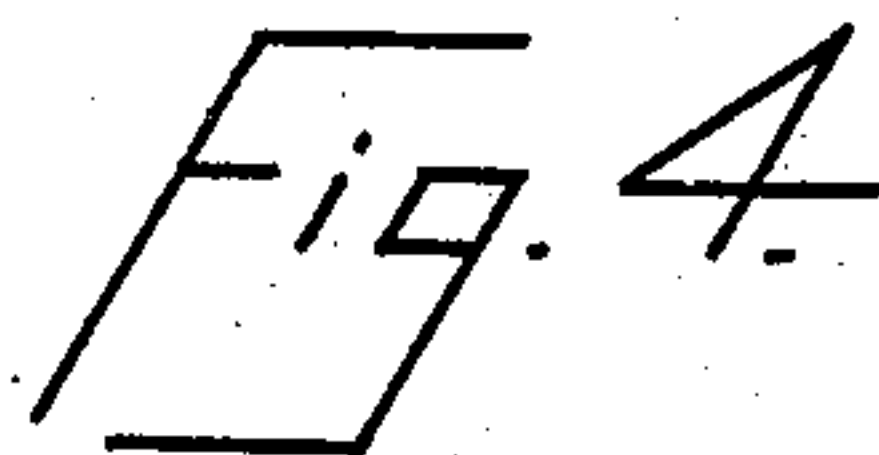
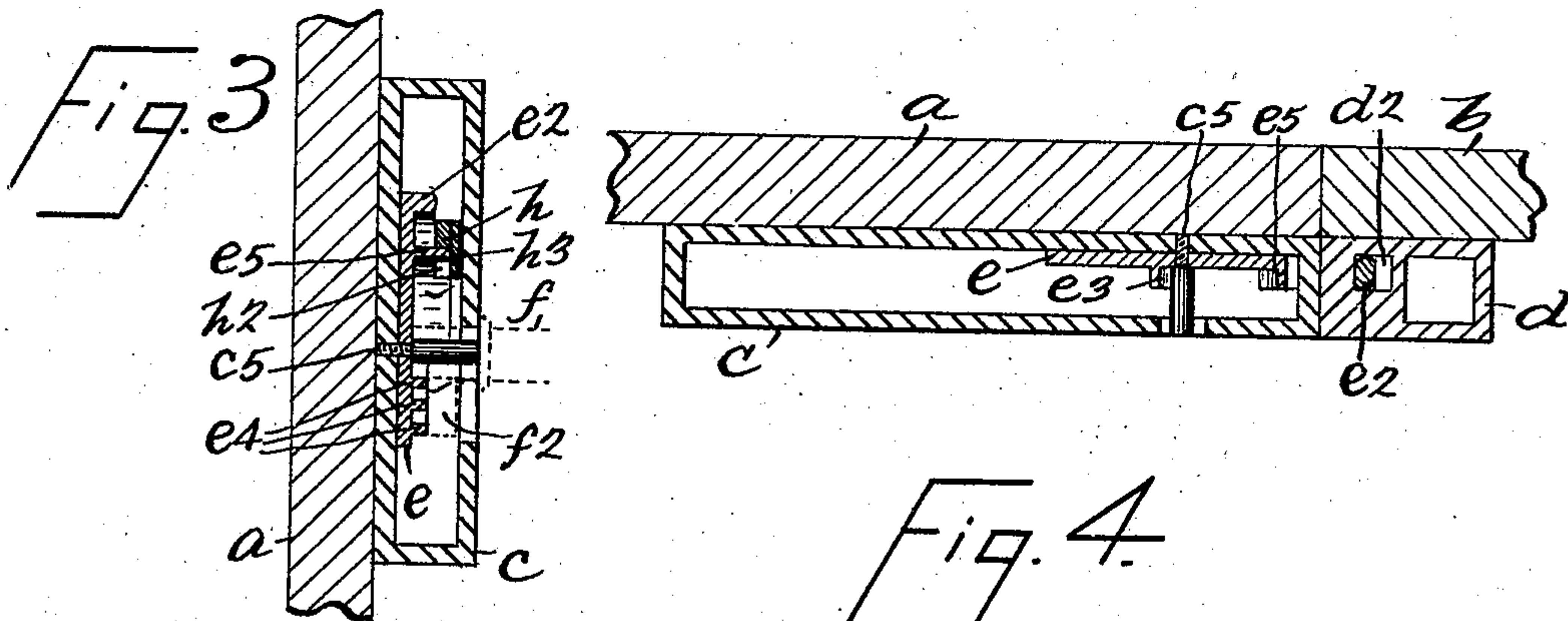
