

M. STODDARD.
MOUNTING ORDNANCE.
PATENTED AUG. 25, 1863.

No. 39,687.

Fig. I.

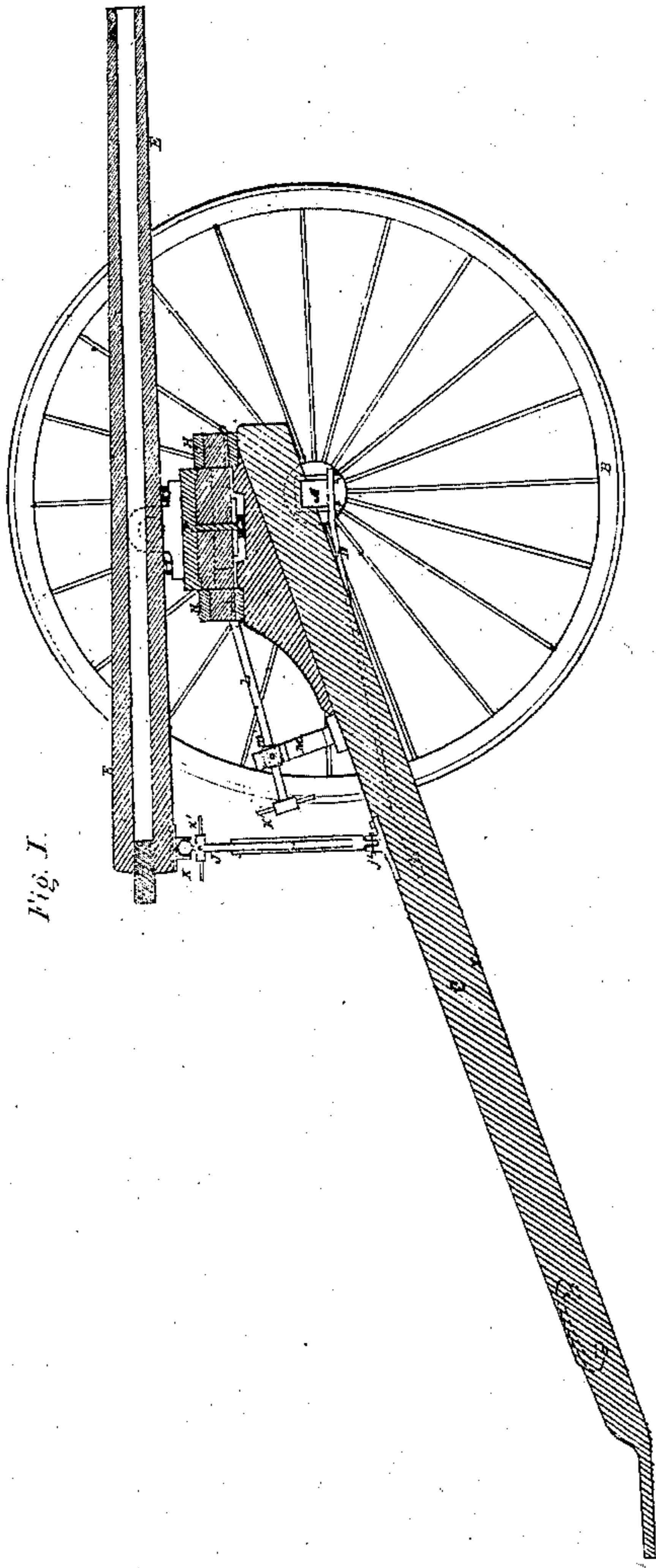


Fig. III.

