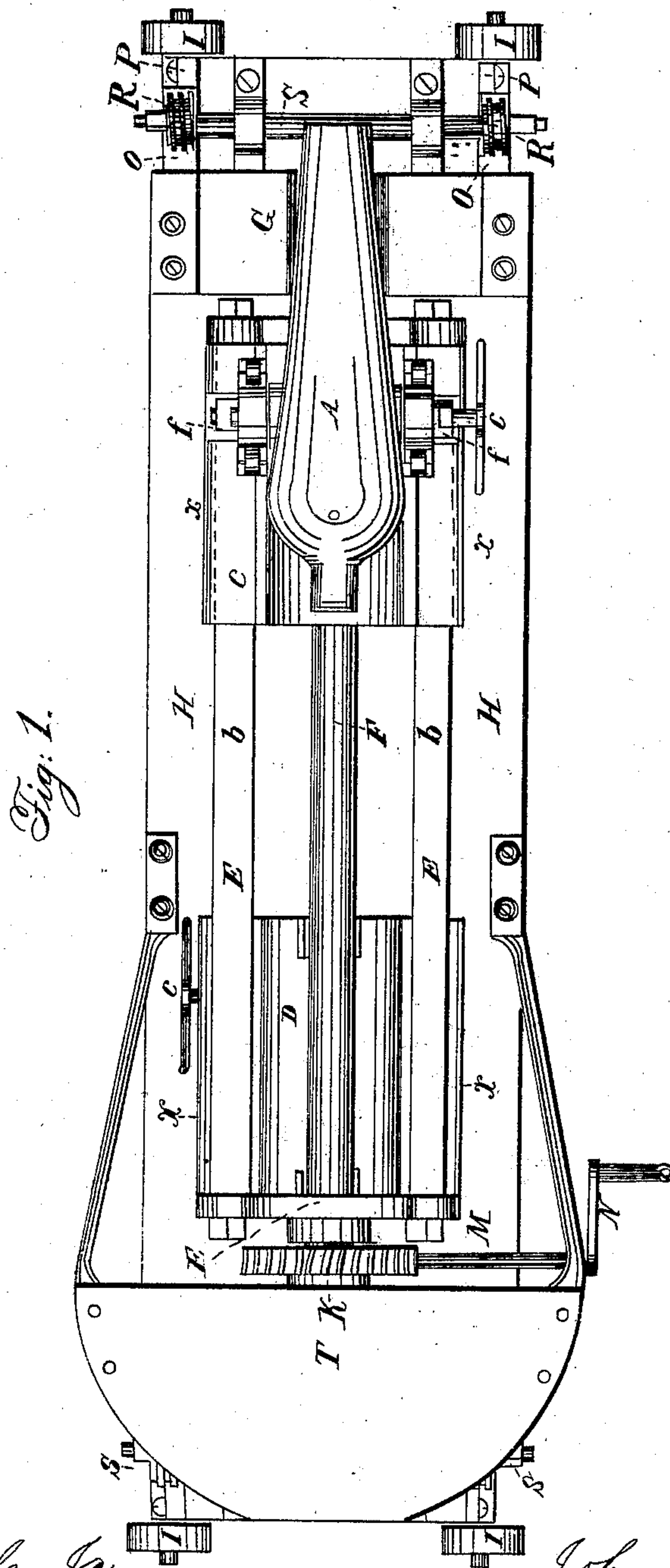


J. TAGGART.

Carriage for Ordnance

No. 38,266.

Patented Apr. 21, 1863.



Witnesses.
R. H. Edchy
J. P. Hale, Jr.