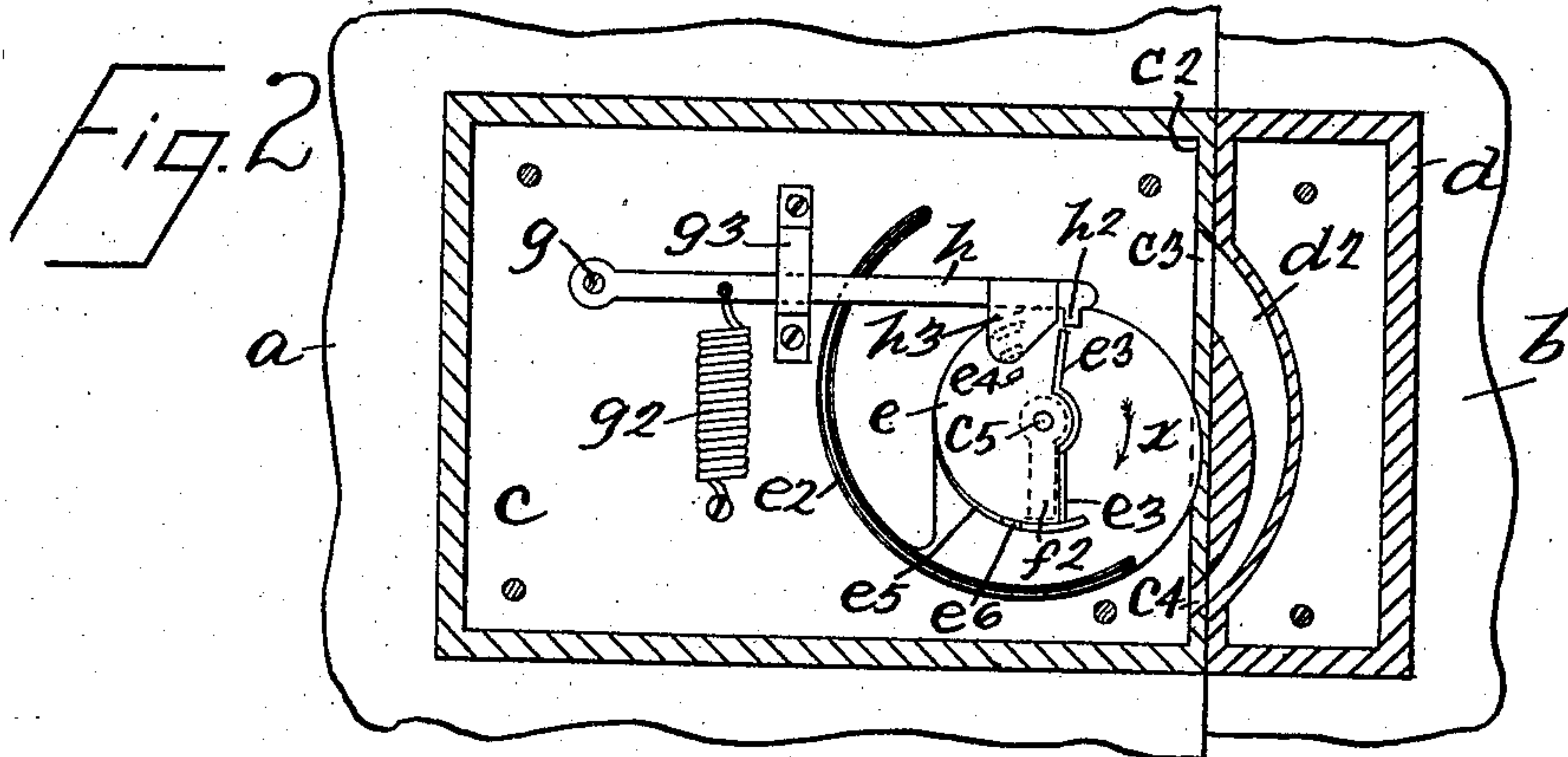
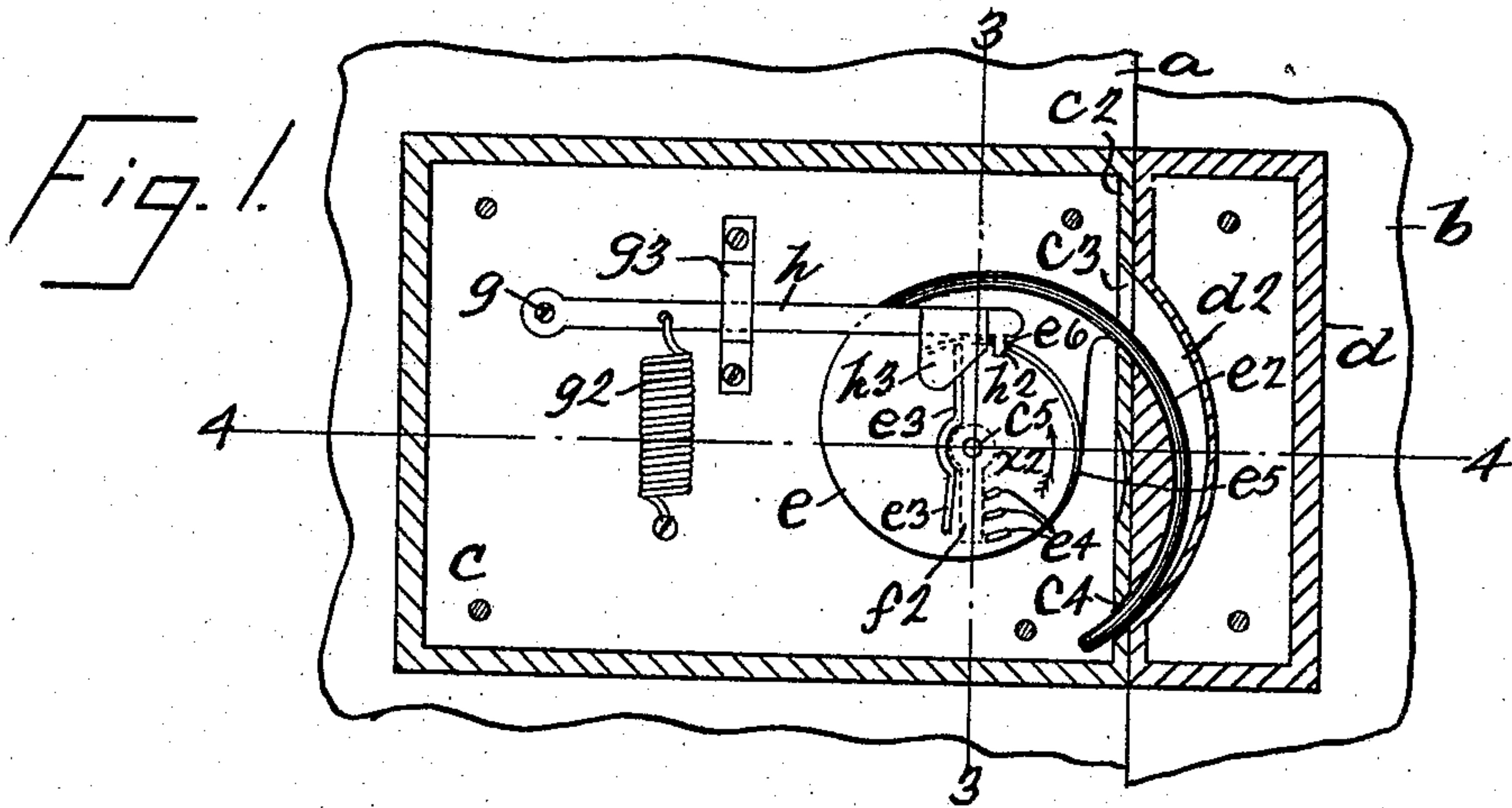


