

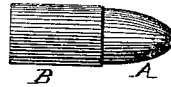
A. C. HOBBS.

BULLET PATCH.

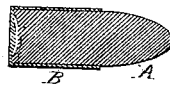
No. 113,431.

Patented Apr. 4, 1871.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

*Harry King*  
*Phil. T. Dodge*

*Inventor*

*A. C. Hobbs*  
*by Dodge & Munn*  
*his atty.*

# United States Patent Office.

ALFRED C. HOBBS, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 113,431, dated April 4, 1871.

## IMPROVEMENT IN BULLET-PATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern :*

Be it known that I, ALFRED C. HOBBS, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain Improvements in Patches for Bullets, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in an improved patch for rifle-bullets, the same being formed of paper pulp, as hereinafter more fully explained.

Figure 1 is a side elevation of a bullet with my improved patch applied thereto;

Figure 2, a longitudinal section of the same; and

Figure 3, an end view thereof.

Various plans have been devised for applying a patch to bullets for breech-loading arms, but all such plans are more or less defective or expensive. The plan generally adopted has been to prepare strips of fine, strong paper, of proper width, and long enough to wrap about twice around the bullet. These strips, after being moistened, are wrapped smoothly around the bullet so as to cover its cylindrical portion, with one edge projecting below its base, after which the projecting edge is turned down and twisted together, and forced as compactly as possible into the cavity in the base of the bullet. This method is necessarily slow and tedious, and requires great care to so wrap the paper as to have the ends of the strip come to the exact same point, to make it of uniform thickness all around, without which it is obvious that the bullet will not be seated concentrically in the bore.

To remedy these difficulties is the object of my present invention, and I accomplish the desired result as follows:

I make a patch, B, upon the bullet A of paper pulp, as represented in the drawing. This may be accomplished in various ways. One way is to first dip the bullets A into a preparation of gelatine or glue to the

depth that it is intended to have the patch extend, and when this coating has partially dried, so as to form a viscid or sticky covering, then dip the bullet into a vessel containing the prepared pulp, a coating of which will adhere to it. It is then allowed to dry, thus forming a seamless tubular patch of paper, which may be increased in thickness, by repeating the operation, to any desired extent.

Another and more perfect method of applying or forming the patch is to place the bullet in a mold point downward, with a space left surrounding it where it is desired the patch shall be applied, and then pour the pulp into this space, after which it is dried, thus forming a perfect patch on the bullet. A large number of these molds may be arranged in a compact mass, as, for instance, by boring them in a metallic plate, and thus the pulp be applied to a large number of bullets at once.

To hasten the drying of the pulp they may be heated in any suitable manner.

The patched bullets are removed from the molds by a plunger or piston working through a hole in the plate or mold opposite the point of the bullet; and it is obvious that where the molds are made in a mass, as above described, the pistons may in like manner be secured to a corresponding plate, and all made to operate to expel the bullets from the mold of the entire mass at once.

In this way I produce a patch that has no seam and is uniform in thickness throughout.

Having thus described my invention,

What I claim is—

A patch for bullets composed of paper pulp applied to the bullet, substantially as described.

Witnesses: ALFRED C. HOBBS.

A. J. HOBBS,  
FRANK R. KENNEDY.