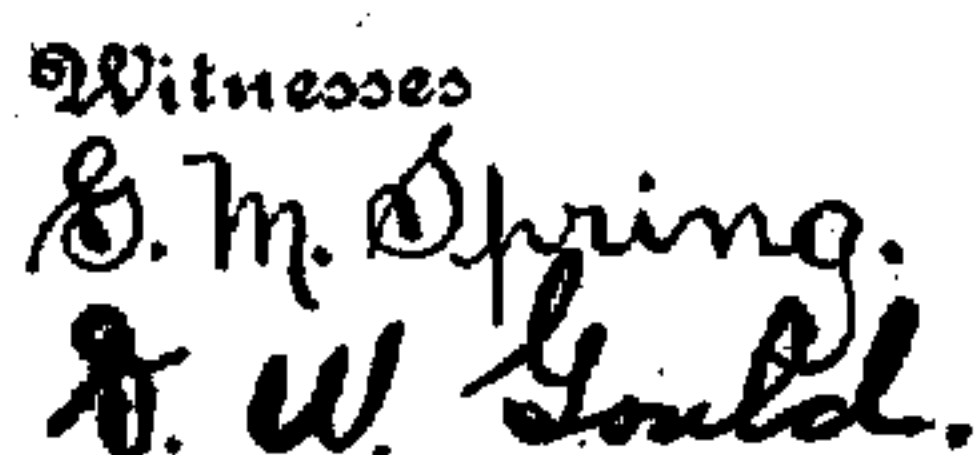


912,378.

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DOOR-FASTENING MEANS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES JACKSON, a citizen of the United States, residing at Hunter, in the county of Greene and State of New York, have invented new and useful Improvements in Door-Fastening Means, of which the following is a specification.

The invention relates to an improvement in door fastening means and is particularly directed to a manually operable device whereby the securing means of the door may be readily actuated to release the door when desired.

The invention consists in the combination with a door, of upper and lower securing bolts therefor, a bearing block secured to the door intermediate the bolts, a trunnion mounted in the bearing block and having one end projecting beyond the same, a cap plate secured to the bearing block and overlying the trunnion, that portion of the cap plate overlying the trunnion comprising spaced strips, a handle portion projecting at an angle to the trunnion and between the strip of the cap plate and connections between the projected end of the trunnion and the respective bolts as hereinafter described and claimed.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a perspective view illustrating the application of my improvement. Fig. 2 is an enlarged broken vertical section through the same. Fig. 3 is a perspective of the cap plate of the lever bearing. Fig. 4 is a perspective of the base block of said bearing. Fig. 5 is a perspective of the lever.

Referring particularly to the accompanying drawings, the door 1, with which the invention is adapted for use, is provided with upper and lower fastening means 2, which fastening means for the purposes of the present invention are shown as identical and each include a casing 3, in which is slidably mounted a bolt 4 having a reduced stem 5 terminally projected through an opening in the casing, said stem within the casing being encircled by a thrust spring 6, adapted to bear between the bolt proper and casing and to normally maintain the bolts in projected or locking position. The upper bolt is designed to cooperate with a keeper 7, while the lower bolt may, if preferred, engage a

recess 8 in the sill of the door. Secured between and slightly to one side of a line joining the respective bolt casings is a bearing including a base block 9 of approximately rectangular shape and formed with openings 10, whereby it may be secured to the door. Secured on the face of the block is a bearing projection 11 which, in a line transverse the block, is formed with a semicylindrical depression or bearing recess 12. A cap plate 13 is designed to cooperate with the block 9 having plate sections 14 to rest snugly upon the plain portions of the block 9 above and below the bearing projection 11, and an intermediate offset section 15 formed of spaced strips 16, which are arranged to overlie the bearing depression 12 in the block when the parts are assembled. A lever 17 is arranged for cooperation with the bearing including a handle portion provided at one end with a trunnion 18 disposed at an angle to the handle portion and of a size to seat in the depression 12 in the block 9. With the trunnion in the bearing block the handle of the lever will project between the strips 16 of the central portion of the cap plate, whereby a limited movement of the lever and a corresponding rotation of the trunnion is permitted. One end of the trunnion is circumferentially enlarged to provide a barrel 19, the free end of which is headed at 20. At diametrically opposing points the barrel of the trunnion is provided with eye bolts 21 from which flexible connectors, as chains 22, extend for connection with the free terminals of the stems 5 of the locking bolts. By this construction it is obvious that by movement of the lever in one direction the barrel is partially rotated with the effect to partly wind the chains 22 thereon and thereby retract the bolts 4 from their respective keepers against the tension of the springs 6. By a single movement of the lever, therefore, the fastening means are simultaneously released and the door permitted free movement.

The invention is particularly designed toward providing an easily controlled and conveniently operated releasing means for the door fastening used in emergency exits in public halls, theaters, schools, or the like, the operation being such as to require no particular knowledge or skill to effect release of the door.

As a particular and salient feature of the

present invention it is to be noted that the lever when in normal position will project approximately at right angles to the surface of the door and that the release of the fastening means may be readily accomplished by moving said lever in either direction. This materially simplifies the release of the doors and thereby guards against uncertainty of operation by one not particularly familiar with the construction.

Having thus described the invention what is claimed as new, is:—

1. The combination with a door, of upper and lower securing bolts therefor, a bearing block secured on the door intermediate the bolts, a trunnion mounted in the bearing block and projecting at one end beyond the same, means for holding the trunnion in position in the bearing block, connections intermediate the projected end of the trunnion and the respective bolts, and a lever secured to the trunnion and projecting at right

angles therefrom, whereby said lever is operative in a plane at right angles to the plane of the door.

2. The combination with a door, of upper and lower securing bolts therefor, a bearing block secured to the door intermediate the bolts, a trunnion mounted in the bearing block and having one end projected beyond the same, a cap plate secured to the bearing block and overlying the trunnion, that portion of the cap plate overlying the trunnion comprising spaced strips, a handle portion projecting at an angle to the trunnion and between the strips of the cap plate, and connections between the projected end of the trunnion and the respective bolts.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES JACKSON.

Witnesses:

GEORGE E. SWEET,
C. RODELL LAKE.