

S. W. WOOD
Cartridges for Fire-Arms.

No. 144,011.

Patented Oct. 28, 1873.

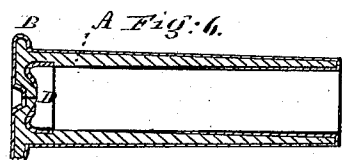
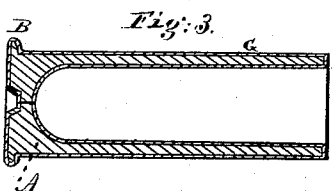
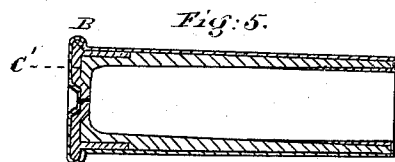
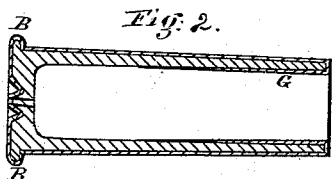
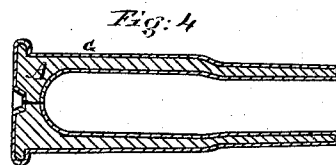
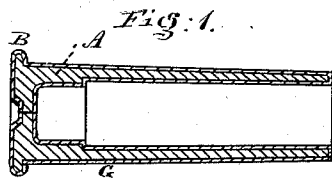
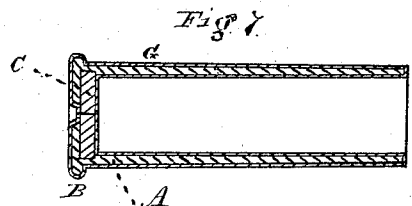
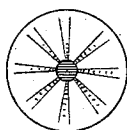


Fig: 8.



Witnesses.

R. Thomas,
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Inventor.

S. W. Wood

UNITED STATES PATENT OFFICE.

STEPHEN W. WOOD, OF CORNWALL, NEW YORK.

IMPROVEMENT IN CARTRIDGES FOR FIRE-ARMS.

Specification forming part of Letters Patent No. **144,011**, dated October 28, 1873; application filed March 18, 1873.

To all whom it may concern:

Be it known that I, STEPHEN W. WOOD, of Cornwall, county of Orange and State of New York, have invented a new and useful Improvement in Cartridges; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 represents a central longitudinal section of a case for a cartridge, the body of which is composed of paper or other suitable fibrous material, and covered with metal, substantially as herein set forth. Fig. 2 is a similar case for a cartridge, in section, of fibrous material, having an anvil formed on its base, upon which to explode the percussion-cap, and but partially covered with metal. Fig. 3 is a corresponding section, differently formed on its interior; also covered with metal. Fig. 4 represents a case for a cartridge, of paper or other fibrous material, and necked so as to receive a bullet smaller than the main body of the case. Fig. 5 is a case for a cartridge, in section, of paper or other fibrous material, and having a base or head separate from the body thereof, and covered with metal. Fig. 6 represents a similar case, in section, to that of Fig. 2, and which is provided with a re-enforced cup, placed in the base thereof, similar to the invention of J. W. Cochran, and which is represented as being but partially covered with metal, the metal extending only partially over the interior. Figs. 7 and 8 are still further modifications of the same.

My invention consists in a case for a cartridge, of paper or other suitable fibrous material; or the body thereof of fibrous material, combined with a base or head, of metal, wood, or other suitable material, and covered with metal, substantially in the manner herein set forth.

It is obvious that my new case for a cartridge may be made after any of the variously-formed inventions of this class, and the body may be constructed in one piece, or composed of several parts, constituting the whole; and as my invention does not relate to any special

form of case, this description will be confined to a simple detail of a few of the practical methods of accomplishing the same.

Like letters designate corresponding parts in all of the figures.

The main body of the case A is made of paper, rendered water-proof, so as not to absorb moisture in the process of being coated with metal, and is compressed into the required form by means of punch and die, or shaped by any other convenient method. This case is made by wrapping sheets of paper into a cylinder of the desired size, and the flange or rim B formed thereon from the body A, as shown in Fig. 7, in which instance the base or closed end of the case may be made by folding the paper as represented in the end view, Fig. 8. When the case A is made comparatively thin the base or head thereof may be re-enforced by a disk, C, of metal, wood, or other suitable material, to assist in resisting the blow of the hammer; or a cup, D, inserted, such as used in the cartridge known as the "Berdan."

If preferred, the base or head may consist of a separate piece, C', as shown in Fig. 5, with the body A of the case of fibrous material, and secured thereto in any convenient manner.

The paper or other fibrous material of which this case A, or the main body thereof, is formed may be rendered proof against moisture, either in the pulp or afterward, as may be found most expedient, and by any of the well-known processes. When the case shall have been rendered proof against moisture, a body or covering of plumbago or its equivalent is given to the surface, or to such parts as may be required, which forms a metallic base, upon which to deposit the metal forming the exterior G of the case. The fibrous case now being prepared against moisture by absorption, and provided with a metallic base, is immersed in an electro-galvanic bath, and receives a coating of metal upon its surface of any desired thickness.

In preparing the fibrous material to be used in making cartridges, the plumbago, or any other suitable substance whereby a metallic base is created, may be intermingled therewith

in the process of preparation—that is to say, intermingled with the fibrous material when in the pulp.

I desire to be distinctly understood that I do not confine myself to any special form of a case for a cartridge composed of fibrous material, or composed in part of fibrous material, and coated by depositing thereon a covering of metal, as herein described; but

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

A case for a cartridge composed entirely or in part of paper or other fibrous material, covered with metal, substantially as herein set forth.

Witnesses: STEPHEN W. WOOD.
 WILLIAM A. SEAVER,
 P. E. THOMAS.