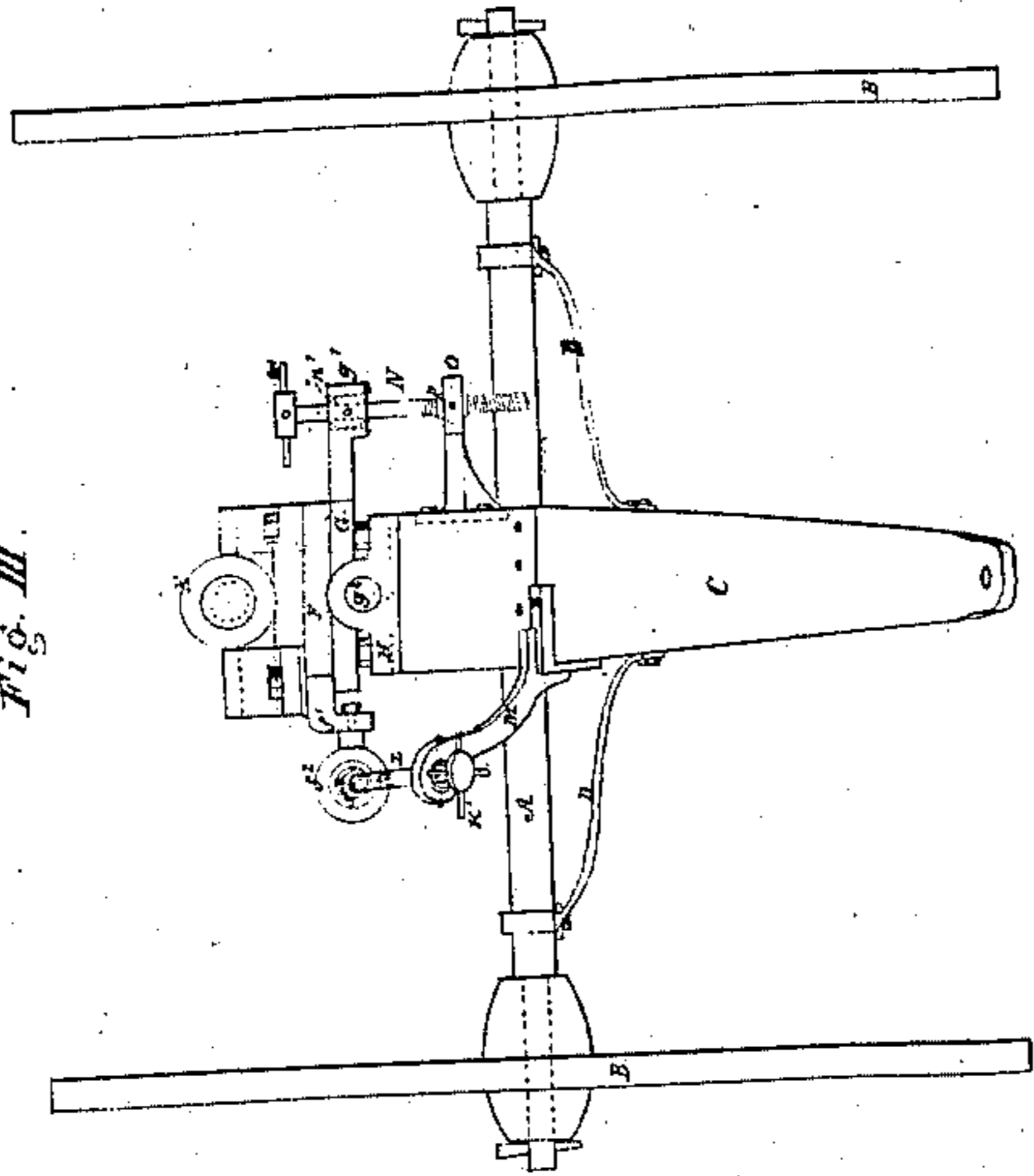
