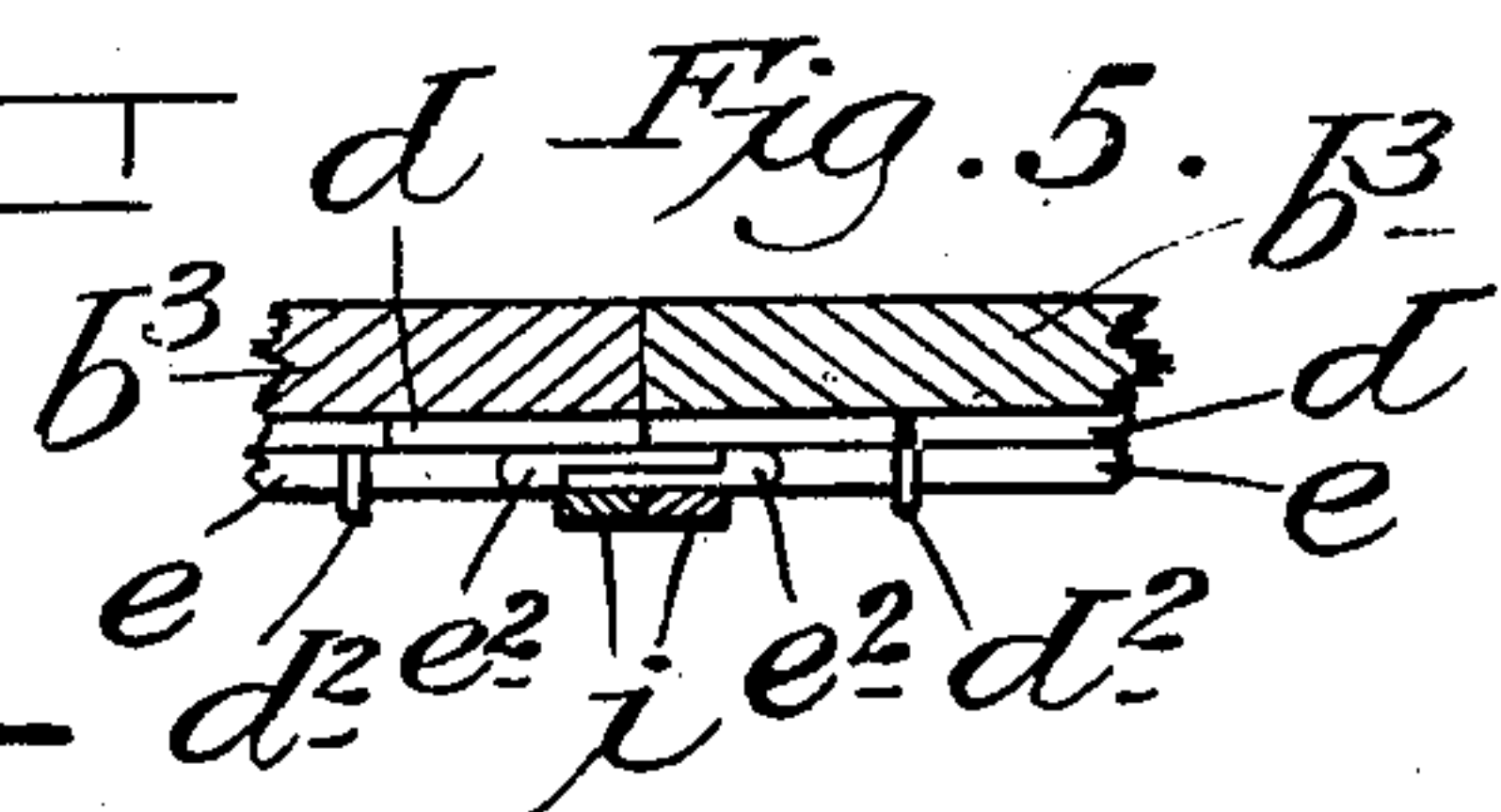
