No. 693,857. Patented Feb. 25, 1902.

A. GUSTAFSON.

SAFE DOOR.

(Application filed Feb. 1, 1901.)

(No Model.)

Fig. 2.

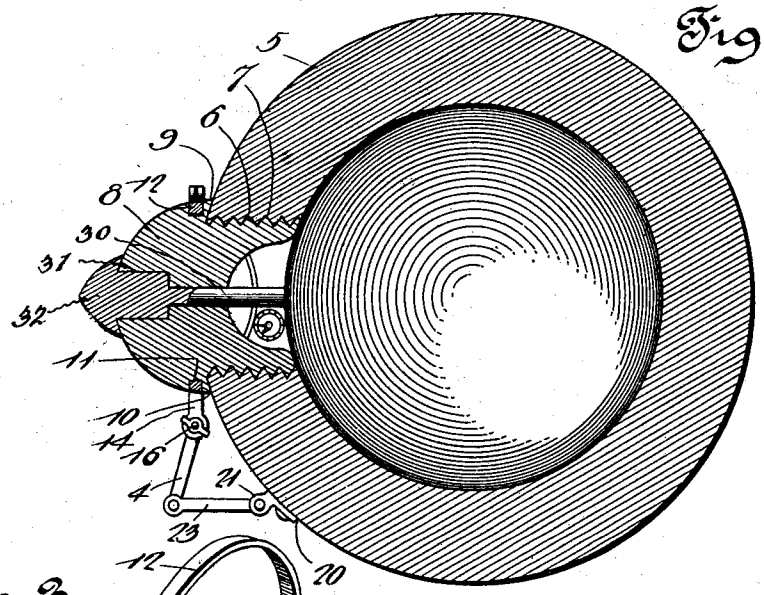
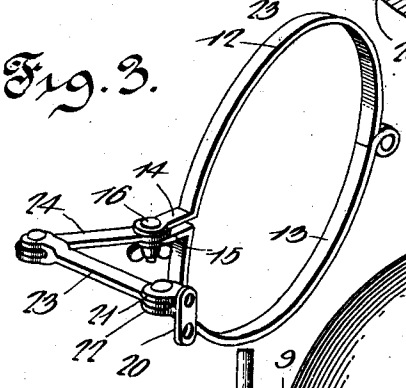


Fig. 3.



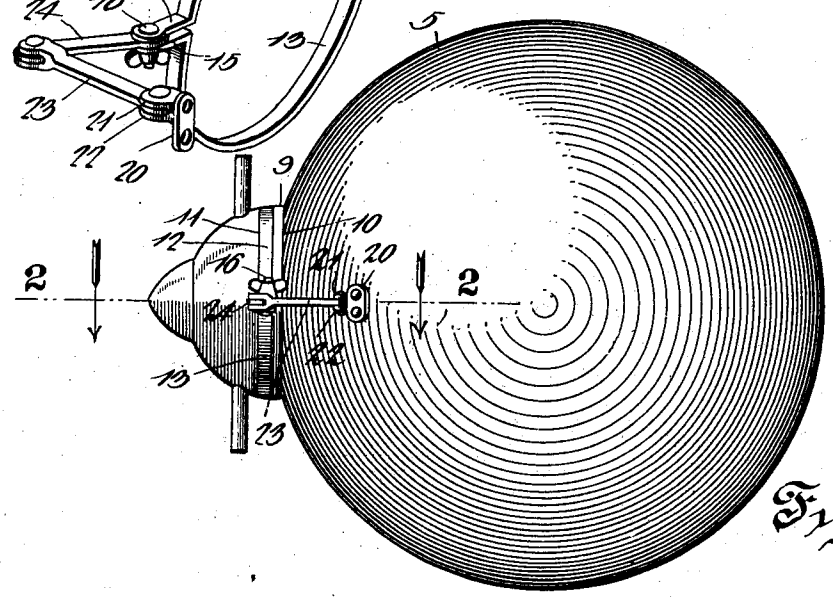


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

ADOLPH GUSTAFSON, OF PUEBLO, COLORADO.

SAFE-DOOR.

SPECIFICATION forming part of Letters Patent No. 693,857, dated February 25, 1902.

Application filed February 1, 1901. Serial No. 45,619. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH GUSTAFSON, a citizen of the United States, residing at Pueblo, in the county of Pueblo and State of Colorado, have invented a new and useful Safe-Door, of which the following is a specification.

This invention relates to safes in general, and more particularly to the doors thereof; and it has for its object to provide, in connection with a door adapted for threaded engagement with the safe, a supporting-hinge mechanism which will permit of manipulation of the door and will hold it elevated when disengaged from the safe, further objects and advantages of the invention being evident from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the safe with the door in place. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a perspective view of the hinge connection removed.

Referring now to the drawings, there is shown a safe provided with the present invention and including a spherical body portion 5, which is hollow and with the interior of which communicates a radial cylindrical opening 6, provided with screw-threads 7.

The door for the safe consists of a plug 8, the body portion of which is cylindrical and threaded, so that it may be engaged with the opening 6 by screwing thereinto, and this body portion has an enlarged head 9, the side of which adjacent to the body is formed to fit snugly against the surface of the body 5. In the curved face of the head and adjacent to the shoulder 10 there is formed a circumscribing groove 11, and in this groove is fitted a ring including two semicircular portions 12 and 13, which are hinged together at one end, while at their opposite ends are formed ears 14 and 15 by bending said ends outwardly, and these ears are perforated to receive a clamping-bolt 16, through the medium of which the two ring members are drawn toward each other to lie closely within the groove while permitting the rotation of the door independently of the ring. The hinge for the door includes a plate 20, which is secured to the outer face of the body 5 by screws or in any other manner and having spaced ears 21 and 22, between which is pivoted a link 23, having a bifurcated outer end to pivotally receive a second link 24, the opposite end of which is pivoted upon the bolt 16 between the ears 14 and 15. It will be seen that with this construction the door when disengaged from the body 5 will be held in proper position to be swung into engaging position and when thus swung may be rotated freely into engagement with the opening of the body, and conversely when the door has been rotated from its threaded engagement it may be swung outwardly to permit of access to the interior of the safe. When the door is in closed position, the enlarged head 9 thereof in overlapping the edge of the opening in the safe prevents pouring of an explosive through the opening of the safe in whatever position the safe may be in.

The locking mechanism for the door includes a rotatable spindle 30, passed through an axial perforation in the door, this perforation having its outer portion enlarged, as shown at 31, to receive the enlarged outer portion of the spindle. Beyond the outer surface of the door the spindle is provided with a head 32, which has a greater diameter than the spindle and the under face of which is concaved, so as to fit snugly against the outer surface of the head of the door and overlapping the edge of the perforation through the door, thus preventing the pouring of an explosive through the perforation through the door that receives the spindle. The spindle at its inner end is connected with a locking mechanism that may be of any suitable specific construction and need not be specifically described.

In practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

The combination with a safe having a convex face and a door-opening therein, of a door provided with a flange having its face concaved to bear against and closely fit the convex face of the safe and to extend circumferentially beyond the door-opening to seal the same against admission of an explosive, the door having a convex outer face

through which extends a counterbore-passage, locking mechanism including a spindle passed through the passage, said spindle having an enlarged portion to fit the counterbore and a head provided with a concaved flange to fit and closely bear against the convex face of the door and to extend circumferentially beyond the passage, thereby sealing the said passage against admisssion of an explosive, and a hinge suitably associated with the door, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ADOLPH GUSTAFSON.

Witnesses:
M. J. GALLIGAN,
ALICE WILSON.