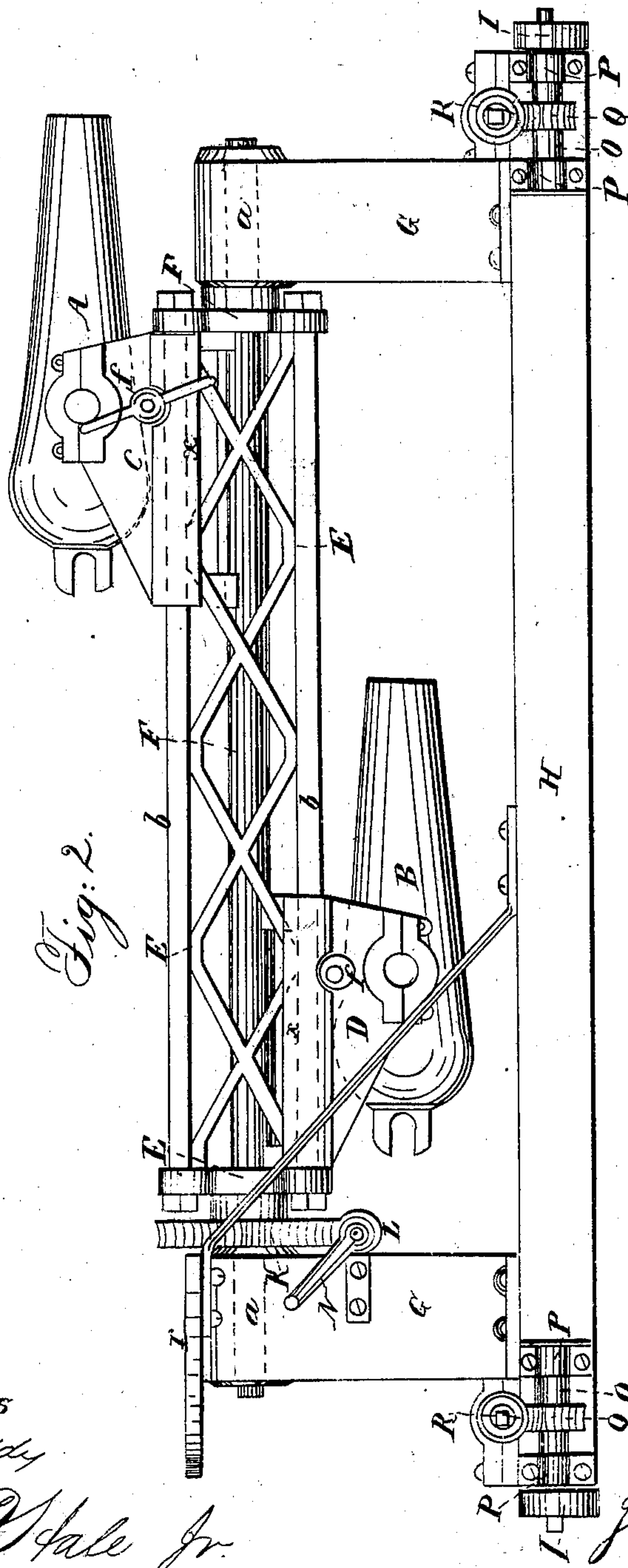
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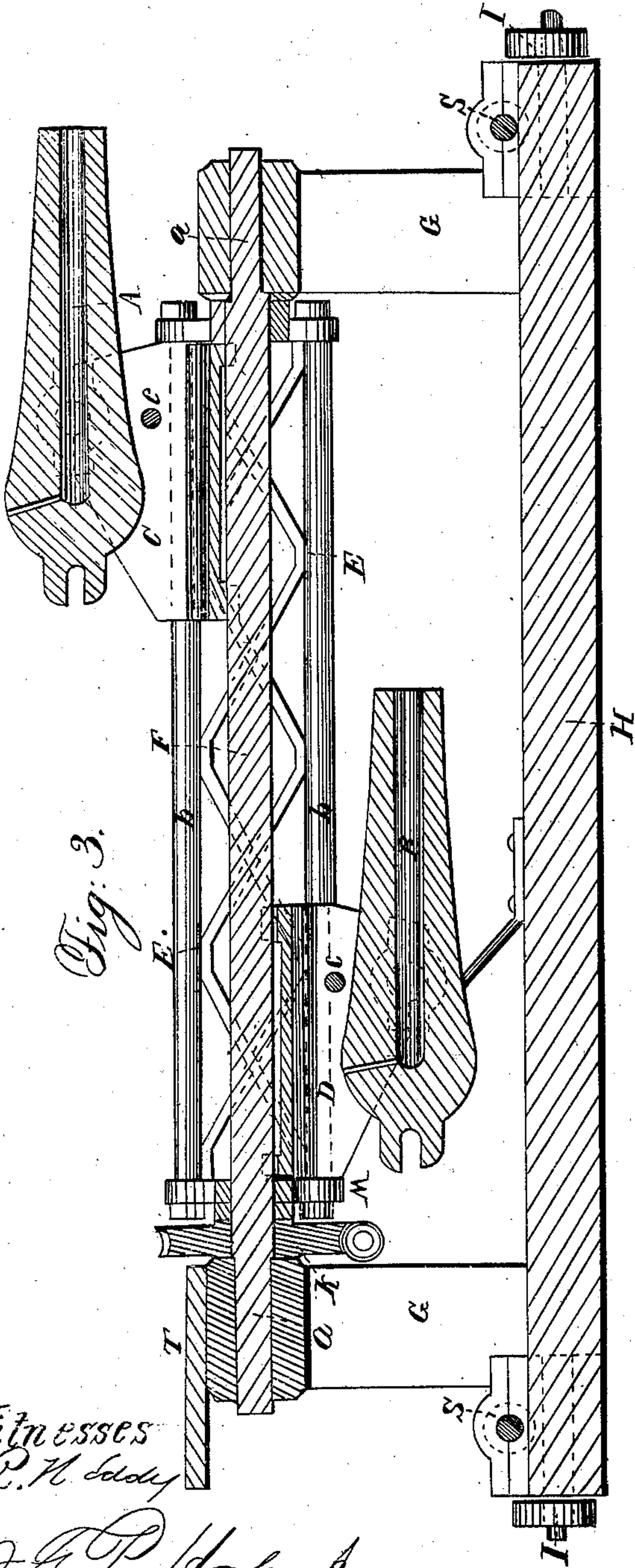
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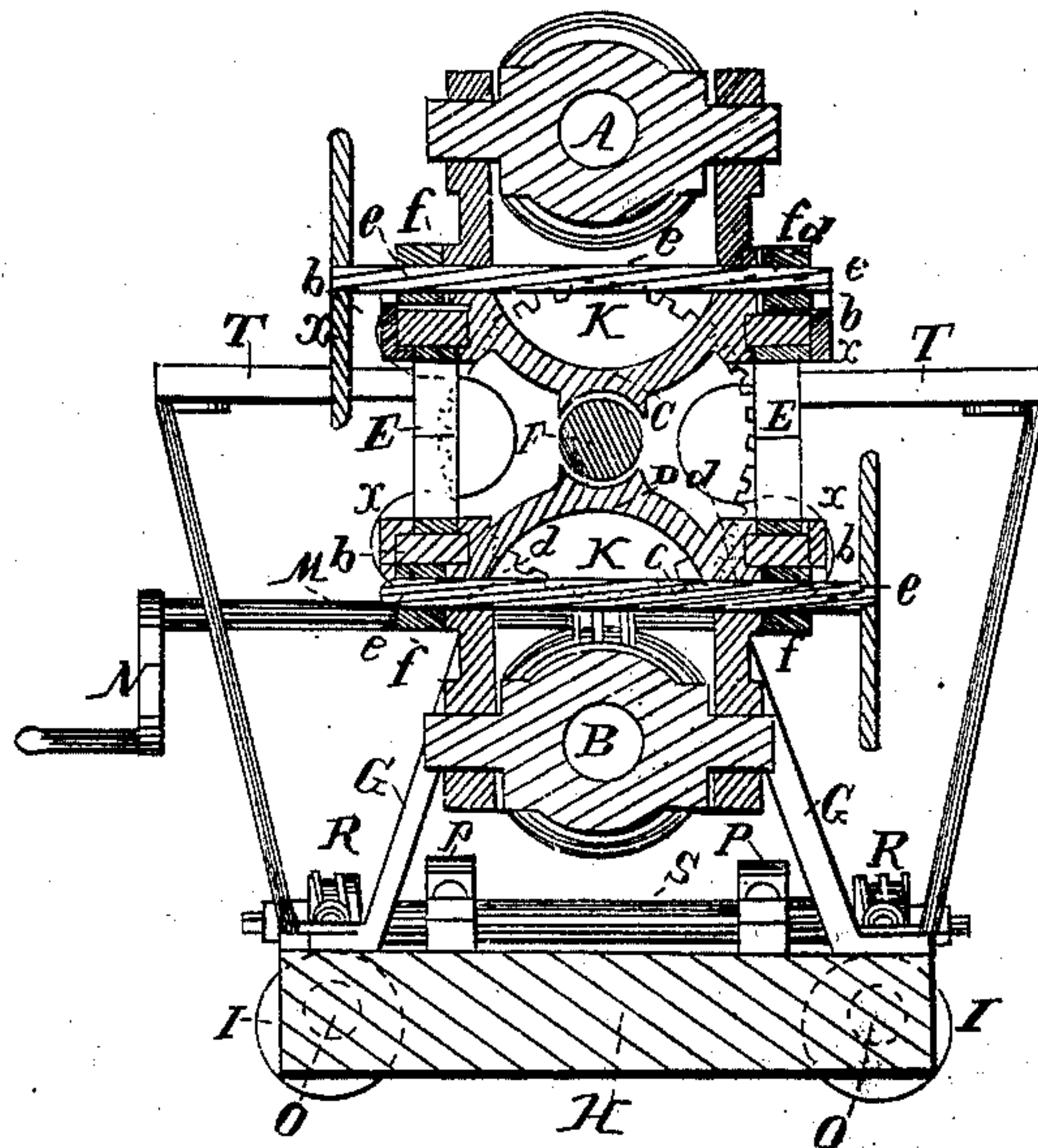
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Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN TAGGART, OF ROXBURY, ASSIGNOR TO HIMSELF, AND LIVERAS HULL,
OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN MOUNTING AND OPERATING ORDNANCE.