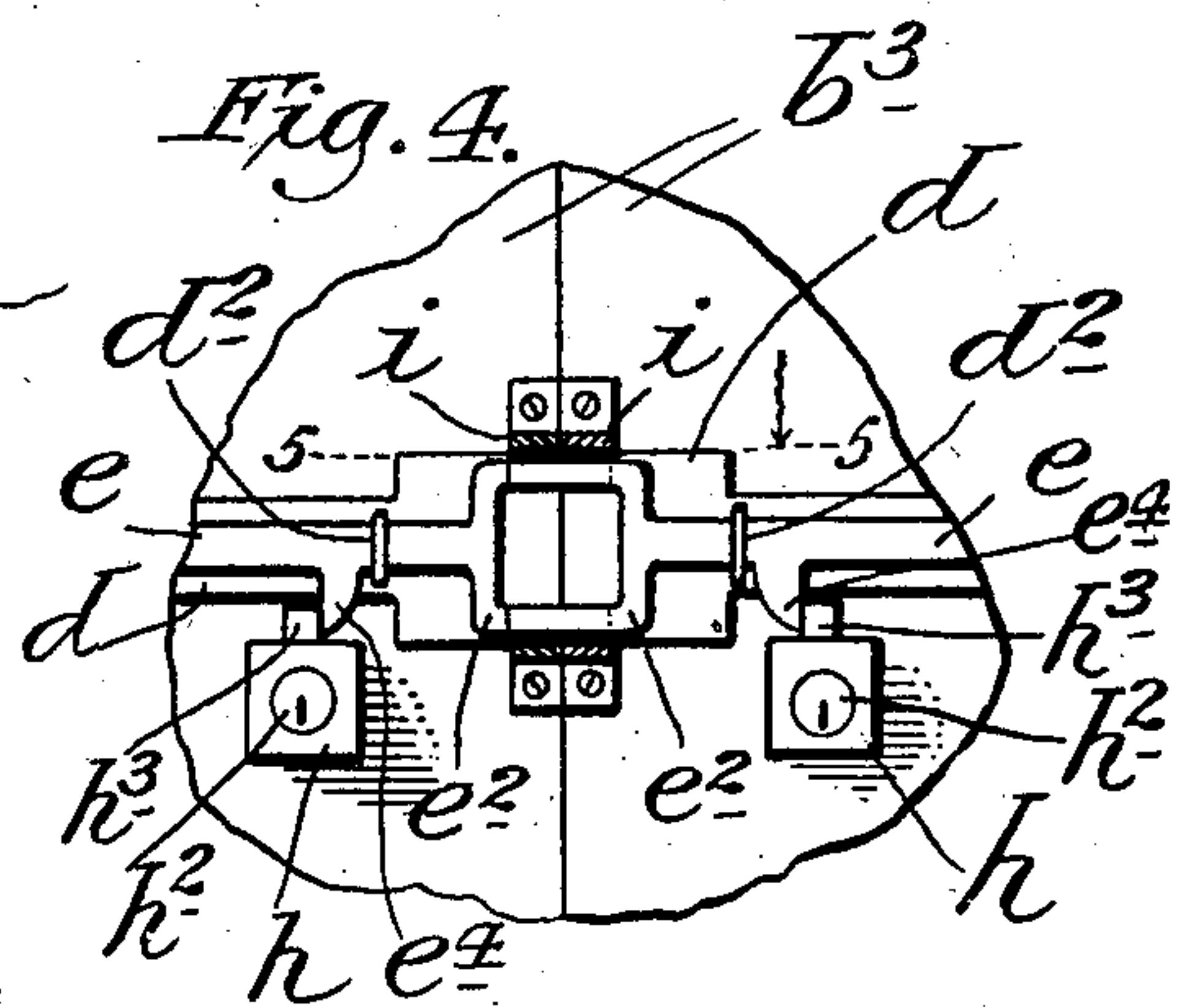
