No. 829,398. PATENTED AUG. 28, 1906.

J. A. GIESE.

LOCK.

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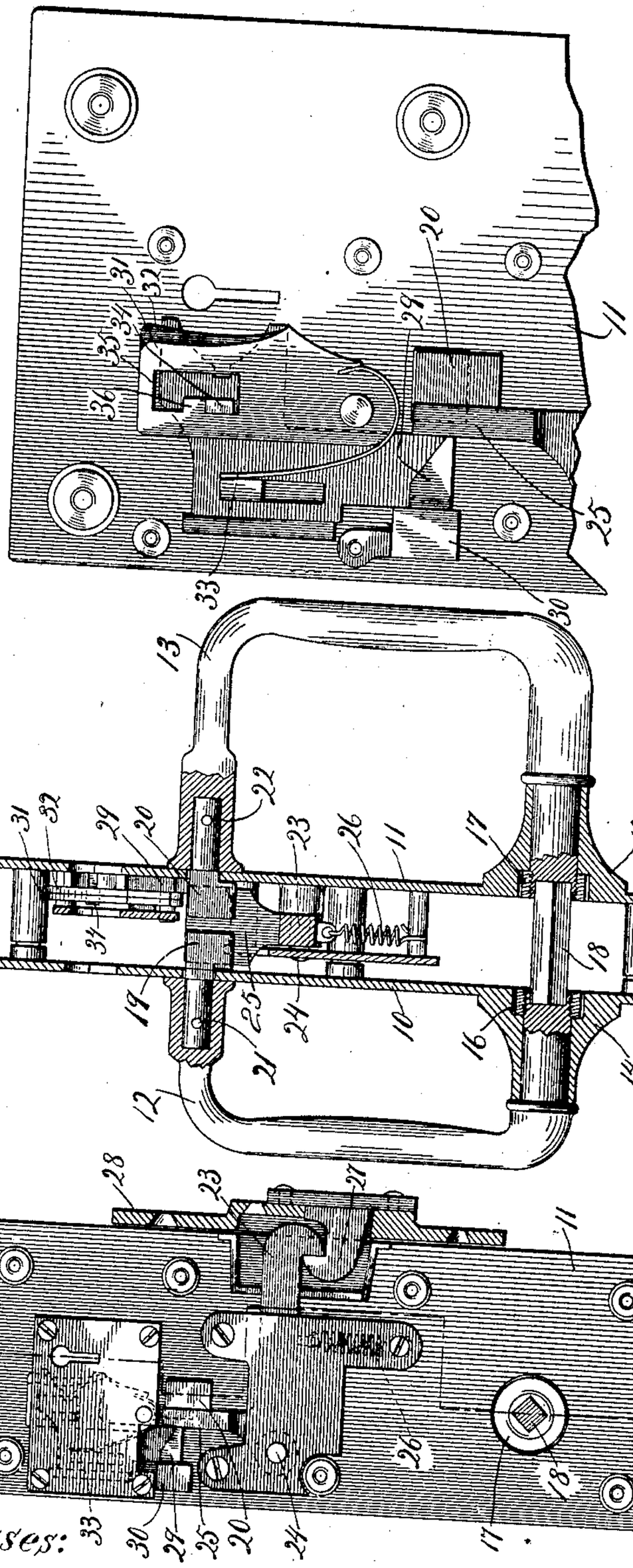

Fig. 3.

Fig. 2.

Fig. 1.

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# UNITED STATES PATENT OFFICE.

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## LOCK.

No. 829,398. Specification of Letters Patent. Patented Aug. 28, 1906.

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*To all whom it may concern:*

Be it known that I, JAMES A. GIESE, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Locks, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to locks especially adapted for use on sliding doors and of that type in which the pull-handles are so arranged as to control the latch.

The object of the invention is to generally improve and to simplify locks of this kind; and the invention is exemplified in the structure hereinafter described, and which is illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of the lock with one of its side plates removed. Fig. 2 is a sectional view on the broken line 2 2 of Fig. 1, and Fig. 3 is a detail of certain of the parts.

The side plates 10 and 11 are suitably secured together by bolts and are spaced apart to form a housing for the latch and its controlling mechanism. A pair of pull-handles 12 13 in loop form are secured to the outer faces of the plates 10 and 11 and serve as means not only for moving the door, but also for controlling the latch. These pull-handles are pivoted at their lower ends within the bosses 14 15, which project from the outer faces of the plates 10 and 11, the bosses being nterbored at their inner ends to accommodate the nuts 16 17, screwed upon the shanks of the handles to hold them within their sockets. The handle-shanks are preferably provided at their ends with angular sockets for receiving a correspondingly-shaped connecting-bar 18, which locks them together, so that they will oscillate in unison. The upper end of each of the handles is socketed to receive the stem of a shouldered block 19 20, the head of which is located within the chamber of the casing, its stem projecting through a suitable slot in the side plate and its shoulder engaging the inner face of this side plate to prevent the handle from being pulled away from the plate. The stems of the blocks 19 and 20 are secured within the handles, as by means of pins 21 22.

The latch 23 is in hook form and is pivoted at 24 within the casing. This latch has a lateral arm 25, which projects into the path of the blocks 19 20, so that as the handles are turned on their pivots by pressure in the direction of travel of the door as it opens the latch 23 is raised. A suitable spring, as 26, is provided for resisting this movement of the latch and restoring it to its lowered position after the pressure is relieved. The hook coöperating with the latch is shown at 27 and is secured to a suitable plate 28, adapted to be secured to the door-post.

A key-controlled bolt 29 is so housed within the casing that it may be moved into the path of the arm 25 to lock the latch in engagement with the hook 27, and an abutment 30 is fixed back of the advance position of the bolt in order to support it. The bolt-controlling mechanism or lock proper presents no novel features. There are suitable tumblers 31 32 and a spring 33. The bolt 29 is provided with a lateral lug 34, which projects through a slot 35 in the tumblers and engages a lug 36, formed on the latter and projecting into the slot. When the bolt is advanced, as shown in Fig. 3, it is held against retraction by the engagement of the lugs 34 and 36, as shown, and when the bolt is retracted the lug 34 is carried to the opposite side of the lug 36, thereby preventing the advance of the bolt until the tumblers are thrown back by a suitable key.

I claim as my invention—

1. In a lock, in combination, a face-plate, an oscillating latch pivoted to the face-plate, an oscillating handle in loop form pivoted to the face-plate and movable in a plane parallel with the plane of movement of the latch and having its swinging end projecting through a slot therein and provided with a shoulder engaging the inner face of the plate, the swinging end of the handle being in lifting engagement with the latch.

2. In a lock, in combination, a pair of face-plates secured together and spaced apart to form a housing-chamber, a latch pivoted between the plates, a pair of handles in loop form pivotally attached one to the outer face of each of the plates to swing in planes parallel with the plane of movement of the latch, the swinging end of each handle projecting through a slot in the adjacent plate and being in lifting engagement with the latch, and connection between the pivoted ends of the

handles for locking them against relative movement.

3. In a lock, in combination, a pair of face-plates secured together and spaced apart to form a housing-chamber, a latch pivoted between the plates, a pair of handles in loop form pivotally attached one to the outer face of each of the plates to swing in planes parallel with the plane of movement of the latch, the swinging end of each handle projecting through a slot in the adjacent plate and being in lifting engagement with the latch, and an angular bar entering complementary sockets in the pivotal ends of the two handles.

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