Specification forming part of Letters Patent No. 38,266, dated April 21, 1863.

To all whom it may concern:

Be it known that I, JOHN TAGGART, a citizen of the United States of America, and a resident of Roxbury, in the county of Norfolk and State of Massachusetts, have made a new and useful invention having reference to the application of cannon or ordnance to either stationary or floating batteries; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal and vertical section, of my invention. Fig. 4 is a transverse and vertical section taken through its two gun-carriages and their rotary chassis or frame.

The nature of my invention consists in the combination of two or any other suitable number of cannons or guns and their carriages or mechanical equivalents for such carriages with a chassis or slide-frame so supported as to be capable of being rotated transversely, in order to bring either of the said cannons or guns above the other, and enable one carriage and its cannon to serve as a counterbalance, either in whole or in part, to the other; also, in the combination of one cannon or the same and its carriage, as the case may be, with a frame or chassis so supported as to be capable of being revolved transversely, so as to bring the said cannon from a firing position down to a lower position for being either loaded, cleaned, or protected, as occasion may require; also, in the combination of a pivot-carriage or traversing platform with the said revoluble slide-frame or chassis and its one or more cannons.

The main purpose of my invention is protection to the gunners, particularly while in the act of loading a piece of ordnance, as when the invention is in use the gunners and the piece, while the latter may be in the act of being loaded, may be supposed to be situated in rear of a rampart or breastwork or bulwark, and entirely below the top of the same, the piece or cannon to be discharged over such breastwork, or through a port-hole or embrasure thereof, in case two of the cannons be applied to the revoluble slide-frame, being elevated into a proper position for being fired. My invention is capable of being used on shipboard as well as on land or in a fortress.

