

UNITED STATES PATENT OFFICE.

SAML. STEVENSON, OF OIL CITY, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF SHOT.

Specification forming part of Letters Patent No. **45,651**, dated December 27, 1864.

To all whom it may concern:

Be it known that I, SAMUEL STEVENSON, of Oil City, in the county of Venango and State of Pennsylvania, have invented a new and improved mode of manufacturing shot from lead otherwise than dropping the molten metal from a great height from a tower or dropping it through a tube in which a strong ascending current of air is forced. These modes are the only ones I can find ever applied to the manufacture of shot.

My mode consists in the adaptation of a forcing-pump to receive the molten lead in such a manner as to enable me to eject it by a sudden jerk (by means of a vibrating or rotary vessel) with a sufficient force either upward or laterally, so as to divide the metal or molten lead into small globules or pellets, and also to a sufficient distance to secure their spherical form and consistency (or degree of cooling) on reaching the basin of water adapted to the reception, however scattering the stream may be.

Having experimented with an ordinary forcing-pump of small size, I am satisfied that shot of the best quality can be manufactured by this means at a great saving of expense.

I may find it necessary to invent a peculiar combination of the pump and melting-pot or furnace, which, however, is not a part of my present invention.

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

The mode of manufacturing shot by throwing the molten lead into the air by means of a forcing-pump sufficiently high or distant to secure their spherical form when lodged in the basin adapted for their reception, as set forth and specified.

SAMUEL STEVENSON. [L. S.]

Witnesses:

JOS. S. TOWNSEND,

JOHN A. LOUREZ.