

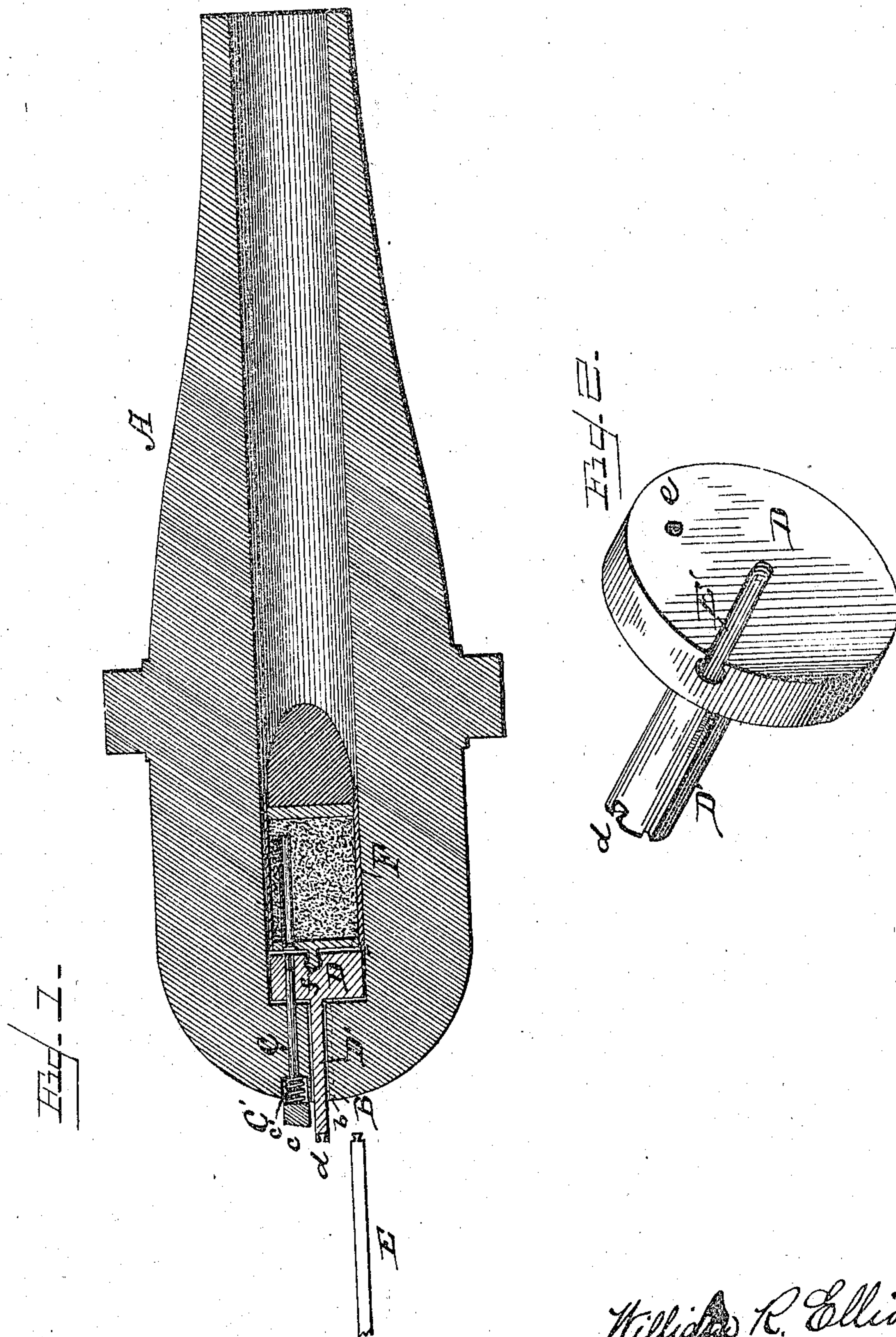
(No Model.)

W. R. ELLIOTT.

LOADING APPARATUS FOR ORDNANCE.

No. 310,038.

Patented Dec. 30, 1884.



WITNESSES
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LOADING APPARATUS FOR ORDNANCE.

SPECIFICATION forming part of Letters Patent No. 310,038, dated December 30, 1884.

