

No. 653,071.

Patented July 3, 1900.

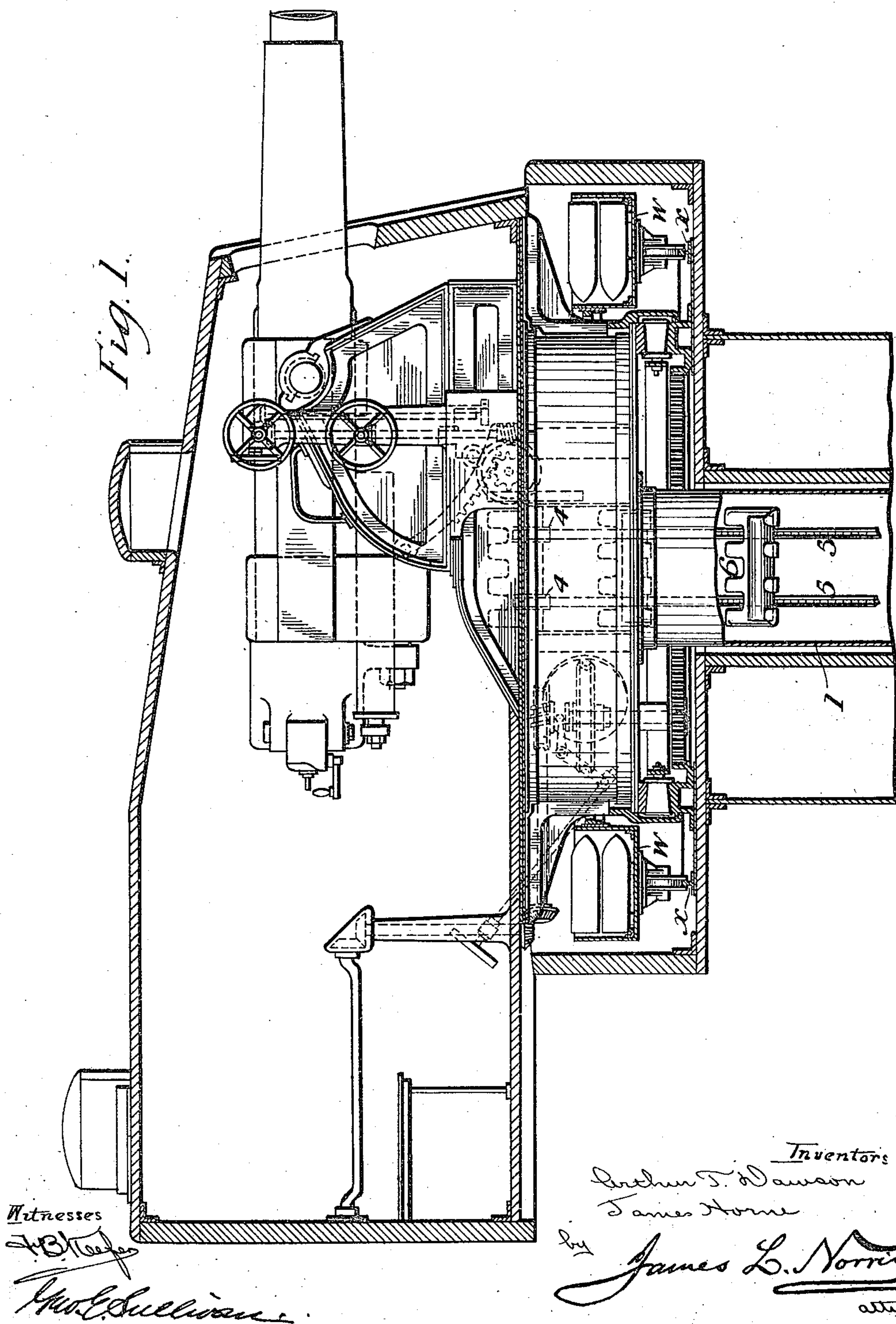
A. T. DAWSON & J. HORNE.

APPARATUS FOR SUPPLYING AMMUNITION TO TURRET OR BARBETTE GUNS.

(Application filed Mar. 9, 1900.)