In the drawings, A and B exhibit the cannons, whose respective carriages, C D, are applied on opposite sides of a revoluble chassis or slide-frame, E, which is attached to a horizontal shaft, F, passing longitudinally through the middle of such slide-frame, and having its journals *a a* supported in suitable bearings arranged in the upper parts of two standards, G G. These standards are erected upon a traversing platform or pivot-carriage, H, at whose extremities are four supporting-wheels, I I I I, for sustaining the carriage either upon the platform of a fortress or on the deck of a vessel of war, as circumstances may require. The said carriage may swivel on a pivot, if necessary, which may extend either from or through any convenient part of it. A worm-gear, K, is fixed on the shaft F, and between the rear standard G and the slide-frame E. An endless screw or worm, L, fixed on a horizontal shaft, M, engages with the gear K, so that while being put in revolution by power applied to a crank, N, such screw will revolve the said gear, and, as a matter of course, rotate the shaft F and its slide-frame E in a transverse direction. The said slide-frame or chassis E is provided with two sets of parallel slide bars or ways, *b b b*, which are supported and arranged as shown in the drawings, one of the gun-carriages being placed on each of such sets, and so applied to it as to be capable of being slid along the ways thereof in a longitudinal direction, and of remaining on such ways in whatever position they may be. A shaft, *c*, passes transversely through each gun-carriage, and has extending beyond each of its journals *d* another journal, *e*, on which a roller or wheel, *f*, is placed concentrically, and so as to be capable of being freely revolved. Each outside journal, *e*, is arranged a little eccentrically relatively to the axis of the shaft, in order that by turning the shaft around in its bearings the wheels may be pressed down upon the rails, so as to draw the flanges *x x* of the carriage closely up to the under surfaces of such ways in a manner which, during a recoil of the cannon, will produce friction to resist such recoil. Furthermore, the wrist or journal of each wheel I is arranged eccentrically with respect to a shaft, O, from which such journal extends, the said shaft being furnished

with journals to rest and turn in boxes P P. A worm-gear, Q, on each of the said shafts O engages with a screw, R, fixed on a cross-shaft, S. Each of such shafts S carries two of the worms, so that when revolved the said shaft will put both gears in revolution simultaneously. The eccentricity of the wrists or journals of the wheels I I is such as to enable the main platform of the pivot-carriage to be raised off or lowered down upon the deck or platform over which it may be.

T is a secondary platform arranged on the top of the rear standard, and being for the purpose of sustaining a gunner while in the act of firing the upper cannon.

From the above it will be seen that by my invention a cannon may be revolved transversely about a supporting-shaft, and so as to be raised from a lower to a higher level or position, and that when two cannons are thus applied to one frame or chassis supported by a shaft one of them may be employed to counterbalance the other, and also that while one of them may be in the act of being sighted and discharged the other will be in a position to be loaded. Thus the gunners, while in the act of loading a piece, will be protected from the shots of an enemy, and accordingly, after the gun has been loaded, they (the said gunners) not only can raise it to a position for being fired, but bring the other into a position to be loaded. In this way very rapid firing can be effected.

Another feature of great value in my invention is that it will afford to a single-decked vessel or sloop of war the efficiency of a two-decker or frigate, and save the necessity of a lower range of ports, as one range of ports would suffice for both ranges of cannons, and the two cannons can be worked by the same

number (or about the same) of gunners as would be necessary for a single cannon as heretofore worked. Thus my invention not only effects a saving in the number of men required to operate two cannons, and imparts to a small ship or vessel the advantages of a much larger one, as heretofore constructed and provided with guns, but is a safeguard to the crew, as it enables them or most of them to work below the water line or level of flotation of the vessel, and out of reach of the shots or projectiles of an enemy.

In carrying out my invention one gun and its carriage only may be used on the rotary chassis; but when two are employed, one of them serves to counterbalance the other, and enables the chassis to be revolved to better advantage and with less power, and, besides, with two guns applied to the rotary chassis, other important advantages result.

I do not claim the protection of guns by means of any movable turret, hood, or armor-plate used in connection therewith, and made to traverse therewith horizontally, or in such manner that its port-holes or position shall conform to the direction of the guns.

I claim as my invention—

1. Either one or two cannons and a rotary chassis or slide-frame, arranged and combined in manner and so as to operate together substantially as specified.

2. A pivot-carriage or traversing platform, one or two cannons, and a rotary chassis or frame, combined and arranged in manner and so as to operate substantially as above specified.

JOHN TAGGART.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.