

UNITED STATES PATENT OFFICE.

CHARLES B. STEPHENS, OF PLAINVILLE, CONNECTICUT.

IMPROVEMENT IN MATCHES OR ARROWS FOR USE WITH TOY PISTOLS OR TOY GUNS.

Specification forming part of Letters Patent No. **150,203**, dated April 28, 1874; application filed March 13, 1874.

To all whom it may concern:

Be it known that I, CHARLES B. STEPHENS, of Plainville, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Matches or Arrows for Use with Toy Pistols and Toy Guns, of which the following is a specification:

Letters Patent of the United States, No. 145,798, dated December 23, 1873, were granted to Glover S. Hastings, Edward N. Pierce, and myself for improvement in toy guns and pistols, intended to be used in exploding the detonating compound on the end of a common parlor-match or arrow, and thereby impelling or propelling the match or arrow from the fire-arm. I have found that the common parlor-match, when used with this toy fire-arm, is liable to ignite when exploded, and burn after leaving the fire-arm—a thing that is desirable to avoid, so as to avoid all danger of setting fire accidentally to other things. This retention of fire by the match I find to be due to the fact that the stock of the match is dipped into coal-wax before the detonating mixture is put on, for the purpose of causing the stock to ignite. The detonating quality of the firing compound is not altered

by the addition or the omission of the coal-wax; and my improvement consists in omitting it, that the retention of the fire may be obviated, and the purpose of the invention is carried out by omitting either the coal-wax or any other substance of the same general nature which may be used by any match-maker for the purpose of effecting retention of fire. Such substitutes may be; I do not know, as I am not skilled in match-manufacture; and, therefore, I specify that my invention consists in the omission from a detonating compound—such, in general qualities, as are found in so-called parlor-matches—of coal-wax, or other substance answering the purpose in the compound of the coal-wax; and

I claim as my invention—

As a new article of manufacture, a match or projectile for toy pistols, and the like, composed of an explosive coating on a body of wood or other material not easily ignited, so as to prevent the spread of fire by the use of the match, all substantially as set forth.

CHAS. B. STEPHENS.

Witnesses:

GLOVER S. HASTINGS,
FRANK S. JOHNSON.