(No Model.)

3 Sheets—Sheet 1.



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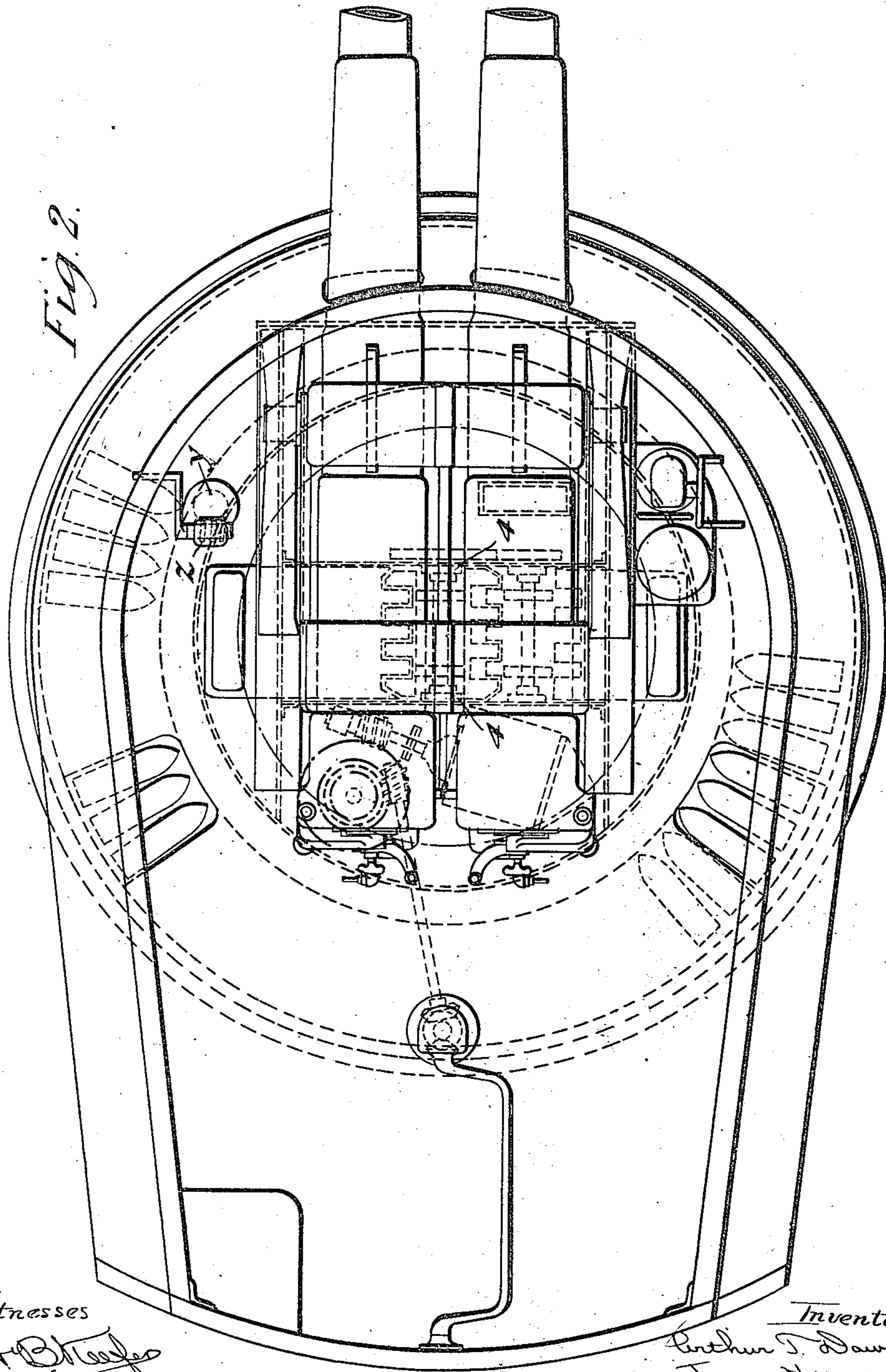
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Witnesses

