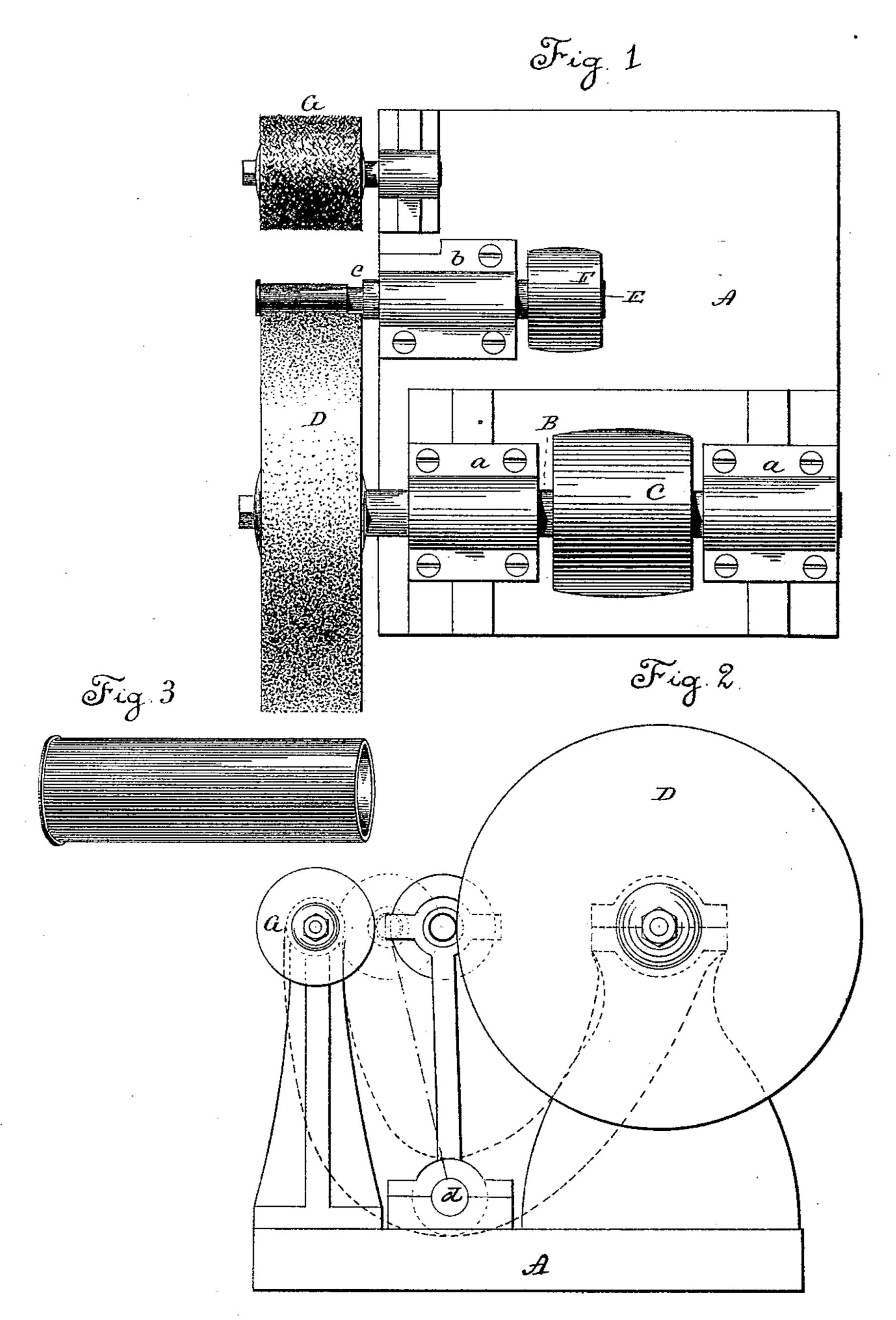
H. E. FOWLER.

METHOD OF FINISHING CARTRIDGE SHELLS.

No. 350,729.

Patented Oct. 12, 1886.



Derknesses. Let Ohnmag Fall Carl Herbert 6. Fomler. Inventor. By Ottly.

United States Patent Office.

HERBERT E. FOWLER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE WINCHESTER REPEATING ARMS COMPANY, OF SAME PLACE.

METHOD OF FINISHING CARTRIDGE-SHELLS.

SPECIFICATION forming part of Letters Patent No. 350,729, dated October 12, 1886.

Application filed January 9, 1886. Serial No. 188,060. (No model.)

To all whom it may concern:

Be it known that I, HERBERT E. FOWLER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Methods of Finishing Cartridge-Shells; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top view of the machine adapted to carry out the improved method; Fig. 2, an end view of the same; Fig. 3, a perspective

view of a cartridge-shell enlarged.

This invention relates to an improvement in the method of finishing metal cartridge-shells, and with special reference to shot-shells. In the usual manner of finishing this class of shells the surface is polished on a fine buff or crocus wheel, which, while giving a smooth surface, leaves it with a dull or dead finish.

The object of this invention is to finish the shells so as to give them a bright brilliant appearance; and it consists in first smoothing the shell on a polishing-wheel having a fine surface—as crocus—and then finishing on a fibrous surface—as felt—which produces minute circumferential scratches on the surface, and which gives to the shell a bright brilliant appearance. This result is best obtained on the machine hereinafter described.

A represents the base, upon which the oper-

35 ative parts are arranged.

B is an arbor supported in bearings a a, and is revolved through a pulley, C, or otherwise. On the outer end of the arbor B is a buff or

polishing wheel, D, having a fine surface—as crocus.

E is an arbor parallel to the arbor B, arranged in a bearing, b, which is hung near the base at d, to allow the arbor E to swing toward and from the arbor B, and is arranged to be rapidly revolved by a pulley, F, or otherwise, and preferably in the opposite direction to the arbor B. The arbor E carries at its outer end a spindle, e, adapted to receive and hold a cartridge-shell.

G is a cylinder having a fibrous surface—as 50 felt—its axis parallel with the axis of the wheel

D, and should be in the same plane.

The shell to be finished is placed upon the spindle e, the spindle and wheel revolving rapidly. The arbor E is swung toward the wheel 55 D until the shell comes in contact with the surface of the wheel, which smooths the surface, as in the usual manner. Then while still revolving, the arbor E, carrying the shell, is swung toward the fibrous cylinder G and the 60 shell is pressed against it, the fibers producing minute circumferential scratches, which give it a bright and brilliant appearance, and without practically detracting from the smoothness of the surface.

I claim—

The herein-described method of finishing cartridge-shells, which consists first in giving to the surface of the shell a fine smooth finish, and then subjecting the surface of the shell, 70 while rapidly revolving, to a fibrous working-surface, substantially as described.

HERBERT E. FOWLER.

Witnesses:

JOHN E. EARLE, LILLIAN D. KELSEY.