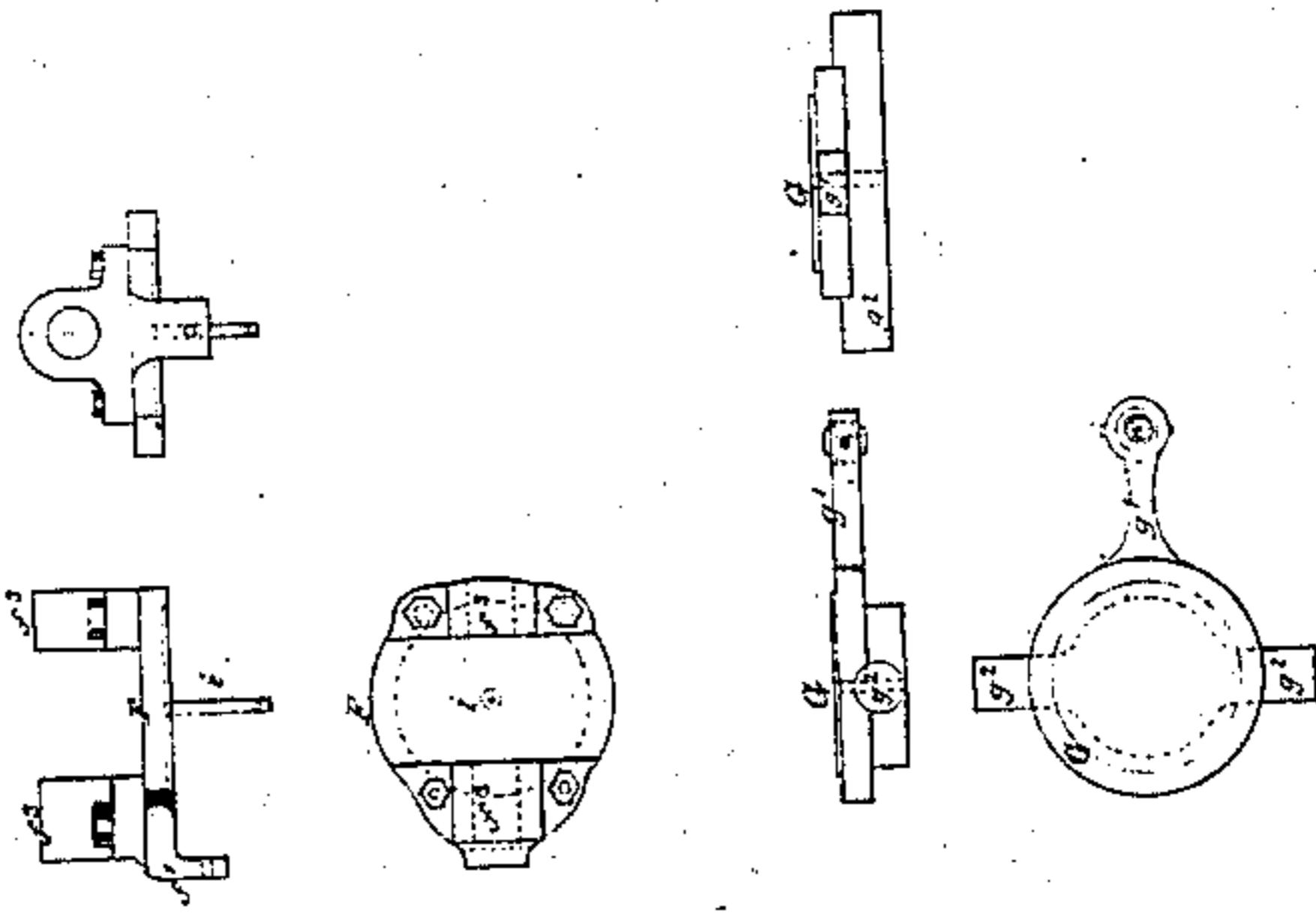