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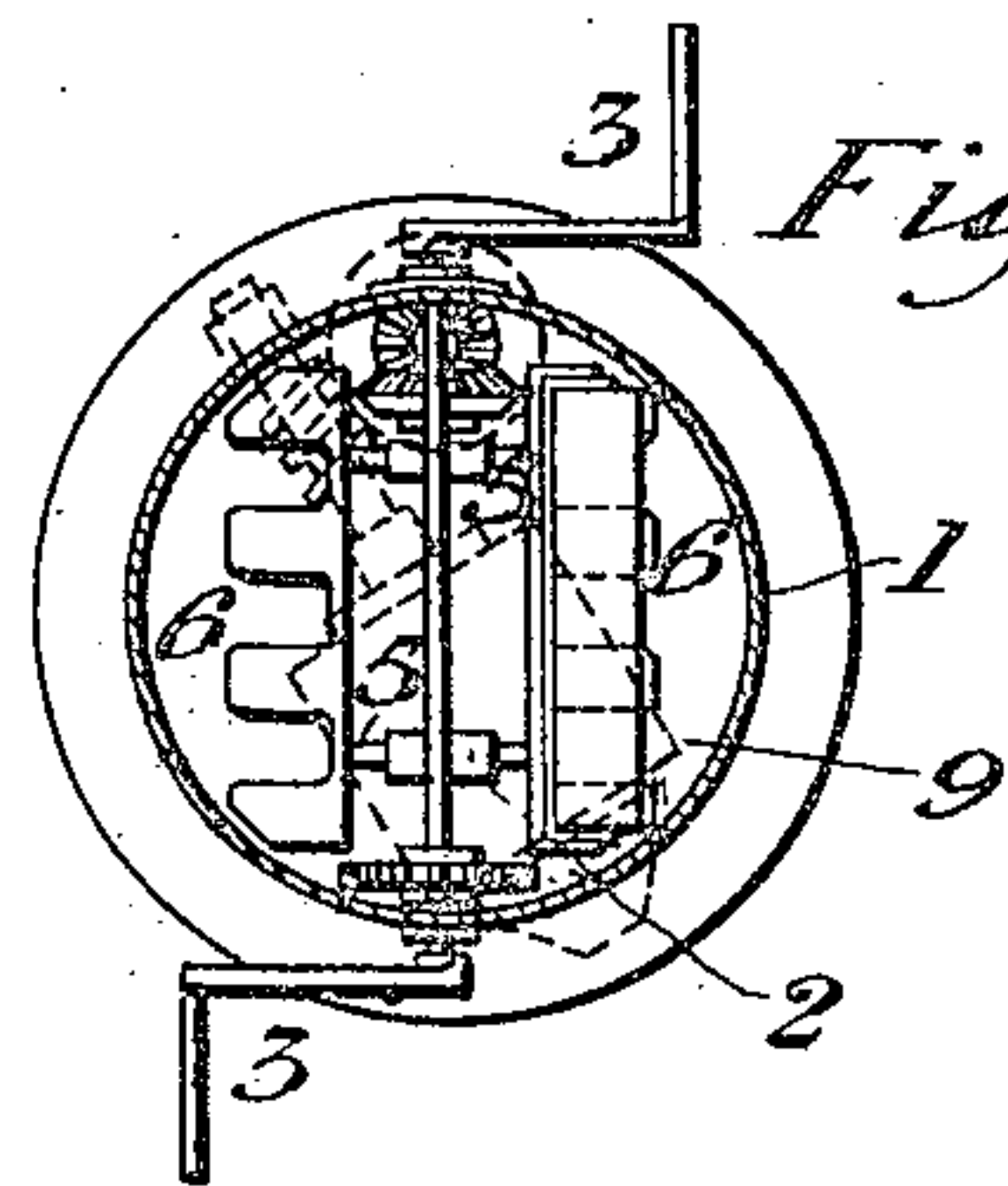
