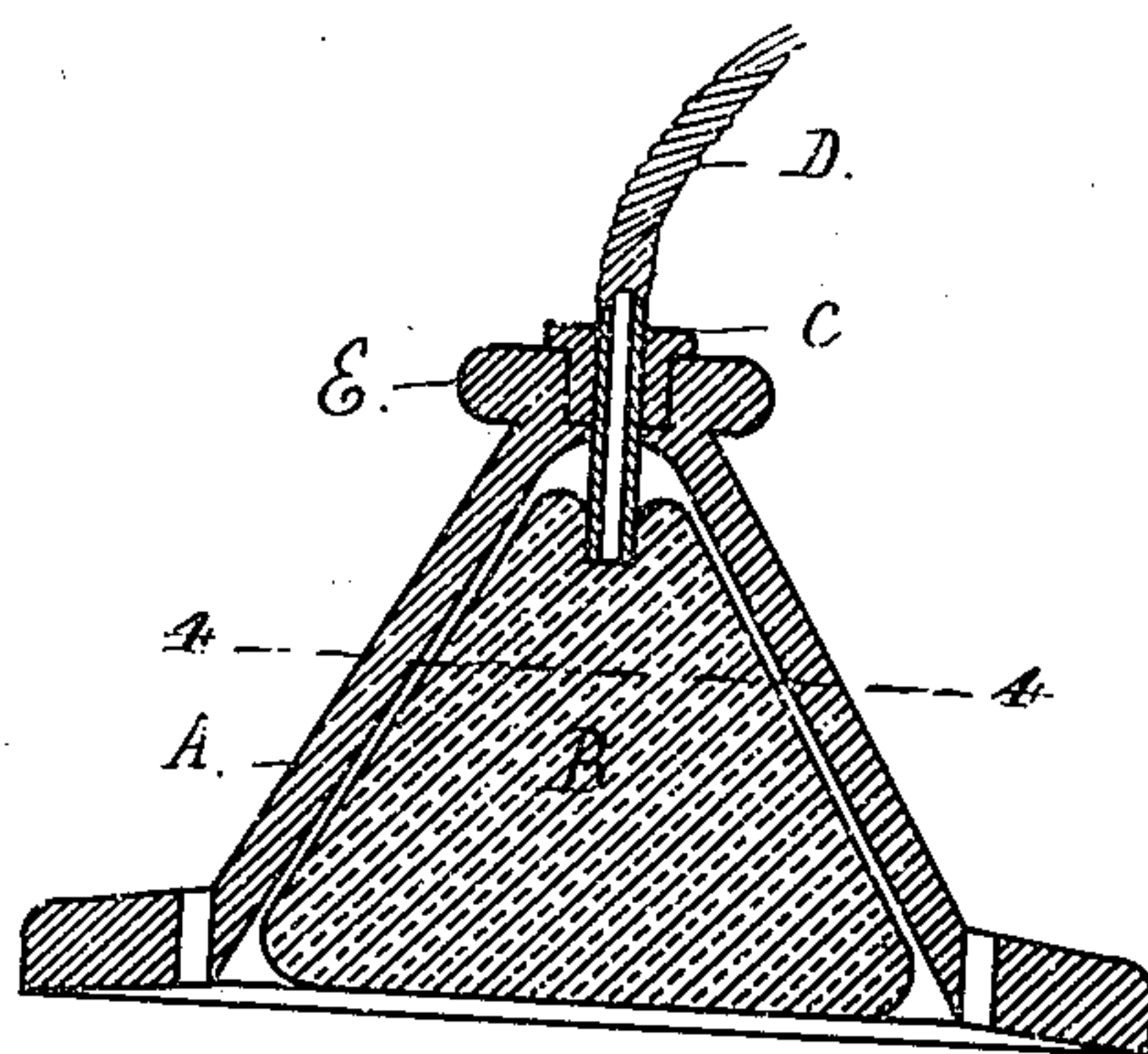


Fig. 3.