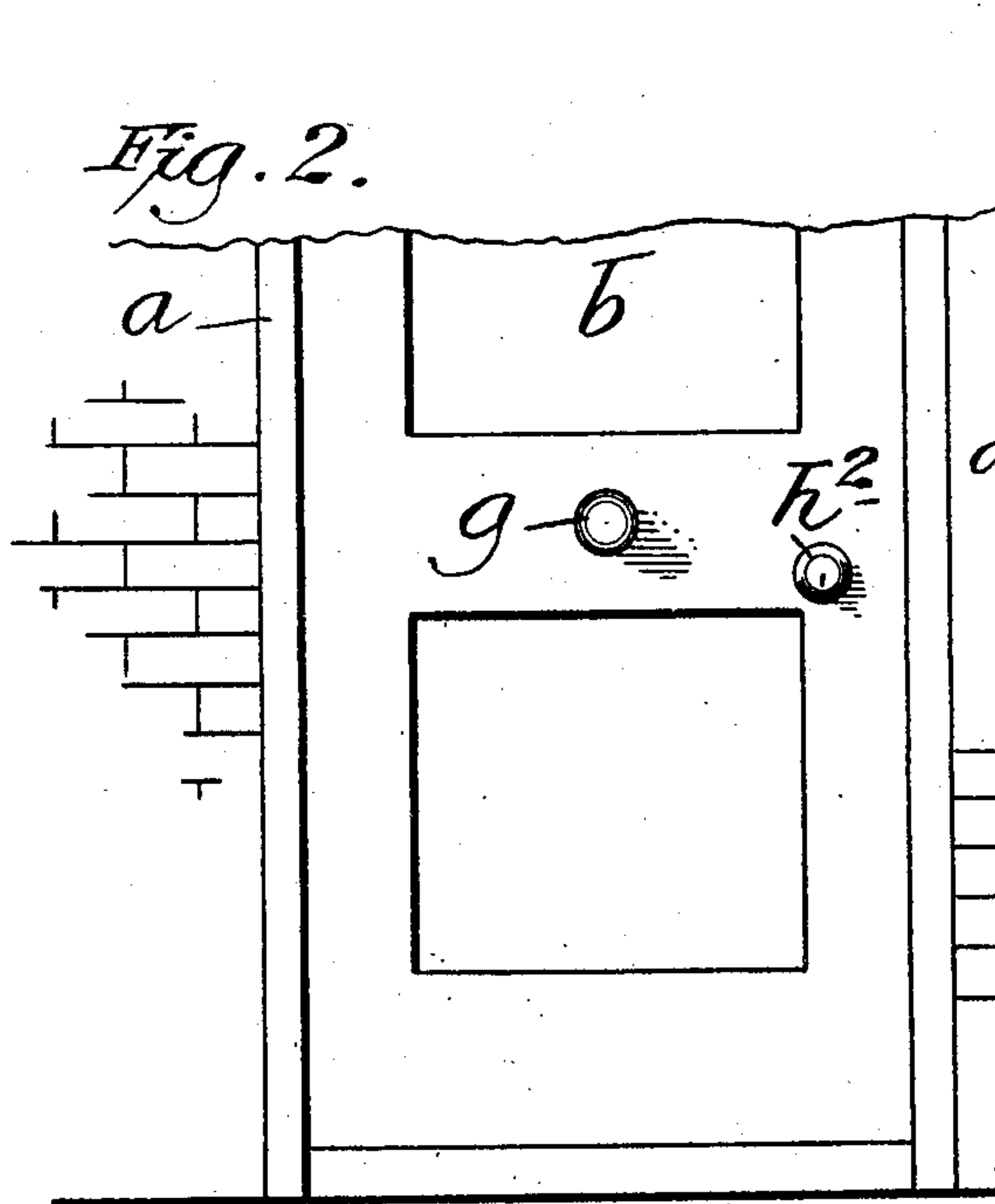
