No. 871,747. PATENTED NOV. 19, 1907.

W. T. ALSOP.

METHOD FOR RESHAPING AND RESTORING CARTRIDGE SHELLS.

APPLICATION FILED DEC. 18, 1905.

Fig. 1.

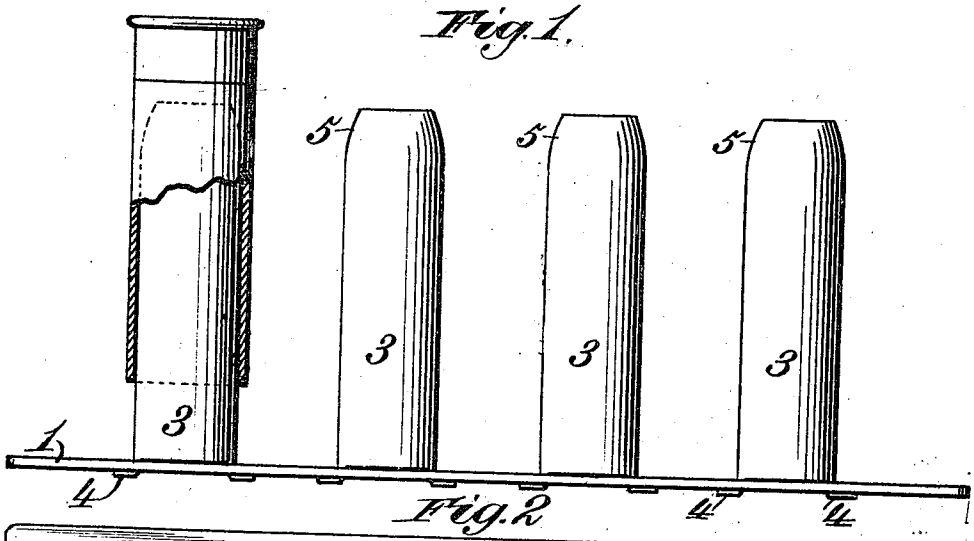


Fig. 2

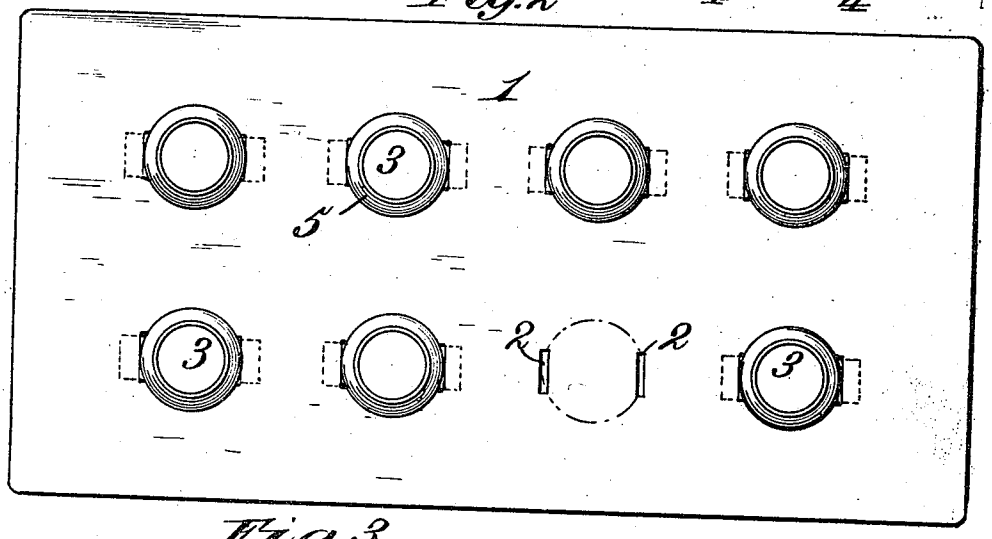
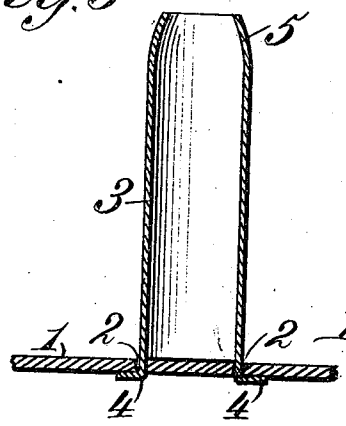


Fig. 3



Witnesses,
Robert Gwatkin,
[illegible]

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UNITED STATES PATENT OFFICE.

