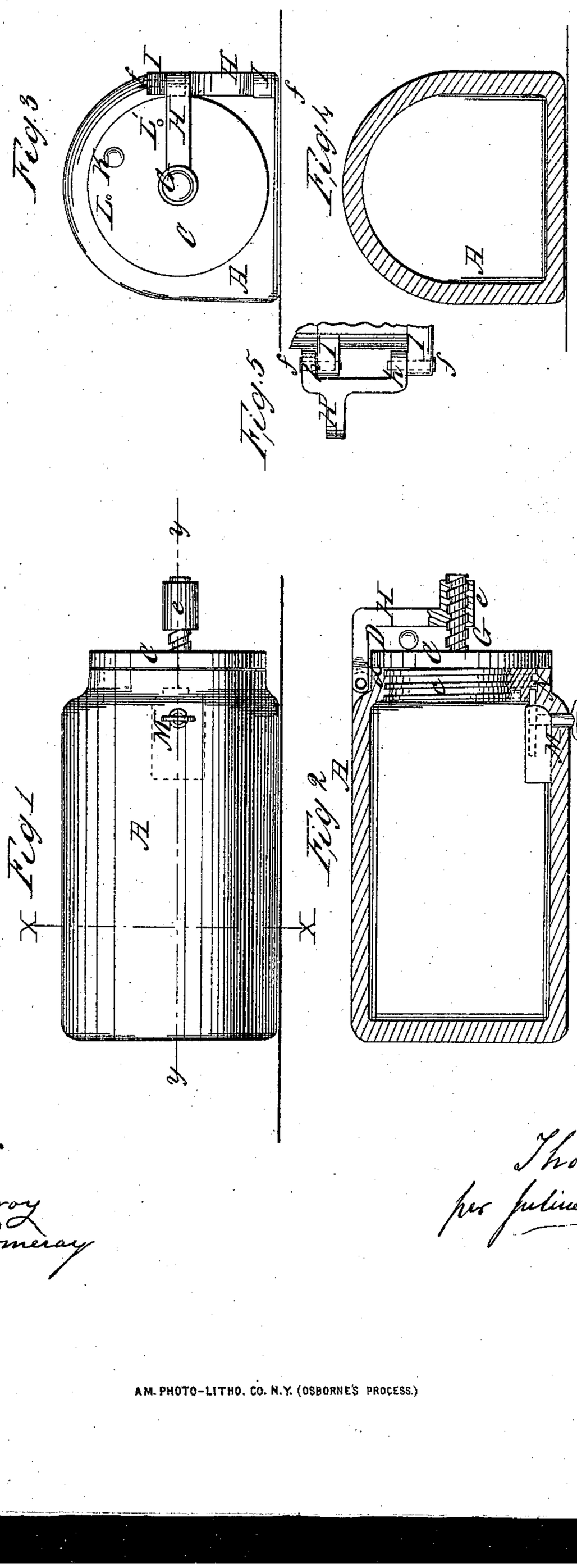
T. Cook,

Fire-Proof Safe.

No. 70,415. Patented Nov. 5, 1867.



Witnesses

Charles Pomeroy
William Pomeroy

Inventor

Thomas Cook.
per Julius R. Pomeroy
Attorney

UNITED STATES PATENT OFFICE.

THOMAS COOK, OF LONDON, ENGLAND, ASSIGNOR TO CHARLES POMEROY BUTTON, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-PROOF SAFES.

Specification forming part of Letters Patent No. **70,415**, dated November 5, 1867.

To all whom it may concern:

Be it known that I, THOMAS COOK, of Coburg Road, Old Kent Road, London, England, have invented new and useful Improvements in the Construction of Safes or Depositories intended to contain valuable property; and I do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being hand to the accompanying drawings, forming part of this specification, and to the letters and figures marked thereon.

