

United States Patent Office.

THOMAS JEFFERSON JOHNSON, OF CINCINNATI, OHIO, ASSIGNOR TO H. P. DIEHL & CO., OF SAME PLACE.

Letters Patent No. 108,028, dated October 4, 1870.

IMPROVEMENT IN TOY TORPEDOES.

The Schedule referred to in these Letters Patent and making part of the same.

I, THOMAS JEFFERSON JOHNSON, of the city of Cincinnati, county of Hamilton and State of Ohio, have invented a certain Improvement in the Composition for the Pyrotechnical Toy known as a Torpedo.

The nature of my invention consists in the use of a mixture of sulphur and chlorate of potassa, (say about two grains of the former to two grains of the latter,) or any other not readily detonating-compound, and clean fine gravel, eighty grains, which are all to be placed in a paper; then add thereto a small quantity of fulminate of silver, (say one-fourth grain,) or other readily detonating-substance, all of which substances are to be wrapped up in the paper or other enveloping substance. The torpedo is then ready for use, and, when thrown upon any hard surface, the readily fulminating-compound will be exploded, there-

by causing the detonation of the other compound, the detonation of the two compounds giving a loud report.

Claim.

I claim as my invention—

The combination of a readily-exploded fulminate with a less explosive one, so as to obtain a loud-reporting torpedo without the excessive explosive force and danger incidental to the use of large amounts of powerful detonating-compounds.

THOS. J. JOHNSON.

Witnesses:

E. GILLIGAN,

JOSEPH M. LOCKE.