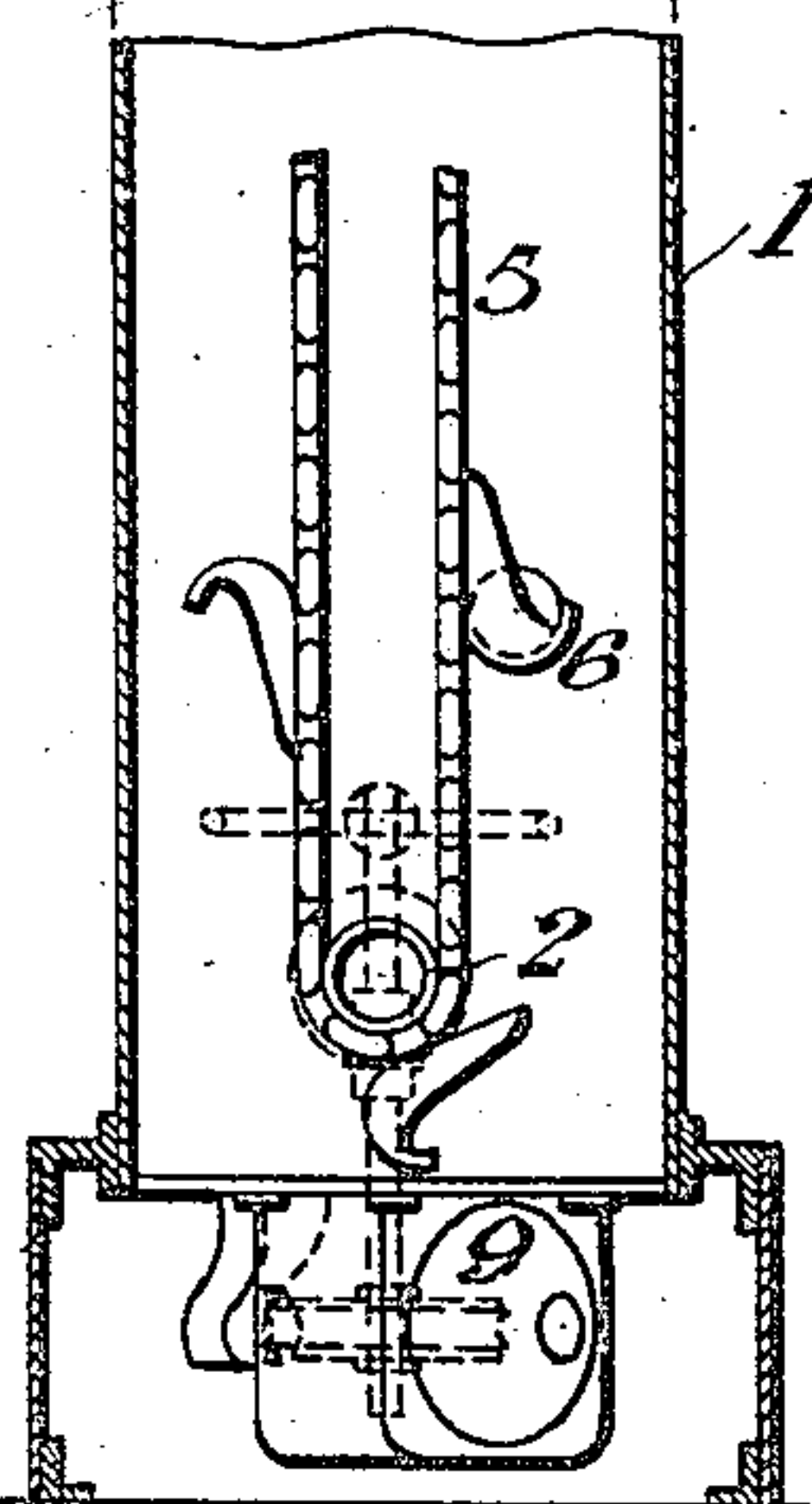
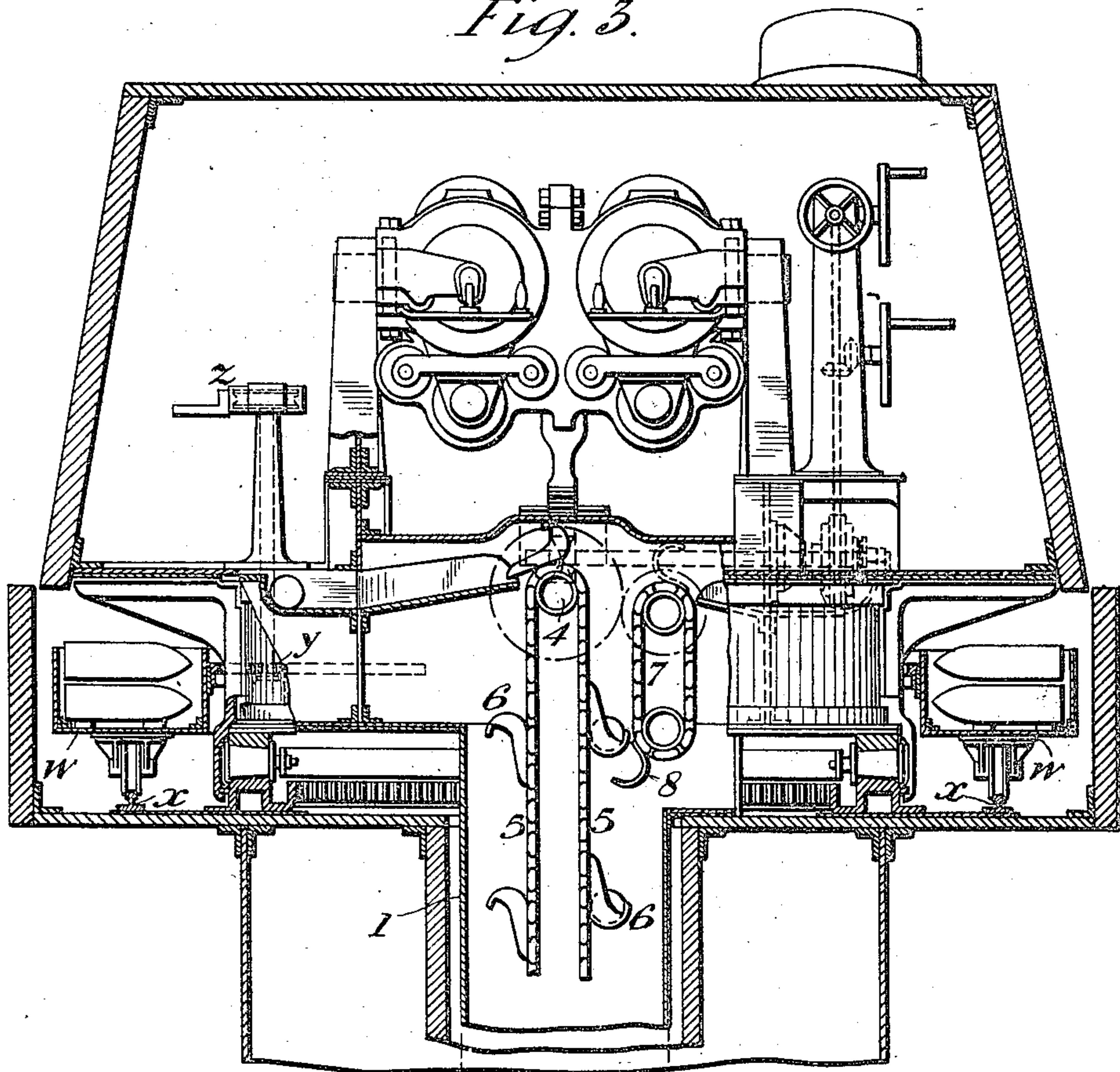
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3 Sheets—Sheet 3.