This invention relates to an improved method of connecting the door of a safe to the body or case thereof; and consists in forming the door of a circular plate of metal, with a circular fillet or projection at the back thereof, about one or two inches, more or less, in diameter than the diameter of the door. Around this fillet I propose to cut a strong, quick-threaded screw, or portion of a screw, to fit into a corresponding screwed hole formed in the front of the body or case of the safe; or I form the screws or portions of screws both on the door and case of the safe—that is to say, I form a male and female screw, one inside the hole into which the door fits, and the other outside of said hole. I also form a screwed hole through the center of the door, and fit therein a screw, the outer screwed end whereof passes through a screwed hole formed in one end of an iron arm, the other end of said arm being hinged to the outside of the body of the safe, so that as the said door is turned around by means of a suitable handle for the purpose of opening the door, for example, the screw aforesaid passes along the screwed hole in the aforesaid hinged arm, and thus allows the screw on the door to move parallel to the hinge until the door is open, when it may be turned on its hinged arm. A reverse movement will close the door. The door of the safe is intended to be fastened by any approved kind of lock.

Referring to the drawings, Figure 1 represents a side elevation of my improved safe; Fig. 2, a horizontal section through the line *y y* of Fig. 1; Fig. 3, a front elevation thereof; Fig. 4, a back view of the same; Fig. 5, a lateral view of the parts H I of Fig 3.

I employ similar letters of reference to denote corresponding parts.

A A mark the body of the safe, of metal, lined with fire-proof clay or other known fire-proof material, the door thereof formed circular, and with a coarse thread or screw at *c*, there being a corresponding thread or screw formed in the front of the body A of the safe. The door C is formed with a flange at D, the inner face whereof should be turned true in a lathe, as also the face *d* of the safe, against which the aforesaid flange is intended to fit closely to prevent the introduction of a lever, wedge, or other instrument. G is a quick-threaded left-handed screw. One end of this screw is securely fixed at the center of the door C, and the other end passes through a screwed hole formed in the boss *e* of a strong wrought-iron arm, H, whose opposite ends are hinged to lugs I I fixed to or formed on the body of the safe, said lugs having each a hole formed therein to receive strong pins *f f* fitted into the parts *h h* of the arm H, which swings thereon as by a hinge. K is a handle fixed into the front of the door, and L L′ are stop-pins, also fixed into the door, for governing the distance which the door is to move for opening and closing the same. M marks the key-hole of the lock, which lock may be of any approved construction, and may be attached to the body of the safe, its bolt playing into a hole cut in the thread of the screw of the door, as at N, Fig. 3; or it may be attached to the door itself, its bolt playing into a hole made in the body of the safe.

The operation of the foregoing mechanical arrangements is as follows: Suppose the door to be closed, as exhibited by the drawings. In order to open the door, the lock at M must be unlocked, then, by means of the handle K, the door C can be unscrewed from the case. The screw G at the same time will be advanced along the screwed hole in the boss *e* of the hinged arm H, thereby enabling the door to be unscrewed and supported during such time in a perfectly-horizontal plane. The stop-pin L, coming into contact with the arm H, arrests the further movement of the door upon its screwed axis G. The door C, being now detached from the body of the safe,

may be swung back on its hinges, and free access had to the inside of the safe. A reverse direction of movement of the handle K will effect the closing of the door of the safe, the stop-pin L′ being so arranged as to stop the further circular movement of the door when the bolt N of the lock comes opposite to the recess intended to receive it.

Having now fully described and set forth the nature and object of my said invention for improvements in the construction of safes or depositories intended to contain valuable property, together with the best means I am acquainted with for carrying the same into practical effect, I would remark, in conclusion, that what I claim as my invention, intended to be secured to me by Letters Patent, is as follows:

1. The construction and application of a screw-fitting door to safes and depositories, substantially as above described.

2. The hinged arm H and the screwed axis G, for supporting the weight of the door C, and guiding the same in a true horizontal plane during the opening and closing of the said door, as above described.

THOS. COOK.

Witnesses:

EBENEZER BAUTON BURR,
HENRY BRIDGLAND.