No. 815,009.

PATENTED MAR. 13, 1906.

W. W. FESSLER.
DOOR LOCK.

APPLICATION FILED MAY 15, 1905.



WITNESSES

J. C. Larsen
F. A. Stewart

INVENTOR

Walter W. Fessler

BY

Edgar Tate & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

WALTER W. FESSLER, OF NEW YORK, N. Y.

DOOR-LOCK.

No. 815,009.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed May 15, 1905. Serial No. 260,421.

To all whom it may concern:

Be it known that I, WALTER W. FESSLER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Door-Locks, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

10 This invention relates to locks for doors and similar swinging articles which it is desired to lock; and the object thereof is to provide an improved device of this class which is simple in construction and composed of
15 few parts and which when in operation cannot be "picked" or operated so as to open the door except by means of a key.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

25 Figure 1 is a sectional front view of my improved lock and showing the same applied for use to a door and door-frame and showing the lock in operation; Fig. 2, a similar view showing the lock out of operation; Fig. 3, a section on the line 3 3 of Fig. 1, and Fig. 4 a
30 section on the line 4 4 of Fig. 1.

In the drawings forming part of this specification I have shown at *a* a part of a door and at *b* a part of a door-frame, and in the practice of my invention I provide a lock
35 which comprises a casing *c*, adapted to be secured to the door *a* in the usual manner and both ends of which in the form of construction shown are closed, the end *c*² adjacent to the door-frame, with which the keeper *d* is
40 connected, being provided with two openings *c*³ and *c*⁴, and the keeper *d* is also closed and that part thereof adjacent to the lock-casing *c* when the door is closed being provided with a curved or segmental passage *d*²,
45 which communicates when the door is closed with the openings *c*³ and *c*⁴ in the lock-casing *c*.