WILLIAM T. ALSOP, OF OWENSBORO, KENTUCKY.

METHOD FOR RESHAPING AND RESTORING CARTRIDGE-SHELLS.

No. 871,747. Specification of Letters Patent. Patented Nov. 19, 1907.

Application filed December 18, 1905. Serial No. 292,339.

To all whom it may concern:

Be it known that I, WILLIAM T. ALSOP, a citizen of the United States, residing at Owensboro, in the county of Daviess and State of Kentucky, have invented new and useful Improvements in Methods for Reshaping and Restoring Cartridge-Shells, of which the following is a specification.

This invention relates to a method for reshaping and restoring cartridge shells used in sportsman's guns or the like, and the primary object of the same is to provide a simple and effective means for expeditiously reshaping a shell after it has been used and distributing or rectifying an irregularity of saturation of the paraffin ordinarily employed in shells of this type, and which frequently becomes displaced when the charge from the shell is fired.

The shaper involves essentially a suitable thin or sheet metal base, from which a plurality of thin metal tubes project vertically, the tubes being uniform in height and preferably having upper inwardly beveled extremities for convenience in application of empty shells thereover. After the shaper has had the shells applied thereto, it is subjected to heat of sufficient degree to cause the paraffin in the paper body of the shell to become regularly distributed throughout such body and to overcome any displacement that may have ensued by discharging the load from the shell.

In the drawing, Figure 1 is a side elevation of a shaper embodying the features of the invention. Fig. 2 is a top plan view of the same. Fig. 3 is a section through a portion of the shaper showing the preferred means of attaching the tubular members to the base.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a thin or sheet metal base, having slots or openings 2 formed therein at intervals. Disposed on this base is a plurality of tubular shell supports 3, preferably, formed of thin sheet steel and provided with bendable projections 4 at their lower ends, which are inserted through the slots or openings 2 and upset against the underside of the base 1. The upper extremities of the supports 3 are inwardly beveled, as at 5, to facilitate the application of shell bodies thereover. All of the supports 3 are of the same height, or have the same vertical extent, and they are spaced such distances as to render the application and removal of shells with respect thereto expeditious and convenient.

After the shells to be reshaped are arranged on the supports 3, the device bearing the shells is subjected to heat by placing it in an oven, or it may be heated by other means. After subjecting the shells to the action of heat for a suitable length of time, which will be determined by practice, the shaper is removed from adjacency to the heating means with the shells thereon, and the shells permitted to cool and harden, and after cooling the shells are removed and will be ready for repreparation or recharging by the usual methods.

One of the great advantages of the shaper is that shells, as now commonly constructed, have a difference in depth, and particularly those shells where dense smokeless powder and bulk smokeless powder are used. This difference in shell construction can be readily determined with convenience in separating all the shells of one kind from the supports, in view of the fact that when two kinds of shells, for instance, are applied to the supports they will have a variation in vertical extent. The size of the base 1 will depend upon the number of supports 3 adapted to be used therewith or secured thereto. In some instances it may be necessary to resupply the shell bodies with paraffin to prolong the use of the shells or to render them further serviceable after continued use. This can be readily done by dipping the open ends of the shells in melted paraffin previous to applying the said shells to the supports, and the heating operation carried on after the shells are applied to the supports, as hereinbefore set forth, will facilitate the spread of the paraffin over the bodies of the shells.

It will be understood that the upper reduced extremities of the supports 3 facilitate the application of the open ends of the shell bodies thereto without mutilating the edges of the bodies.

A further advantage in the treatment of shells hereinbefore set forth is that the heating and cooling thereof render the old primers more easily removable. This is an important result of the method, as difficulty is fre-

quently experienced in expelling old primers from shells for the purpose of replacing such primers with new ones.

Having thus described the invention, what is claimed, is:

1. The method of reshaping and restoring a shell having fusible material in the body thereof, consisting in supporting the shell to hold it in shape while under the subjection of action of heat to distribute the stiffening material throughout the body and subsequently cooling the shell while so supported.

2. The method of reshaping and restoring a shell saturated with fusible stiffening material, consisting in supporting the shell interiorly so as to hold it in shape while subjecting it to the action of heat to distribute the stiffening material throughout the shell, and subsequently cooling the shell while so supported.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM T. ALSOP.

Witnesses:
CHARLES S. HYER,
JAMES L. NORRIS.