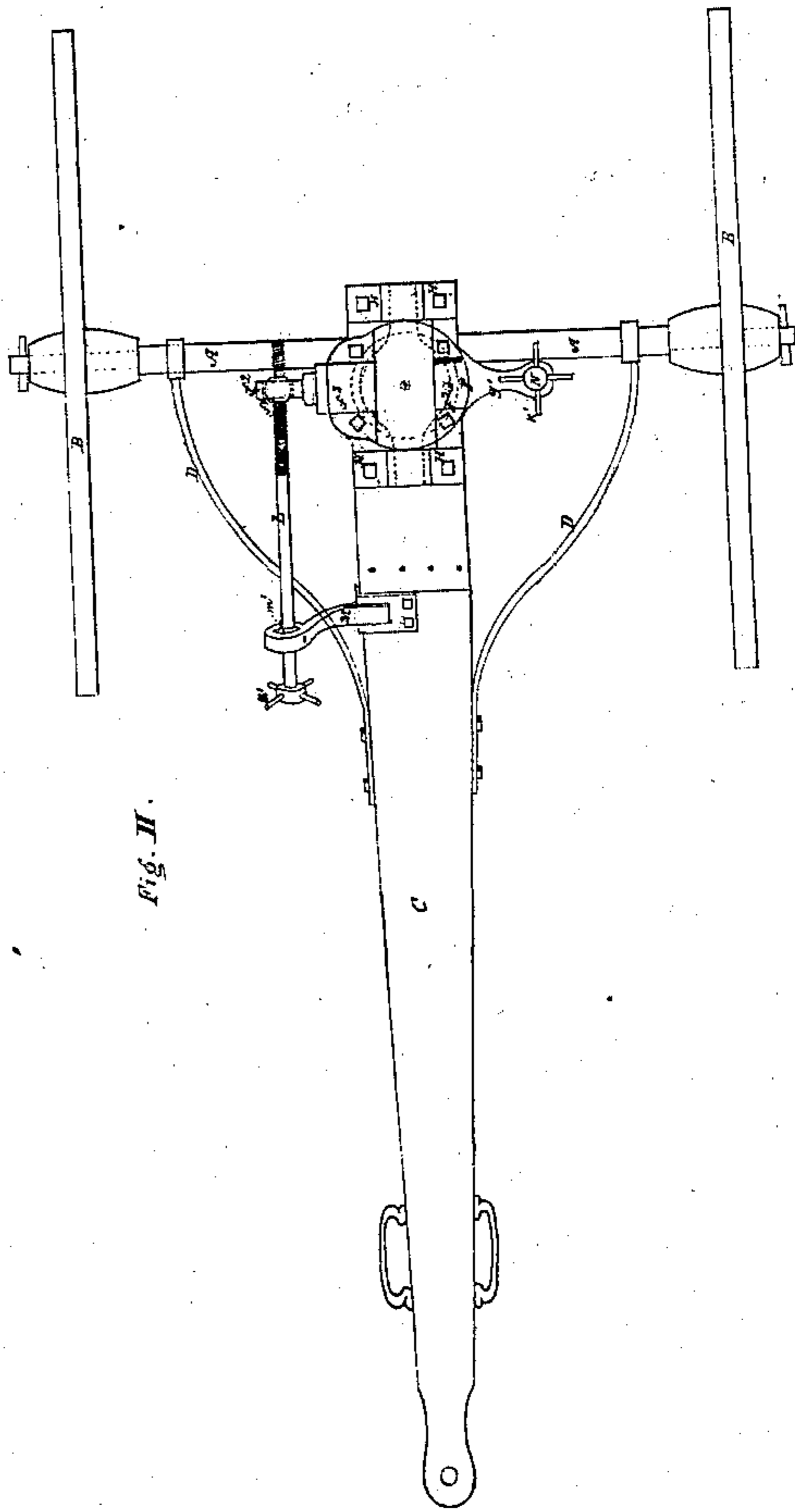