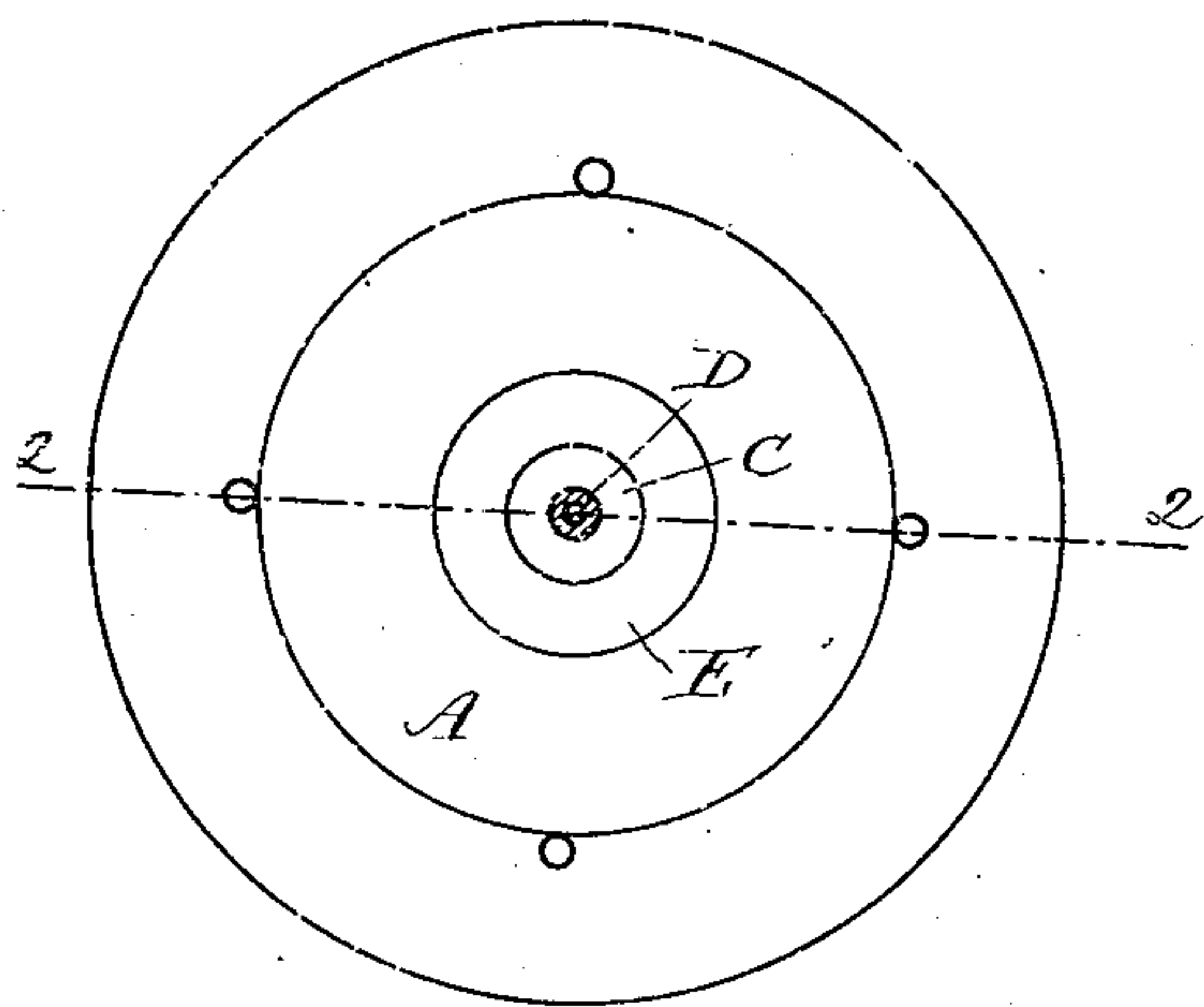
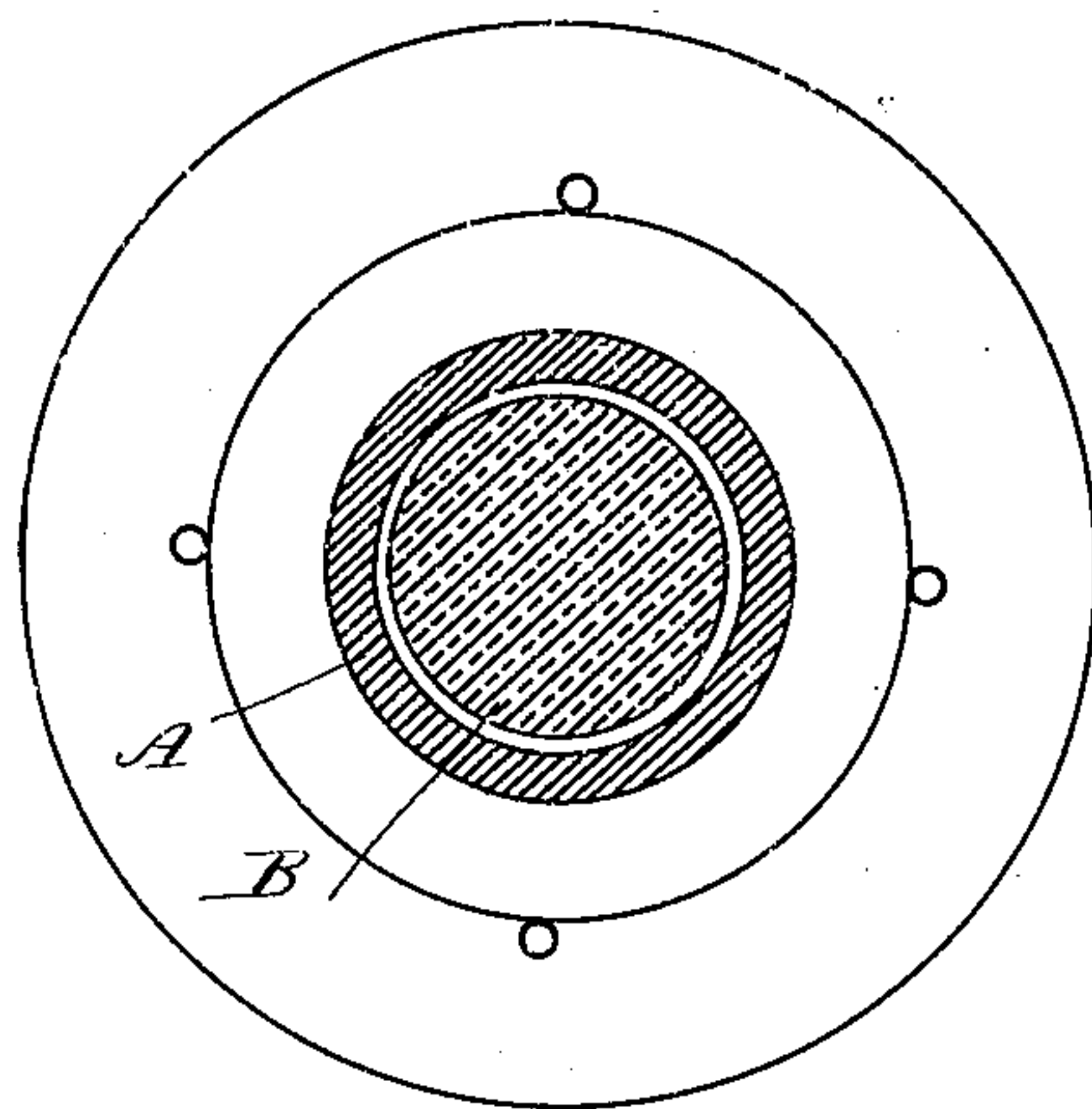


