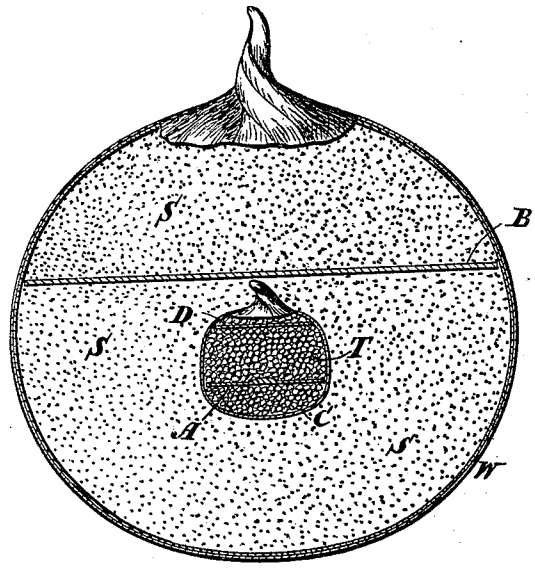
(No Model.)

C. NELSON.

TORPEDO.

No. 485,974. Patented Nov. 8, 1892.



WITNESSES:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES NELSON, OF BROOKLYN, NEW YORK.

TORPEDO.

SPECIFICATION forming part of Letters Patent No. 485,974, dated November 8, 1892.

Application filed July 21, 1892. Serial No. 440,800. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NELSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Torpedoes, of which the following is a specification.

This invention relates to an improvement in torpedoes, and by means of this invention a torpedo can be produced having a powerful charge of fulminate or explosive and which is at the same time quite free from danger in packing and shipping, as set forth in the following specification and claims and illustrated in the annexed drawing, which represents a sectional view of the torpedo.

In the drawing, the letter A indicates the fulminate or charge, and T the filling, of gravel or like dense substance, surrounded by wrapper C. In case the charge A is made very powerful the effect of the explosion becomes intense, but the torpedo at the same time becomes so sensitive as to be very dangerous in handling or shipping. By surrounding the wrapper C with a filling S of light specific gravity—such as sawdust or the like—inclosed in a shell W, the sensitiveness of the torpedo is sufficiently overcome to enable safe packing, handling, and shipping. At the same time the enlarged size of the torpedo increases its selling capacity without the weight of the torpedo being excessively increased. By making the external shell or casing W of several thicknesses of such substance as Manila paper it becomes sufficiently strong to escape accidental rupture, and the appearance of the article may be heightened by an external covering of fancy paper—as, for example, colored tissue-paper.

A shield or cover B of suitable material—such as strawboard—will prevent the gravel T from scattering upward into the face or eyes of the thrower when exploding the torpedo by throwing it bottom downward. The bottom of the torpedo is of course the part opposite the twisted or closing portion of the shell.

A disk or piece of consistent material D—such as card-board—may be placed within the wrapper C, so that the latter will retain its shape.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a fulminate or explosive, a gravel or heavy filling, and a wrapper, of a filling of light specific gravity and an external shell or casing for the light filling, substantially as described.

2. The combination, with a fulminate or explosive, a gravel or heavy filling, and a wrapper, of a filling of light specific gravity, and an external shell or casing for the light filling, and a cover or shield placed within the light filling in proximity to the fulminate, substantially as described.

3. The combination, with a fulminate or explosive, a gravel or heavy filling, a disk or strip D of consistent material, and a wrapper, of a filling of light specific gravity and an external shell or casing, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHAS. NELSON.

Witnesses:
WM. C. HAUFF,
E. F. KASTENHUBER.