

J. B. NEWMAN.

Gun-Carriage.

No. 43,330.

Patented June 28, 1864.

Fig. 1.

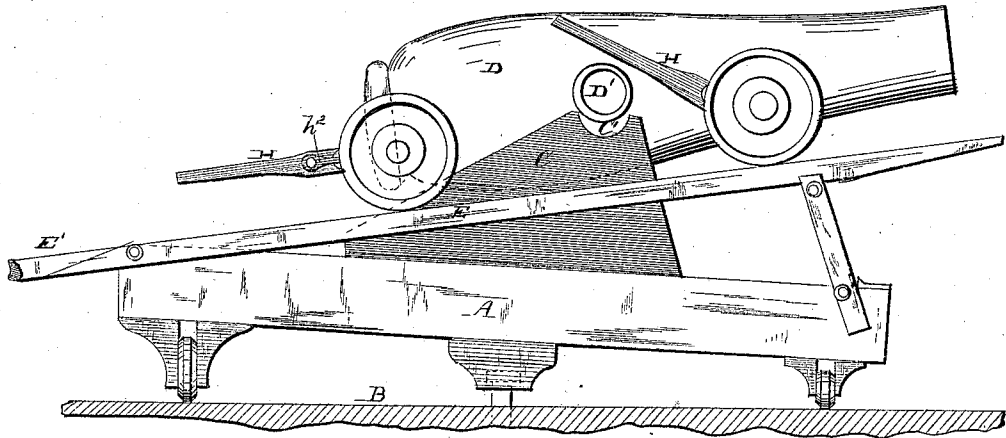


Fig. 2.

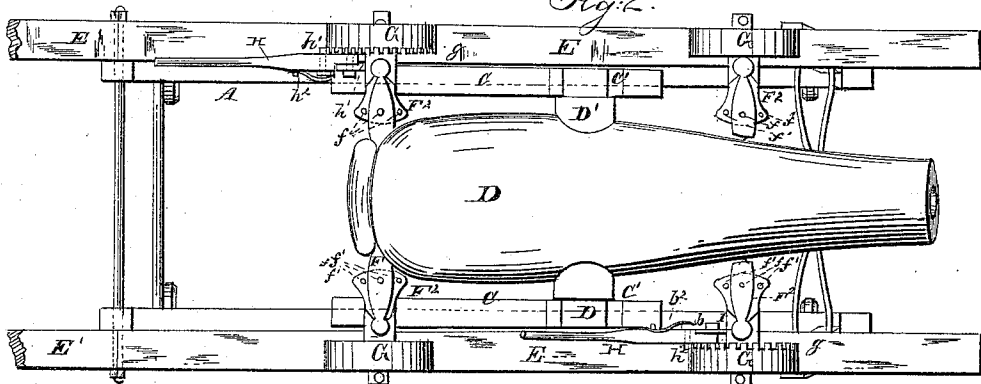


Fig. 3.

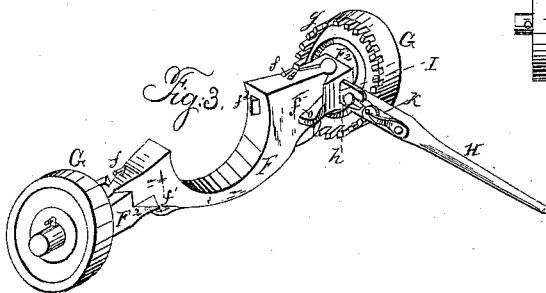


Fig. 4.



Witnesses.

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JOHN B. NEWMAN, OF MILFORD, PENNSYLVANIA.

IMPROVEMENT IN MOUNTING HEAVY GUNS.

Specification forming part of Letters Patent No. 43,330, dated June 28, 1861.

