

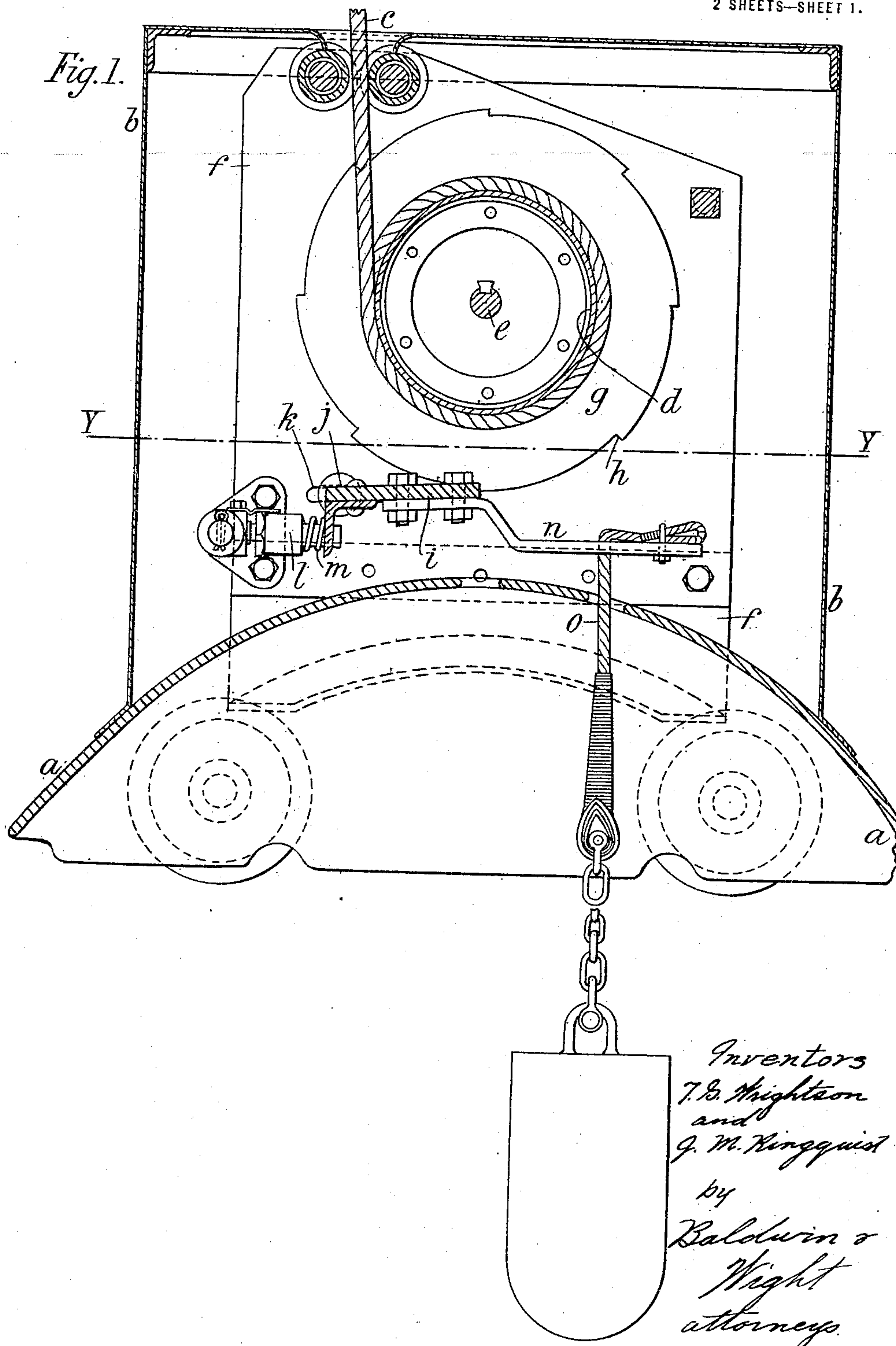
T. G. WRIGHTSON & J. M. RINGQUIST.
SUBMARINE MINE SINKER.

APPLICATION FILED AUG. 7, 1917.

1,298,143.

Patented Mar. 25, 1919.

