

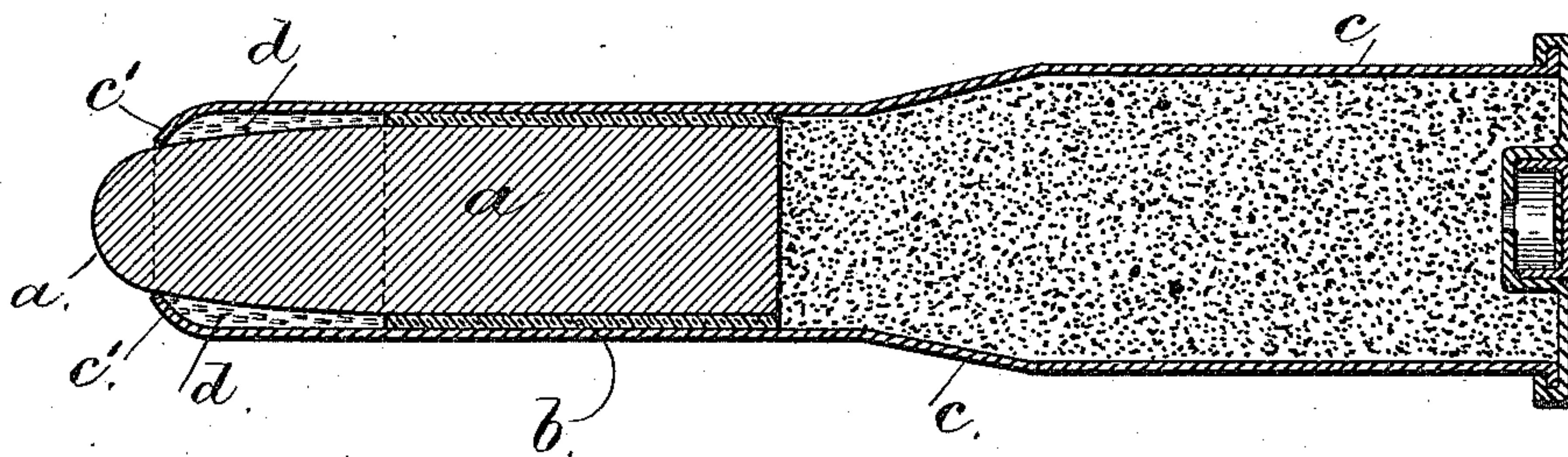
(No Model.)

H. F. CLARK.

CARTRIDGE.

No. 333,728.

Patented Jan. 5, 1886.



Witnesses.
Harold Serrell
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Inventor
per Henry F. Clark
Lemuel W. Serrell
att'y

UNITED STATES PATENT OFFICE.

HENRY F. CLARK, OF POUGHKEEPSIE, NEW YORK.

CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 333,728, dated January 5, 1886.

Application filed September 3, 1885. Serial No. 176,070. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. CLARK, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and
5 useful Improvement in Cartridges, of which the following is a specification.

Cartridges for breech-loading fire-arms have been made with a metallic case or shell having a bullet within the forward end and lubricating material within the shell and around
10 the point of the bullet. In other instances the bullet has been surrounded by a patch formed of a strip of paper, and this has been inserted at the end of the cartridge-case and
15 lubricating material applied between the base of the bullet and the wads that rest upon the powder.

My present invention is designed as an improvement upon Letters Patent granted to me,
20 No. 310,650, in which the bullet, having a paper patch around the same, is combined with a lubricating material introduced in the shell around the point of the bullet; but the lubricating material around the point of the
25 bullet, if adapted to use in cold weather, is liable to melt and run out of the shell in hot weather.

My invention relates to a cartridge wherein I make use of a bullet that is provided with
30 the aforesaid paper patch—such as shown in my Patent No. 286,387—and with the lubricating material introduced in the shell around the point of the bullet, as shown in my aforesaid Patent No. 310,650, the special feature of
35 the present improvement being that the end of the cartridge-shell is closed in over the lubricating material, with the end of the shell against the surface of the bullet, thereby confining the lubricating material and retaining
40 the same within the shell, whether in a soft or hard condition.

In the drawing I have represented my improved cartridge by a longitudinal section. The bullet *a* is preferably surrounded with the
45 patch *b* of paper. The shell *c* is of any desired size, shape, or length, and under all circumstances it receives within it the bullet having the patch *b* around it, the point of the bullet projecting slightly beyond the end of
50 the shell *c*. The space around the conical end of the bullet within the shell is filled with lubricating material *d*—such as tallow or other suitable substance. The end of the cartridge-shell at *c'* is now contracted or closed over the

lubricating material, as shown in the drawing, 55 and the end of the shell is made to press tightly against the surface of the bullet, thereby confining the lubricating material and retaining the same within the shell, whether in a solid or liquid state. When the cartridge is
60 fired, the end of the shell is spread, and the tallow or other material passing out with the bullet not only lubricates the patch and causes it to pass through the barrel with great ease and accuracy, but it also lubricates the barrel
65 and prevents injury to the same by leading, and the patched bullet cleans out the barrel in a perfect manner and leaves the barrel with a thin coating of lubricating material that prevents the residuum adhering to the metal.
70 The end of the cartridge-shell may be closed or turned against the bullet in any desired manner; but usually it is done by a conical die, and said shell retains within it the lubricating material, regardless of the condition it
75 may assume under the action of heat.

One of the advantageous features of my invention is that dirt and gritty substances, which may injure and clog the fire-arm, are prevented from adhering to the lubricating-
80 grease contained in the end of the cartridge-shell, and the cartridge can be kept clean.

In cases where the lubricating material has before been placed in front of the patch and around the bullet such lubricant was not con-
85 fined by the case, and would run out if it became melted by heat, and where the case was closed around the ball there was no patch to prevent the lubricant running into the powder when the case became warm enough to
90 melt the lubricant. In all instances the lubricant if too hard is not effective in cold weather.

I claim as my invention—

The cartridge having a patch around the
95 bullet to fit tightly within the case and prevent the lubricating material, whether solid or liquid, reaching the powder, and the end of the case closed in tightly around the bullet to confine such lubricating material, in the case
100 and around the tapering portion of the bullet, substantially as specified.

Signed by me this 29th day of August, A. D. 1885.

HENRY F. CLARK.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.