

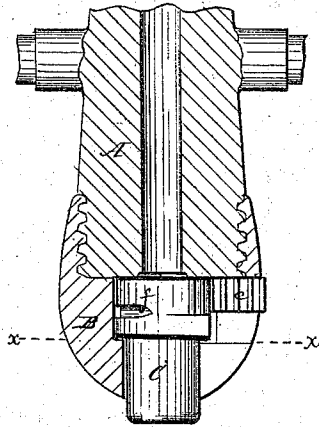
N. THOMPSON.

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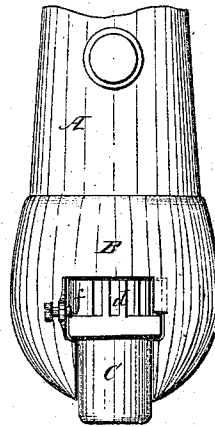
No. 132,220.

Patented Oct. 15, 1872.

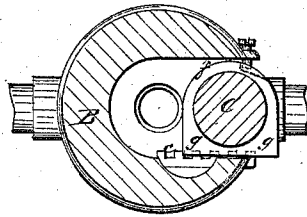
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Sydney Smith.*  
*J. C. Robbins*

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*Nathan Thompson*  
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# UNITED STATES PATENT OFFICE.

NATHAN THOMPSON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN BREECH-LOADING ORDNANCE.

Specification forming part of Letters Patent No. **132,220**, dated October 15, 1872; antedated October 11, 1872

*To all whom it may concern:*

Be it known that I, NATHAN THOMPSON, of the city of Brooklyn, in Kings county and State of New York, have invented an Improvement in Breech-Loading Ordnance, of which the following is a specification:

This invention is an improvement upon an invention for which I made application for Letters Patent on the 7th of March, 1872; and it consists in forming the rolling breech-block with one side of its collar or guide portion of rectangular form, so as to give increased bearing-surface to resist the shock of firing, and as a counter-balance to such angular projections I provide a solid formation on the reverse of the geared or toothed portion of said breech-block; said breech-block being also formed of spirally wedge-shape to close the breech in the rolling-motion.

Referring to the drawing, Figure 1 represents a horizontal section in part of the breech-portion of a piece of ordnance constructed according to my invention; Fig. 2 is a side elevation of the same portion; and Fig. 3 is a section taken on the line *xx* of Fig. 2, with the breech-block rolled to its outer position.

In this instance I have shown a method of converting a muzzle-loading into breech-loading ordnance, in cases where the stock in the breech-portion is insufficient for other modes of alteration by severing the breech-end from the bore or barrel portion A, and attaching, by screw or other similar mechanical device, the breech-portion B.

Referring to the drawing, O is the breech-block, which is operated in every respect in the same manner as that in my previous

application above referred to; its construction, however, is different, inasmuch that one-half of the perimeter of that portion which traverses the guides is of rectangular form, whilst the other half is circular, and forward of this rectangular portion about one-third of its cylindrical periphery is toothed, as at *d*, to gear with the horizontal rack *e* in the main portion or body B of the breech, the remaining two-thirds, *f*, of such cylindrical periphery being solid to act as a counter-balance to the angular projections *g* of the rolling breech-block. The rear portion of that part of the breech-block which traverses the ways or guides, being inclined or spiral, act to cause said breech to close the bore of the gun without any separate device to screw it home, or to its bearing. The firing apparatus to be applied to this breech-block may be the same as that described in previous applications filed and allowed.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The rolling breech-block O, when provided with a guide-collar of rectangular form on one-half of its perimeter and cylindrical on the opposite portion, as shown and described, for the purpose set forth.
2. The rolling breech-block, when made with a spirally-formed rear portion to operate as a wedge in closing the breech, substantially as specified.

NATHAN THOMPSON.

Witnesses:

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