

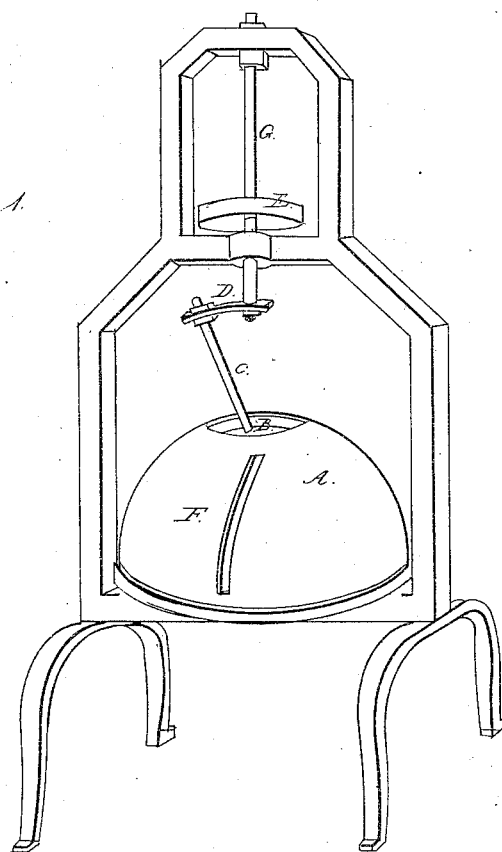
J. F. Ostrander.

Bullet Machine.

N<sup>o</sup> 6,265.

Patented Apr. 3, 1849.

Fig 1.

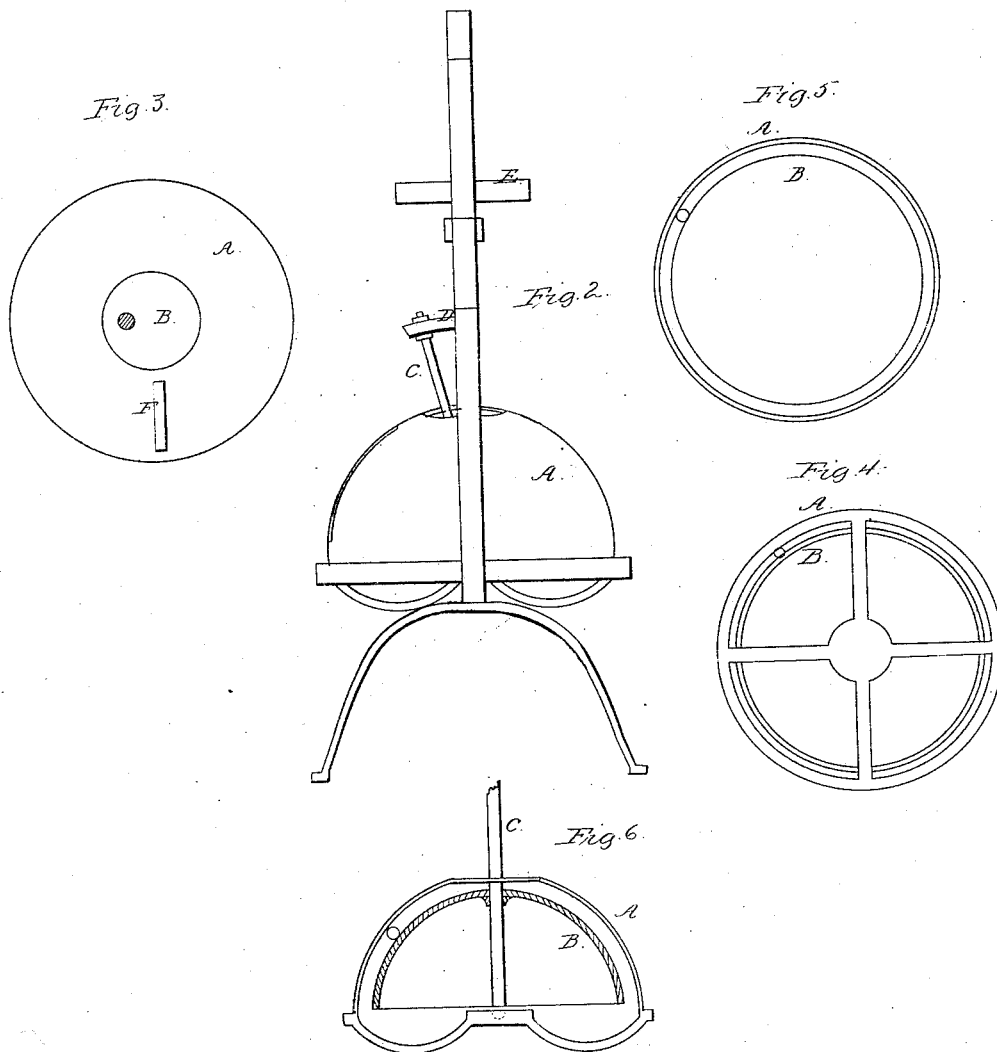


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Fig. 7.