Pivoted within the lock-casing *c*, adjacent to the end *c*² thereof, as shown at *c*⁵, is a cam-disk *e*, provided with a curved or cam arm *e*², adapted to enter and pass through the passage *d*², and the pivot-pin *c*⁵ is secured to the cam-disk *e* and forms a key-post adapted to enter the head of a key inserted into the lock in the
55 usual manner. Arranged transversely of the disk *e* are stops *e*³, in connection with which

the key operates to turn said disk in opposite directions, and arranged radially of one side of said disk (the narrower side thereof in the form of construction shown) are three baffles *e*⁴, and in practice the head of the key is provided with recesses through which these baffles pass when the key is turned to operate the lock or the disk *e*, and in Fig. 3 of the drawings the key is shown in dotted lines at
65 *f* and the head thereof at *f*². The disk *e* is also provided with a segmental flange *e*⁵, formed on a circle the center of which is the key-post or pivotal pin *c*⁵, and this flange is between the key-post or pin *c*⁵ and that part
70 of the arm *e*² which is formed on or connected with the disk *e*, and said flange *e*⁵ is provided with a recess *e*⁶.

Pivoted in the casing *c* and near the inner end thereof, as shown at *g*, is a lock-arm *h*, to
75 which is secured a spring *g*², which serves to pull said arm downwardly at all times, and said lock-arm is provided near its free end with a lug or projection *h*², adapted to enter the recess *e*⁶, and the said lock-arm is also
80 provided with a cam-plate *h*³, which is secured thereto and in connection with which the head of the key operates, and the arm *h* also passes through a guide *g*³, secured in the casing *c*, and which serves to hold said arm in
85 proper operative position.

Whenever it is desired to lock the door, as shown in Fig. 1, the key is inserted and turned to the right into the position indicated in dotted lines in Fig. 1, and this operation
90 turns the disk *e*, and the arm *e*² is forced into and through the passage *d*² in the keeper *d* and the door is securely locked, and whenever it is desired to unlock the door the key is inserted and turned in the opposite direc-
95 tion, or to the left, and this operation unlocks the door, as shown in Fig. 2. The direction in which the key is turned to lock the door is shown by the arrow *x* in Fig. 2, and the direction in which the key is turned to unlock the
100 door is shown by the arrow *x*² in Fig. 1. When the key is turned to the left to unlock the door, the head *f*² thereof strikes the cam-plate *h*³ and throws the arm *h* upwardly and disengages said arm from the flange *e*⁵ or the
105 recess *e*⁶ therein, and at the same time the head of the key strikes the upper stop *e*³ on the disk *e* and turns said disk to the left, and in turning the disk to the right to lock the door the head of the key strikes the lower
110 stop *e*³, as will be readily understood, and it will be understood that the arm *h* serves to

hold the disk e and curved arm e^2 in connection therewith both in and out of locked position, the said arm operating in connection with the recess e^6 to hold said disk and arm in the locked position and bearing on said disk to hold said disk and arm in the unlocked position.

It will be observed that when the arm e^2 is in its operative position, as shown in Fig. 1, the end thereof projects through the keeper d and into the lock-casing c , as shown at i in Fig. 1, and the form of the adjacent parts of the keeper d and lock-casing c is such as to absolutely prevent the "picking" of the lock or the opening thereof without a key, and this is especially true when the end of the arm e^2 is made long enough to project into the casing c , as shown in Fig. 1.

My invention is not limited to any particular form of key, and any suitable key may be provided, and the form of the disk e and the parts connected therewith may be varied, as will be readily understood, and other changes in and modifications of my improved lock may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A lock comprising a lock-casing adapted to be secured to a door and a keeper adapted to be secured to a door-frame, the keeper being provided in the face thereof adjacent to

the door when the latter is closed with a segmental passage both ends of which are open; and the lock-casing being provided with a pivoted disk having an eccentric curved arm adapted to be projected through said passage into said casing, said disk being adapted to be operated by a key, and a spring-operated lock-arm mounted in the lock-casing and adapted to hold said disk in both the locked and unlocked position, substantially as shown and described.

2. A lock comprising a casing adapted to be secured to a door and a keeper adapted to be secured to a door-frame, the adjacent faces of said casing and said keeper being closed and the face of the casing being provided with two openings and the face of the keeper with a segmental passage which communicates therewith when the door is closed, said casing being also provided with a rotatable disk having an arm adapted to pass through said passage, and said disk being adapted to be operated by a key, and means for holding said disk in a predetermined position, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 13th day of May, 1905.

WALTER W. FESSLER.

Witnesses:

F. A. STEWART,
C. J. KLEIN.