## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN AMMUNITION-MATCHES FOR TOY-PISTOLS.

Specification forming part of Letters Patent No. 156,328, dated October 27, 1874; application filed May 11, 1874.

To all whom it may concern:

Be it known that I, WILLIAM S. BEECHER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Ammunition-Matches for Toy-Pistols; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to an improvement in the manufacture of ammunition-matches for that class of toy-pistols which have usually employed what are known as parlor-matches, and which cause the detonating material on the end of the match to explode and impel the stick from the barrel. A difficulty occurs in the use of parlor-matches from the fact that the stick sometimes ignites and leaves the pistol burning.

It is known to me, as a match manufacturer, that dipping the match-sticks without previous coating would allow the detonating material to break or slip so easily from the wood that the wood would seldom ignite, but there is an uncertainty in this respect, and, further, the detonating material is liable to become detached, and thus render the match useless.

The object of this invention is such a preparation of ammunition that it cannot by any possibility ignite the wood of the stick, and yet securely attach the detonating material to

the stick; and it consists in a coating of silicate of soda or equivalent therefor, as more fully hereinafter described.

The stick is dipped in the detonating material in the usual manner for parlor-matches, and is then dipped in a bath of silicate of soda, or any of its equivalents, to coat both the detonating material and stick, or the stick may be first dipped in the bath of silicate of soda, and then the end dipped in the detonating material in the same manner as for matches.

The first method is preferable, because the coating will prevent the usual flame of the detonating material, but in either case the sticks cannot ignite from the burning of the detonating material, and are therefore useless for any purpose for which matches are usually used, but possess all the requisite for ammunition without the danger attending the use of matches.

I claim as my invention—

The herein-described process for the manufacture of ammunition for toy-pistols, the same consisting in coating the ends of splints with silicate of soda and detonating material.

WILLIAM S. BEECHER.

Witnesses:

A. J. TIBBITS, JOHN E. EARLE.