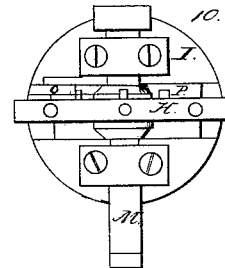
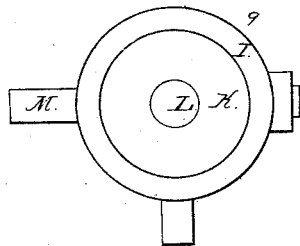
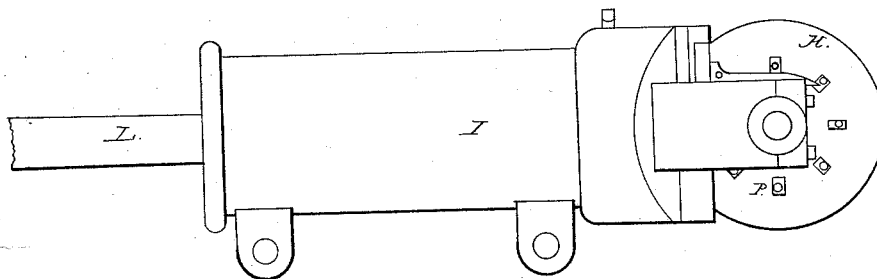
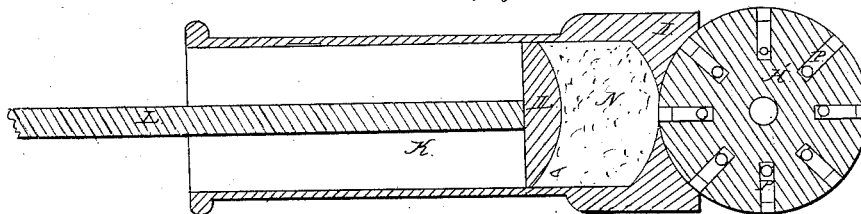


Fig. 8.



# UNITED STATES PATENT OFFICE.

J. F. OSTRANDER, OF NEW YORK, N. Y.

## MACHINE FOR MAKING BULLETS OR PILLS.

Specification of Letters Patent No. 6,265, dated April 3, 1849.

*To all whom it may concern:*

Be it known that I, J. F. OSTRANDER, of New York, county and State of New York, have invented a new and useful Machine  
5 for Making Bullets, Shot, &c.; and I do hereby declare that the following is a full and exact description.

To enable others to make and use my invention I proceed to describe its construction and operation, reference being had to  
10 the annexed drawings which make part of this specification.

Figure 1 is a perspective view; Fig. 2, side elevation; Fig. 3, plan of the top; Fig.  
15 4, plan of the bottom; Fig. 5, cross section; Fig. 6, vertical section; Fig. 7, cylinder for pill mass; Fig. 8, section of ditto; Fig. 9, piston end; Fig. 10, wheel end.

Within a female hemisphere is placed a  
20 male hemisphere as much smaller in size as will admit between them the bullet to be made. The male one is set upon a pivot exactly in its center so that when vibrated it will still preserve its relative position. The  
25 external or female hemisphere, A, has an opening in the top into which the pieces of lead are dropped to be spherified. The band wheel, E, moves the crank, D, and carries with it the shaft of the male hemisphere, B.  
30 The upper end of this shaft is placed upon the pivot (which is secured in the sloat made in the crank, D,) the position of which is adjusted by a binding nut. The obliquity of the shaft is always according to the size

of the shot or pill to be made. The obliquity 35 being increased for a larger size. The shot or pill between the two hemispheres traverses a spiral path until it reaches the sloat or opening, F, when it falls out. This compound motion inevitably spherifies any  
40 mass, (of the proper size) put into the machine and however many pieces may be put in at the same time it is impossible that they should interfere with each other.

When this machine is used to make pills 45 the mass is properly prepared for it—that is measured and cut off in pieces exactly of the same size—to which size the machine must be adapted. So also when bullets or shot are made. The lead must be cut off in pieces of  
50 the same sizes and the machine adapted to such size.

What I claim as my invention and desire to secure by Letters Patent is—

1. The oblique gyration of one hemis- 55 phere within another for the purpose of spherifying any mass of matter in the manner above described.

2. I also claim the sloat, F, or any outlet, for the purpose of letting out the bullets. 60

In witness whereof I have hereunto set my hand at the city of New York this 2d day of May 1848.

JONATHAN F. OSTRANDER.

Witnesses:

OWEN G. WARNER,  
NIEL GRAY.