To all whom it may concern:

Be it known that I, JOHN B. NEWMAN, of Milford, in the county of Pike and State of Pennsylvania, have invented a new and useful Improved Mode of Conveying and Mounting Heavy Guns; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of my improved apparatus, as employed for mounting a piece of heavy ordnance. Fig. 2 is a plan or top view thereof. Fig. 3 is a perspective view of one of the yokes to be hereinafter described, and Fig. 4 is a plan of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obviate the difficulty involved and reduce the time and labor required in elevating, mounting, or moving from place to place heavy ordnance; and by the means which I employ to effect this object a very small body of men are enabled to move and elevate a gun of immense weight in a most expeditious manner, and without undue exertion, as will be hereinafter fully explained.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents an inclined chassis, which may be adapted to revolve on the table B.

C represents the gun-carriage, upon which the gun D is to be mounted, the gun being provided with trunnions D' D' in customary manner, for which trunnions the carriage is provided with bearings C' C'. The respective side pieces of the frame A form ways upon which the gun-carriage C is permitted to slide longitudinally, for the purpose to be explained.

E E represent strong timbers or ways supported in parallel position with and on the respective outer sides of the chassis A, and inclined in an opposite direction thereto, as clearly shown in Fig. 1.

F F' represent strong yokes, each of which is provided with pivoted sections F² F², upon which latter are formed axles for the recep-

tion of wheels G G. These wheels are each formed with notches which constitute a continuous rack, g, which racks, when the gun is supported by the yokes F F', admit of the turning of the wheels by means of levers H, which are each provided at the lower end with catches h' h', formed on a sliding pin or block, h, which at every movement of the lever is pressed against the corresponding rack, g, by a spring, h². The levers H are fulcrumed in the slotted lugs or ears I, projecting from the respective sections F² F², and these sections are prevented from turning on the pivots which form the attaching medium between themselves and the yokes F F', by means of pins f, which may be inserted into either of a series of apertures, f', these latter adapting the axles of the wheels G to be securely retained in a position either parallel or non-parallel with the yokes, so as to permit the gun to be moved straight forward or turned in its course, as circumstances may require.

The form of the yokes, as clearly shown in Fig. 3, is made to correspond to the periphery of the gun, and they may be provided with angular blocks or pieces f², of steel or other suitable metal, which prevent the gun from becoming tightly wedged into the yokes, and thereby avoid difficulty in removing the same when the gun has been mounted or deposited in the desired position.

E' E' represent skids, which may be placed up against and rest upon the lower ends of the ways E E, the lower ends of these skids E' resting upon the level surface from which it may be desired to elevate the gun.

From the above description of the construction of the apparatus its operation will be readily understood.

When the gun D is to be placed upon the yokes, so as to be mounted or removed, its normal position will admit of the yoke F' being passed beneath the breech. The yoke F is then placed under the gun at a point in front of the trunnions D' D', and moved back by the levers G until the weight of the gun is entirely sustained by the yokes. This having been accomplished, the wheels are turned by the levers H, in the manner described, and the gun moved up on the skids E' E'. By my improved apparatus one or two men at each lever H will be able to mount a gun of the

heaviest caliber in any desired position. When the gun is to be mounted, the carriage C is moved forward and downward upon the chassis A until it reaches a position in which the trunnions will be allowed to pass over the tops while the gun is being moved up on the ways E, which done, the carriage is moved back to the position in which the gun is to be mounted, and the gun is moved or allowed to move in a reverse direction, so as to cause the trunnions D' to enter their bearings C'. The carriage may be then retained in proper position in any suitable manner, and the yokes removed.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The yokes F F', supported on wheels, substantially as described, and employed for elevating and mounting guns, as set forth.

2. The pins *f*, in combination with the apertures *f'*, for adapting the yokes to convey the gun in either a direct or indirect course, in the manner specified.

3. The lever H *h* *h'* *h'*, constructed in the manner described, and having its fulcrum in the ears I, when employed in combination with a rack, *g*, formed on the face of the wheel G, as and for the purpose set forth.

4. The angular blocks or pieces *f''*, applied to the yokes F F', in the manner and for the purpose explained.

5. The ways E, inclined in relation to the chassis A, substantially as and for the purposes explained.

JOHN B. NEWMAN.

Witnesses:

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CHAS. DU BOIS.