Fig. II.



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WITNESSES.
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MOSES STODDARD, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MOUNTING ORDNANCE.

Specification forming part of Letters Patent No. 39,687, dated August 25, 1863.

To all whom it may concern:

Be it known that I, MOSES STODDARD, of the city of Buffalo, county of Erie, and State of New York, have invented certain new and useful Improvements in Mounting Ordnance; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure I is a sectional elevation, showing the gun as mounted. Fig. II is a plan of the gun-carriage, the gun being removed. Fig. III is a rear end elevation, (the elevating-screw not shown.) The other figures are details of several parts.

The nature of this invention relates to so mounting the gun upon its carriage that one person may obtain complete control over the gun to adjust or sight it to bear upon any given object without moving or changing the position of the carriage, and irrespective of the irregularities of the ground upon which the carriage stands.

Reference-letters of like name and kind indicate like parts in each of the figures.

A represents the main axle; B, wheels; C, trail; D, braces connecting the trail-piece on either side with the axle to resist lateral strain; E, gun.

The piece of ordnance to be used is mounted upon a compound turn-table, which consists of two tables or plates, F and G. The lower plate, G, has a projecting arm, g' , to receive a traverse-nut of the leveling-screw, and two journals, g^2 , which journals work in appropriate bearings in the stanchions H. The stanchions H are fastened to the head of the trail-piece, as represented in Fig. II. The upper plate, F, has a lip, f' , which drops downwardly in order to receive an eyebolt, f^2 . It also has two upright stanchions, f^3 , with suitable journal boxes or bearings to receive the trunnions of the gun. The king-bolt i connects the two plates together.

J represents the elevating-screw shaft. This works in a screw-sheath which has a joint-connection to the trail-piece, as shown at j' . It has a vertical position. The top of this screw-shaft is fashioned into a ball, which ball works in a corresponding socket, K, which socket is connected to the under side of the

gun near the breech, as shown in Fig. I. K are hand-pins projecting from screw-shaft.

L represents a screw-shaft which has a horizontal position, and is for adjusting the lateral or right and left positions of the gun. The screw part of this shaft works in a traverse-nut, f^4 , which is centered in the eyebolt f^2 . It also passes through a collar, m' , which is centered in the eye of the stanchion M. The stanchion M is connected to and projects from the trail-piece, as shown in Figs. II and III. The eyebolt f^2 is connected to the upper plate, F, so that it may turn slightly therein. By turning this screw-shaft the upper plate of the turn-table may be moved as desired, and thereby change the position of the gun laterally, either right or left.

N is a screw-shaft for leveling the gun without reference to the position of the carriage. This has a vertical position and passes downwardly through a collar, n' , which is centered in the eye of the arm g' , and thence through a nut, p , which is centered in the eye of the stud O. The stud O is fastened to and projects from the head of the trail-piece, as shown in Fig. III. By turning this screw-shaft the lower plate, G, will be caused to move in its journals g^2 in either direction desired, and thereby level the gun with reference to ranging its sights in a vertical plane. A spirit-level should be placed upon the upper plate, F, in order to determine with accuracy when the table (and thereby the gun) is brought to the desired level. This leveling is obtained irrespective of the irregularities of the ground upon which the carriage stands.

The eyes in each of the devices in which the traverse-nuts and collars before referred to are centered are sufficiently large to allow of any required movement upon their centers for the adjustment of the gun. The adjusting-screws are in reach of the person who "sights" the gun, so that he may quickly and with great facility bring the gun accurately to bear upon any object without changing the position of the carriage. No matter if the carriage stands upon unlevel ground, with one wheel up and the other down, the gun may with equal facility and accuracy be adjusted and made to bear upon the object sought.

I have here described the mechanism by

which I am enabled to accomplish these results; but I do not intend to confine myself to the particular mechanism here described, as the same results may be accomplished by other combinations of mechanism.

These improvements are applicable to any kind of guns and gun-carriages for field-artillery, whether made of wood, cast or wrought iron, or a combination of these materials. They are also equally applicable to ship, field, or siege ordnance.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Leveling the gun with reference to rang-

ing its sights in a vertical plane without regard to the position of the carriage, substantially as herein described.

2. The combination and arrangement of appropriate mechanism with a gun and gun-carriage by which the gun may be elevated, leveled, and moved right or left by one person while in the act of "sighting," substantially as herein described.

MOSES STODDARD.

Witnesses:

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E. B. FORBUSH.