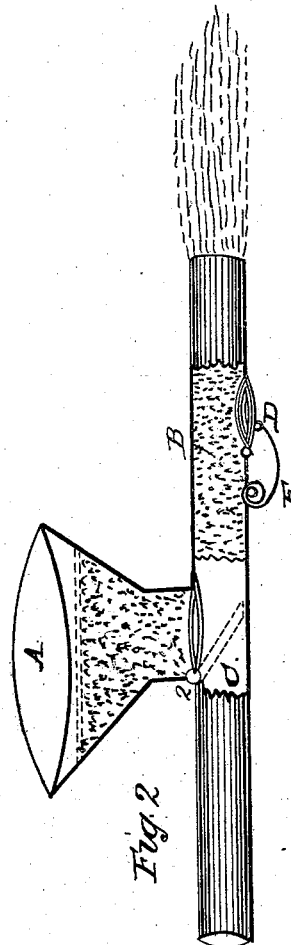
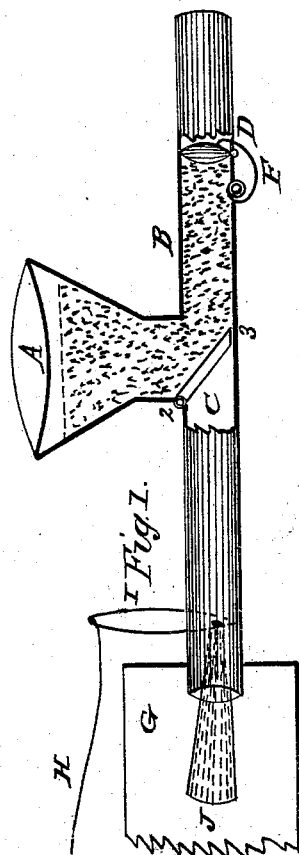


S. SCOTTON.

Device for Shooting Gravel at Cows upon Railroad Tracks.

No. 54,783.

Patented May 15, 1866.



Witnesses:  
Abela F. Scotton  
Mary H. Buchanan

Inventor:  
Stephen Scotton

# UNITED STATES PATENT OFFICE.

STEPHEN SCOTTON, OF RICHMOND, INDIANA.

IMPROVED DEVICE FOR SHOOTING GRAVEL AT COWS UPON RAILROAD-TRACKS.

Specification forming part of Letters Patent No. **54,783**, dated May 15, 1866.

*To all whom it may concern:*

Be it known that I, STEPHEN SCOTTON, of Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Improvement on a Machine or Implement for Shooting Missiles at Cows on Railroads, invented by me, and for which Letters Patent were granted to me on the 11th of May, 1858; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and showing the construction and operation of the same.

Figure 1 is a perpendicular section of the machine when charged and ready for use.

A is the hopper or reservoir for holding the gravel. B is the tube or barrel for holding the charge, and from which it is projected by the force of steam from the boiler along the track. When at rest the valve C, which works on a hinge at Fig. 2, drops down, as shown at Fig. 1, and allows the gravel to run down into the barrel B as far as the hinged and upright valve D. This valve is made to stand perpendicular, as shown at D, Fig. 1, when no force is applied; but on the application of force it yields and bends down, as shown at D in Fig. 2. Thus by merely pulling a cord the steam rushes through the tube, raising valve C. Striking the body of gravel at B, it forces it along, bending down the valve D and making a clear passage through the tube, like a gun-barrel. Letting go the cord, the steam is instantly shut off, when valve C drops and D rises up. The gravel immediately runs down and fills up the tube as far as valve D. It is

then ready for another discharge. In that way it can be discharged as often as the cord is pulled. The force of the discharge can be regulated by the force applied to the cord, a strong pull causing a violent discharge and a light pull a feeble one. Valve C is made rather thick, and should be beveled from the under edge to the upper one, as shown at 3, like a chisel, so that when it is raised up, as at 3 in Fig. 2, it will not be stopped from closing up the throat of the funnel A by means of gravel-stones being caught in the opening. Valve D may also be made of gutta-percha or some other elastic material. These drawings and specification are made specially to illustrate the operation of the valve C, all of the rest having been described and illustrated in a former patent. Valve D is raised up after a discharge by means of the coil-spring E.

G is a locomotive-boiler, in which the tube B is inserted. Steam is admitted into B by pulling cord H, which shoves out plug Y. The steam shuts the plug up.

I do not claim the tube B, nor the valve D, nor the hopper A, for they have all been claimed and used before; but

What I do claim is—

The construction and operation of the valve C, in combination with the hopper A and tube B, or their equivalents, for the purposes herein described.

STEPHEN SCOTTON.

Witnesses:

T. N. YOUNG,  
C. W. YOUNG.