2 SHEETS—SHEET 1.



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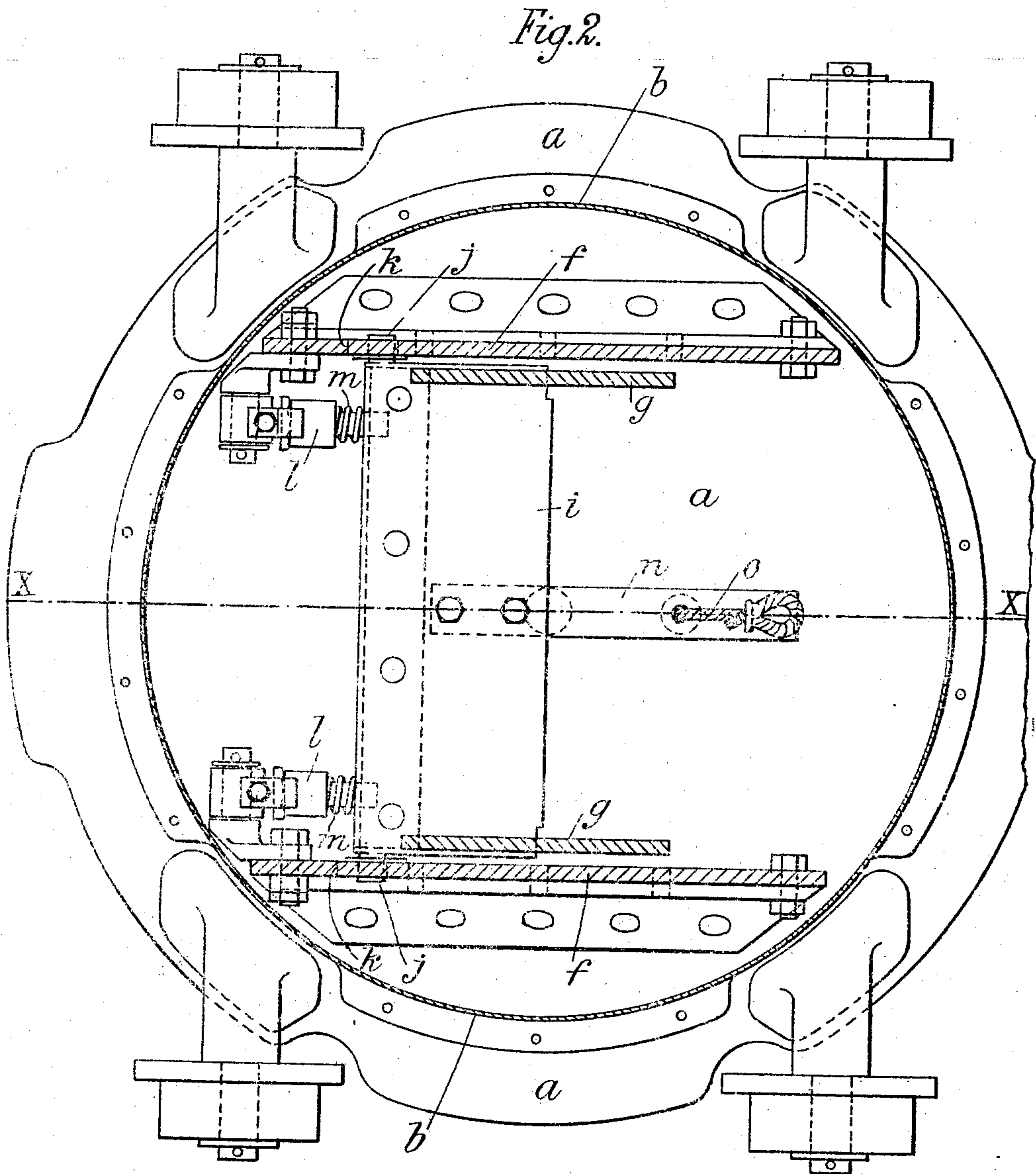
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UNITED STATES PATENT OFFICE.

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SUBMARINE MINE-SINKER.

1,298,143.

Specification of Letters Patent.

Patented Mar. 25, 1919.

Application filed August 7, 1917. Serial No. 184,863.

To all whom it may concern:

Be it known that we, THOMAS GARMONDSWAY WRIGHTSON and JUSTUS MAGNUS RINGQUIST, subjects of the King of Great Britain, both residing at Teesdale Ironworks, Thornaby-on-Tees, England, have invented a new and useful Improvement in Submarine Mine-Sinkers, of which the following is a specification.

This invention relates to improved means for locking the rope drums of submarine mine sinkers.

According to this invention the rope drum of a mine sinker is locked by a plate which acts as a pawl meshing with ratchet teeth cut on the flanges of the drum. This plate is supported by a spring buffer, or preferably by two spring buffers one on either side, so arranged that the spring or springs both tend to press the acting edge of the plate toward the axis of the drum, that is, into engagement with the ratchet teeth, and also act as buffers to take up the shock when the plate is put into engagement with the drum. The plate may be disengaged from the teeth so as to release the drum by a pull upon a chain connected to it, preferably through an arm secured to the middle of the plate.

The drawings show apparatus made in accordance with this invention. Figure 1 is a vertical section on the line X—X, Fig. 2, and Fig. 2 is a horizontal section on the line Y—Y, Fig. 1.

a is the base of the mine sinker to which a bonnet b inclosing the mechanism of the sinker is fixed. The sinker is connected to a mine by a rope c wound upon a drum d

whose shaft e is supported by plates f fixed to the base a . On the flanges g of the drum d are teeth h meshing with a plate i upon which are trunnions j free to turn and slide in slots k in the plates f . Spring buffers l support the plate and the springs m of the buffers tend to press the acting edge of the plate i into engagement with the teeth h and also act as buffers to take up the shock when the plate i is put into engagement with the drum.

Upon the plate i is an arm n to which is attached a rope o , the plate i being released from the teeth h when the rope o is pulled.

What we claim is:—

1. In a submarine mine sinker, a rope drum, ratchet teeth on the rope drum, a plate meshing with the ratchet teeth, trunnions on the plate, a base, two plates fixed to the base, slots in the two plates adapted to receive the trunnions and springs pressing the plate into engagement with the ratchet teeth.

2. In a submarine mine sinker, a rope drum, ratchet teeth on the rope drum, a plate meshing with the ratchet teeth, trunnions on the plate, a base, two plates fixed to the base, slots in the two plates adapted to receive the trunnions, springs pressing the plate into engagement with the ratchet teeth, an arm secured to the plate and a rope attached to the arm.

In testimony that we claim the foregoing as our invention, we have signed our names this 11th day of July 1917.

T. G. WRIGHTSON. [L. s.]
J. M. RINGQUIST. [L. s.]

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."