Fig. 4.



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UNITED STATES PATENT OFFICE.

IVAN SCHLENKER AND THEODOR PUSKAS, OF BUDA-PESTH, AUSTRIA-HUNGARY.

SUBMARINE CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 450,774, dated April 21, 1891.

Application filed June 14, 1890. Serial No. 355,473. (No model.)

To all whom it may concern:

Be it known that we, IVAN SCHLENKER and THEODOR PUSKAS, citizens of the Kingdom of Hungary, and residents of Buda-Pesth, Austria-Hungary, have invented certain new and useful Improvements in Submarine Blastings; and we do declare the following to be a full, clear, and exact description of the same.

Our experiments in the department of submarine blasting have led us to conclude that the drilling in the object to be blasted may be done away with, and that an exceptional effect may be obtained by means of a simple sinker if above the cartridge be placed a sufficiently firm body which may serve as an obstacle to the upward-struggling force of the explosion.

The object of the invention is to place a body at rest above the cartridge which has been sunk in a simple manner. The shape of this body may be varied. For example, it may be like a dish-cover or a half-sphere, &c. The only idea of using the same is to erect a mechanical obstacle to the upward force of the explosion.

We have illustrated our invention in the accompanying drawings, in which—

Figure 1 is an elevation of a cartridge embodying the invention. Fig. 2 is a sectional view on line 2 2 of Fig. 3. Fig. 3 is a plan view. Fig. 4 is a sectional view on line 4 4, Fig. 2.

In the accompanying drawings the body is shown in bell shape. This body A is made of suitable material (steel or iron being preferable) and is of the required strength. When shaped in this manner, it is open at the bottom, and is placed over the cartridge B, which is prevented from falling out through the open part by transversely-placed wires. On the other hand, if the obstacle be shaped like a disk, then the shell must be hung under the obstacle in a suitable manner. Whatever shape the obstacle may have, it is provided

with an opening in the center of the upper part, in which the fuse is placed, and this fuse C is held firmly in place by a cap C'. This cap is provided with two openings, through which the electric wires D lead to the fuse. Otherwise the obstacle A must have a shoulder E, either in the center or at the top, on which the plumb-line may be fastened. The wires D are connected with any suitable source of electric supply, and by this means the discharge is effected.

The body A, with the assistance of a reel, is lowered from the boat simultaneously with the cartridge B underneath it, and this being done, and the boat taken out of the way, the cartridge is fired by the closure of the circuit through the wires D. The effect of the explosion underneath is by this means increased in so striking a degree that from above the effect of the explosion acts on the body A, which offers such a mechanical obstacle that on it rests the weight of the whole column of water which follows the explosion, and which must be displaced by the force of the same. Besides this, the body A is not only an obstacle, but acts so that the whole of the upper part of it is covered at once with the volume of water which follows the explosion of the charge.

What we claim is—

A submarine blasting device consisting of an explosive, a surrounding bell-shaped case having a central opening in its upper part, a perforated cap fitting into said opening, and a fuse and electric wires passing through said perforated cap, substantially as set forth.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

IVAN SCHLENKER.
THEO. PUSKAS.

Witnesses:

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FRANK WESTON, Jr.