(No Model.)

E. A. MONFORT.

ELECTRIC CARTRIDGE.

No. 365,842. Patented July 5, 1887.

Fig. 1.

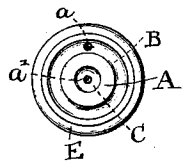


Fig. 2.

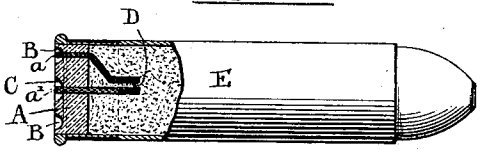


Fig. 3.

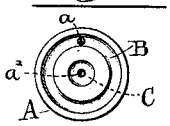
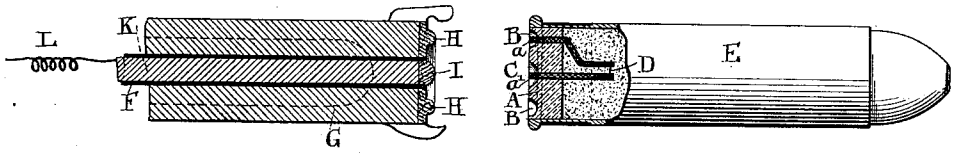


Fig. 4.



Witnesses:-

Louis M. Whitehead.

G. F. Hellman

Inventor:-

Edgar A. Monfort

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

EDGAR A. MONFORT, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE UNIVERSAL ELECTRIC ARMS AND AMMUNITION COMPANY, OF SAME PLACE.

ELECTRIC CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 365,842, dated July 5, 1887.

Application filed January 13, 1883. Renewed March 9, 1885. Serial No. 158,215. (No model.) Patented in England January 9, 1883, No. 125; in France July 9, 1883, No. 156,468, and in Belgium July 9, 1883, No. 161, 968.

To all whom it may concern:

Be it known that I, EDGAR A. MONFORT, a citizen of the United States of America, residing at New York, and having a place of business at 39 Nassau street, in said city, in the county of New York and State of New York, have invented certain new and useful Improvements in Cartridges to be Discharged by Electricity, and a sliding bolt to convey electricity to discharge the same, of which the following is a full, clear, and exact description.

My invention relates to improvements in the construction of cartridges to be discharged from the different varieties of breech-loading fire-arms now in general use, and from breech-loading cannon, howitzers, and light and heavy ordnance for army and navy use, by means of electricity, and for an improvement in the sliding bolt to convey the electricity into the cartridge when the cartridge is in the cartridge-chamber of the gun ready to be discharged, and against the end of which the base of the cartridge rests when it is discharged from the gun by means of an electric current. I convey the electricity to ignite the powder by heating a fine platinum wire into the cartridge by the electric conductors illustrated in the accompanying drawings.

Figure 1 is an end view of the base of the cartridge. Fig. 2 is a view of the cartridge with a portion of the shell removed to show the construction. Fig. 3 is a face view of the base; and Fig. 4 is an elevation of the cartridge and a section of the slide, the cartridge being broken away.

E represents the cartridge-shell.

a and *a'* represent fine copper wires twisted together, which I use to conduct the electricity into the cartridge to heat the fine wire D, which connects with said copper wires *a* and *a'*, to a red heat to ignite the powder.

B B represent a round or annular depression in the butt of the cartridge, into which the fine twisted copper wires *a* project from the inside of the cartridge-shell.

C represents a depression in the center of the cartridge, into which the fine copper wires *a'* project.

A represents the base or butt of the cartridge, which I construct of any suitable insulating material.

The copper wires are cut off flush with the outer flat surfaces of the insulating-plug A, so that the cartridge can be used in magazine-guns now in general use. If the cartridge is now placed in the cartridge-chamber in the gun and the sliding bolt G forced against the base of the same, the annular projections H H will fit into the annular depressions B B of the cartridge, and the projection I of the sliding bolt will force itself into the central depression, C, of the cartridge, and the brush ends of the fine copper wires will be crushed against said projections of the said sliding bolt, and thus insure an electric current on connection between the bolt and the cartridge.

The projections H H of the sliding bolt and the projection I of the same I make of platinum or other non-corrodible material, to insure a proper contact with the wires of the cartridge when the gun is in use. F in the sliding bolt represents insulating material, which entirely surrounds and insulates K from the rest of the bolt.

L represents a spiral spring or wire in connection with a small dynamo-machine placed in the stock of the gun or other source of electric energy, which, with the insulated portion of the sliding bolt K, conveys the electricity into the cartridge. The outer portion of the bolt G can be connected by another wire with the battery in the stock of the gun; or the gun-casing can be used for the other conductor.

What I claim is—

An electric cartridge having an annular depression with a conductor, as *a*, and a central depression with a conductor, as *a'*, the inner ends of said conductors being connected by a metal piece, as D', embedded in the powder, constructed and adapted to serve with an arm having projections to agree with the depressions and electrical connections, as set forth.

In testimony whereof I have hereunto set my hand this 8th day of January, 1883.

EDGAR A. MONFORT.

Witnesses:

F. M. NORCROSS,

JOHN H. WILSON.