*Fig. 3.*



*Fig. 4.*

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# UNITED STATES PATENT OFFICE.

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## APPARATUS FOR SUPPLYING AMMUNITION TO TURRET OR BARBETTE GUNS.

SPECIFICATION forming part of Letters Patent No. 653,071, dated July 3, 1900.

Original application filed October 24, 1899, Serial No. 734,643. Divided and this application filed March 9, 1900. Serial No. 8,050. (No model.)

*To all whom it may concern:*

Be it known that we, ARTHUR TREVOR DAWSON, residing at 28 Victoria street, Westminster, London, and JAMES HORNE, residing at Barrow-in-Furness, county of Lancaster, England, citizens of England, have invented certain new and useful Improvements in Apparatus for Supplying Ammunition to Turret or Barbette Guns, (for which we have applied for a patent in Great Britain, dated May 4, 1899, No. 9,416,) of which the following is a specification.

This invention, originally described in the specification accompanying our application for Letters Patent filed October 24, 1899, Serial No. 734,643, of which this is a division, relates to apparatus for supplying ammunition to a gun or a pair of guns mounted in a turret or barbette, as we shall describe, referring to the accompanying drawings.

Figure 1 is a longitudinal section, Fig. 2 is a plan, and Fig. 3 is a transverse section, of a turret with a pair of guns mounted side by side therein, with apparatus according to our invention for supplying the guns with ammunition. Fig. 4 is a plan of the lower part of the ammunition-hoist.

For supplying projectiles a number of these are laid on a carrier *w*, which has wheels revolving on a circular rail *x*. The carrier has internal teeth gearing with a pinion *y* on an upright shaft, worked by winch-handles and worm-gear *z*. Successive projectiles can thus be brought around to an opening through the gun-platform to be raised by suitable elevating mechanism and transferred to a convenient loading-tray, neither of which is shown in the present application.

The charges of explosive which are stored in the magazine below are brought up to the turret through a hoist-shaft 1, which revolves with the turret. In the lower part of this shaft is mounted a pair of sprocket-wheels 2, worked by hand-winches 3 or an electric motor 9. Around these wheels and around another pair of sprocket-wheels 4, at the top of

the shaft, pass a pair of chains 5, having curved projecting arms 6, each adapted to carry two half explosive charges. Some of the charges loaded on these arms are delivered in the turret in a position whence they can be lifted by hand to charge the gun. Besides the main chains 5 and their sprocket-wheels a subsidiary pair 7, with sprocket-wheels, are mounted at the top of the shaft, these chains having curved projecting blades 8, arranged to pass through the intervals between the blades 6 of the main chains. By causing the subsidiary chains 7 to travel faster than the main chains 5 the blades 8 lift some of the charges from the blades 6 and deliver them on the one hand, while the blades 6 of the main chains deliver others of the charges on the other hand.

Having thus described the nature of this invention and the best means we know for carrying the same into practical effect, we claim—

1. In combination with a revolving gun turret or barbette, a hoist-shaft attached to and revolving with said turret or barbette, sprocket-wheels arranged in the upper and lower portions of said hoist-shaft, endless chains traveling about said sprocket-wheels, endless chains arranged in the upper part of the hoist-shaft parallel to the first-mentioned chains and traveling about sprocket-wheels, means for causing said last-mentioned chains to travel faster than the chains first named, and curved projecting blades carried by each set of chains and adapted to carry charges of explosive, and the blades on the faster-moving chains operating to remove a portion of the charges from the blades on the slower-moving chains, substantially as described.

2. The combination with a revolving gun turret or barbette, a hoist-shaft attached to and revolving with said turret or barbette, an endless carrier arranged in said hoist-shaft and provided with curved projecting holders each adapted to lift a plurality of charges, said holders operating to discharge the charges

at the top of the endless carrier and to one  
side of the latter, an auxiliary endless car-  
rier arranged in the upper part of the hoist-  
shaft parallel with the elevator-carrier, and  
5 means for causing said auxiliary carrier to  
travel faster than the elevator-carrier, said  
auxiliary carrier being provided with curved  
projecting holders arranged to travel between  
the holders on the elevator-carrier and oper-  
10 ating to remove a portion of the charges from  
the latter and discharge them on the side op-  
posite to the elevator-carrier, substantially  
as described.

In testimony whereof we have hereunto set  
our hands in presence of the subscribing wit- 15  
nesses.

ARTHUR TREVOR DAWSON.  
JAMES HORNE.

Witnesses to the signature of the above-  
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HENRY KING,  
GEO. H. BRIDGES.

Witnesses to the signature of the above-  
named James Horne:

R. B. V. BURTHEN,  
W. H. ATKINSON.