Application filed September 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. ELLIOTT, a citizen of the United States of America, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Ordnance; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

15 This invention relates to certain new and useful improvements in loading ordnance, the object being to provide a means whereby the cartridge can be inserted in the gun and ejected therefrom by mechanism located at the breech, as will be hereinafter more fully set forth, and pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a sectional view, and Fig. 2 a perspective view.

25 A represents a muzzle-loading cannon or other piece of ordnance, which is provided at the central portion of the breech with a perforation, B, which has a depending portion or flange, b.

30 To one side of the perforation B is a second opening, C, which is enlarged at its outer end and adapted to receive a firing-pin, C', the outer end of which is provided with a head, c, against which bears a spiral spring, c'. A disk, D, having a rear extending portion, D', of sufficient length to extend through the perforation in the breech of the gun, is provided at its end with a dovetailed slot, d, by means of which it may be connected to other sections of a rod or bar, E, the end of which is constructed so as to engage with the recess d. This disk is provided with a dovetailed perforation or slot, which extends from its circumference to its center, as shown in Fig. 2, said slot or groove being indicated by E'. This disk is also provided with a perforation, e, through which passes the firing-pin. The base of the cartridge F is provided with a projecting portion or nib, f, which engages with a groove, E', said portion D preventing the cartridge from turning

when placed upon the disk, and it also serves to rigidly connect the parts to each other.

The operation of my invention is as follows: When it is desired to load the cannon, the disk D is forced to the muzzle by means of the rod E, and when the disk reaches the muzzle it partly projects out of the gun to the base of the cartridge coupled thereto. It will be seen from the construction of the disk that the base of the cartridge can only be attached thereto, 60 so that the percussion-cap will lie immediately over the perforation e, through which passes the firing-pin. When the rod E is drawn rearwardly, the disk is carried to the breech of the gun, and the projecting portion D', which is 65 grooved to engage with the flange b, will insure the disk being placed in proper position, so that the perforation e will be on a line with the firing-pin. The firing-pin is actuated by a hammer, which is tripped by a rope or cord in 70 the usual manner, and the percussion-cap in the base of the cartridge may be provided with a tube, so that the powder will be ignited at any desirable point which may be found most effective. The projecting portion of the disk 75 may be provided with means, as a key or wedge, for locking the same securely in position at the outer portion of the breech of the gun. One way of securing this portion would be to have side blocks and a key or pin which would be 80 inserted in the dovetailed recess d, against which suitable wedges could be arranged to bear. A rubber washer, as shown in dotted lines in Fig. 2, may be placed behind the disk D. The rod E is employed for the purpose of 85 drawing the disk from the muzzle to the breech, and forcing the same from the breech to the muzzle, and said rod may be actuated either by manual power, hydraulic, or compressed air.

With the means hereinbefore described it 90 will be readily seen that accidents liable by a premature discharge of the piece are avoided, as there is no occasion for the gunners to place themselves in front of the muzzle.

Having thus described my invention, what I 95 claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a loading device for ordnance, of a disk having a portion projecting through the breech of the gun, the face of said 100

disk being provided with a groove to receive a knob attached to the base of the cartridge, substantially as shown; and for the purpose set forth.

5 2. The combination, in a loading and firing device for ordnance, of the cannon or other ordnance-piece, a disk designed for the attachment of the cartridge, and adapted to be moved from the muzzle to the breech, said disk being pro-
10 vided with a perforation, a perforation in the breech of the cannon or ordnance-piece registering therewith, and a firing-pin extending through both of said perforations, substantially as set forth.

15 3. The combination, in a loading device for ordnance, of a disk having a slot, E, in its face, a perforation through which the firing-pin passes, and a rearwardly-projecting portion which extends through the breech, a rod adapt-
20 ed to connect therewith, and a cartridge hav-

ing a central projecting portion adapted to engage said slot; substantially as and for the purpose set forth.

4. The combination, in a device for loading ordnance, of a cartridge or charge having a base, with a dovetailed projecting portion and percussion-cap, the disk provided with a dove-
25 tailed groove perforation through which the firing-pin passes, and a rearwardly-extending portion with a groove and dovetailed end, and
30 a rod adapted to engage with a dovetailed portion of the projecting end, so as to move the disk from the breech to the muzzle, substantially as set forth.

In testimony whereof I affix my signature in
35 presence of two witnesses.

WILLIAM R. ELLIOTT.

Witnesses:

E. H. STREET,
S. FORD.