2 Sheets, Sheet 1.

J. MacGregor Jr.

Torpedo

No 2502. Patented Mar. 23. 1842.

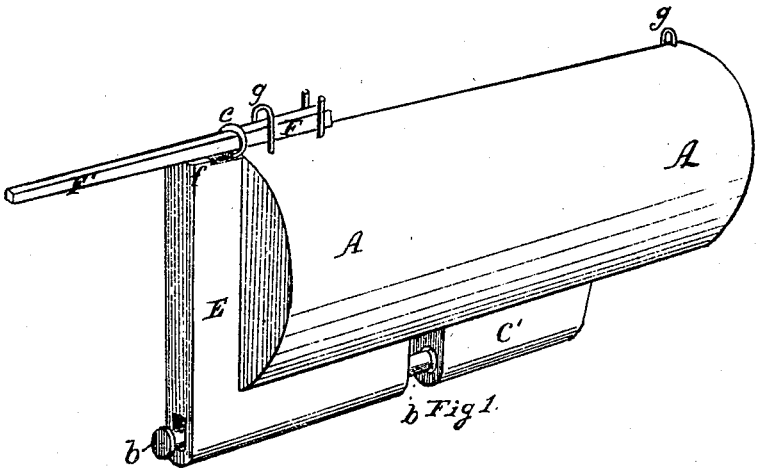

Fig 1.

2 Sheets Sheet. 2.

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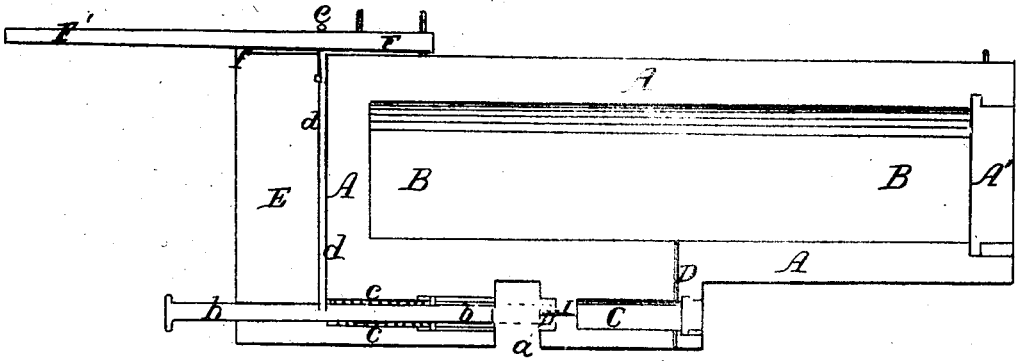

Fig 2

UNITED STATES PATENT OFFICE.

JAMES MACGREGOR, JR., OF WILTON, NEW YORK.

SUBTERRENE BOMB OR MINE.

Specification forming part of Letters Patent No. **2,502**, dated March 23, 1842.

To all whom it may concern:

Be it known that I, JAMES MACGREGOR, Jr., of Wilton, in the county of Saratoga and State of New York, have invented a new and useful improvement to be used in war, which I denominate a Subterrene Bomb or Shell; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in the forming of bombs or shells of cast-iron, which is to be charged, in the manner of other bombs or shells, with gunpowder and such other matter or things as are used in the charging of such instruments, and providing such bombs or shells with a lock so arranged that they shall be discharged by the tramping of men, horses, or the passing of carriages over them, and in placing them under the surface of the ground where the troops or baggage of an army are expected to pass.

In the accompanying drawings I have represented one of these instruments provided with two chambers or cavities to contain powder. The smallest one is first ignited and explodes, and by this means throws the largest one out of the ground before it explodes; but this is by no means necessary in all cases, and when it is not necessary the round or any other shaped shell may be used with equal advantage.

Figure 1 is a perspective view of the instrument, and Fig. 2 a longitudinal vertical section through it.

A A is the outer case or shell, and B B the cavity within which the charge is to be contained.

C is a chamber or cavity cast in a projection on the shell A A, and is charged with powder, sufficient, when exploded, to throw the main shell out of the ground.

I is the vent, leading from the cavity C to the nipple H, upon which the percussion-cap is put, which is to be struck by the rod or piston *b b*, which is urged forward by the spiral spring *c c*, which surrounds it.

d d is a rod which passes through an opening prepared to receive it in the piece E, cast on the head of the shell. The lower end of the rod *d d* enters an opening prepared to receive it in the piston *b b*, and while there holds the piston back, but when withdrawn the piston is urged forward against the percussion-cap by the spiral spring *c c*. The rod *d d* is formed into a loop at the top, as seen at *e*, and through this loop passes the trigger F F. When the end of the trigger F F is forced down, it bears upon the point *f* of the piece E, the rod *d d* will be withdrawn from the piston *b b*, and the discharge will take place. The opposite end of the trigger may, in like manner, be made to retract the rod *d d*.

g g are staples or loops by which to handle the instrument when it is to be placed where it is to be discharged.

When the instrument is to be used, the percussion-cap is put upon the nipple H, and then tallow or some other suitable substance that will resist water is put over the percussion-cap. The instrument is then placed in an excavation made in the earth to receive it, in such situation as may be deemed proper, the cavity C being placed exactly under, after which the whole instrument is to be covered, and the surface so left as to appear like the surrounding earth. If it is intended for wagons, it is to be so placed that the wheel will come in contact with the trigger, and if for men or horses it should be so placed and covered that the treading of men or horses over it will operate the lock and cause the explosion to take place.

When it is not desired to have the shell thrown out of the ground before it is exploded, the vent-hole should go directly through the shell. The shell may be round or any other shape, may have the common gun-lock or any other kind of lock to cause the explosion to take place, the same having a trigger, or lever, or other suitable fixture to come in contact with the treading of men, horses, or carriages as they are passing over it, and by this means operate the lock and cause the explosion to take place.

Having thus fully described the nature of my invention and shown how the same is to be carried into effect, what I claim therein, and desire to secure by Letters Patent, is—

Having the powder for a mine confined in a cast-iron shell or case, and of constructing and combining thereto a lock that will operate by the passing of men, horses, or wagons over it, as above set forth, not, however, intending to limit myself by this claim to the precise form of lock therein set forth, but to vary the same as I may think proper, while the same end is obtained by means substantially the same.

JAMES MACGREGOR, JR.

Witnesses:

LUTHER W. TOWER,
SAMUEL S. TIFT.