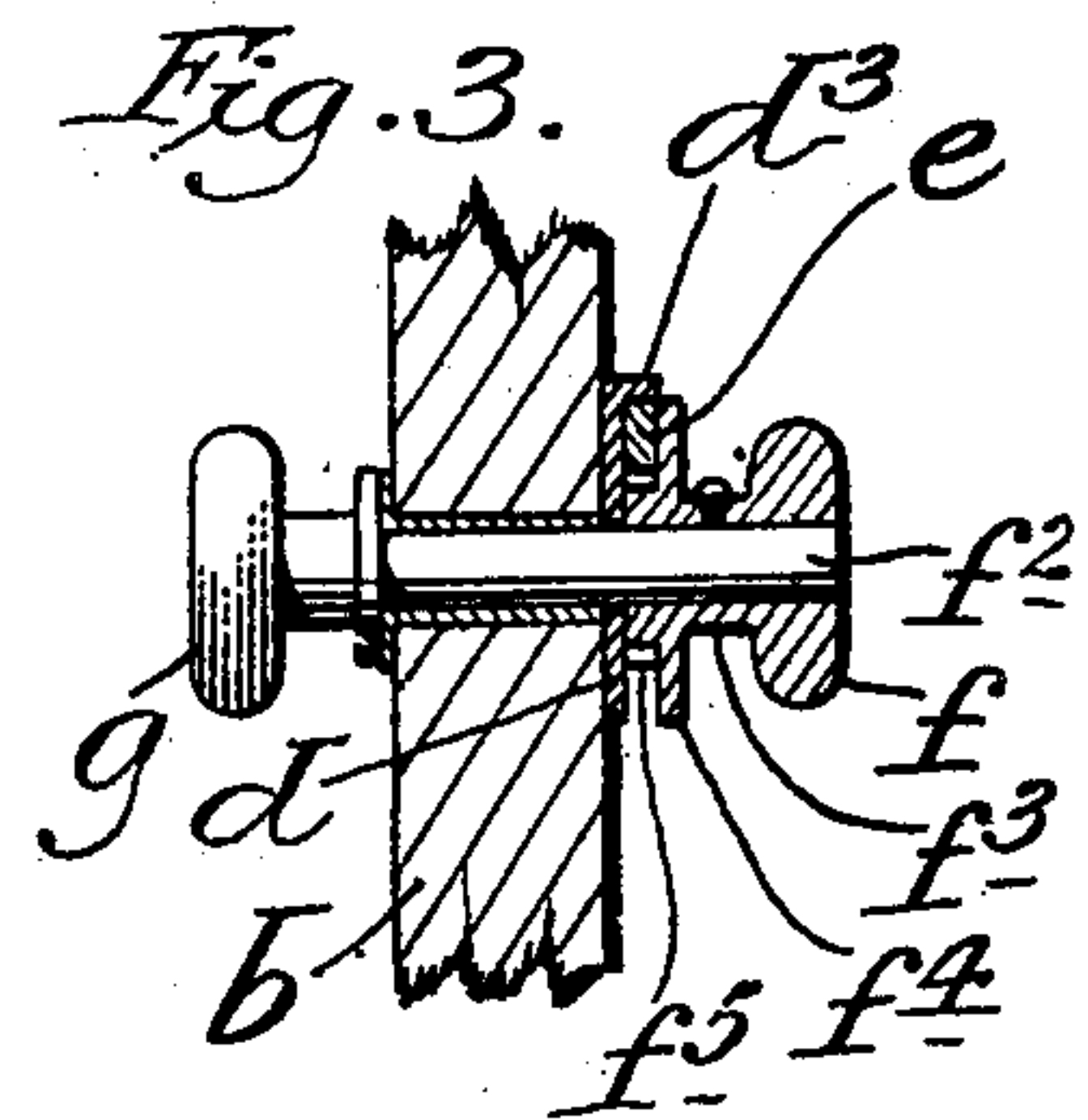
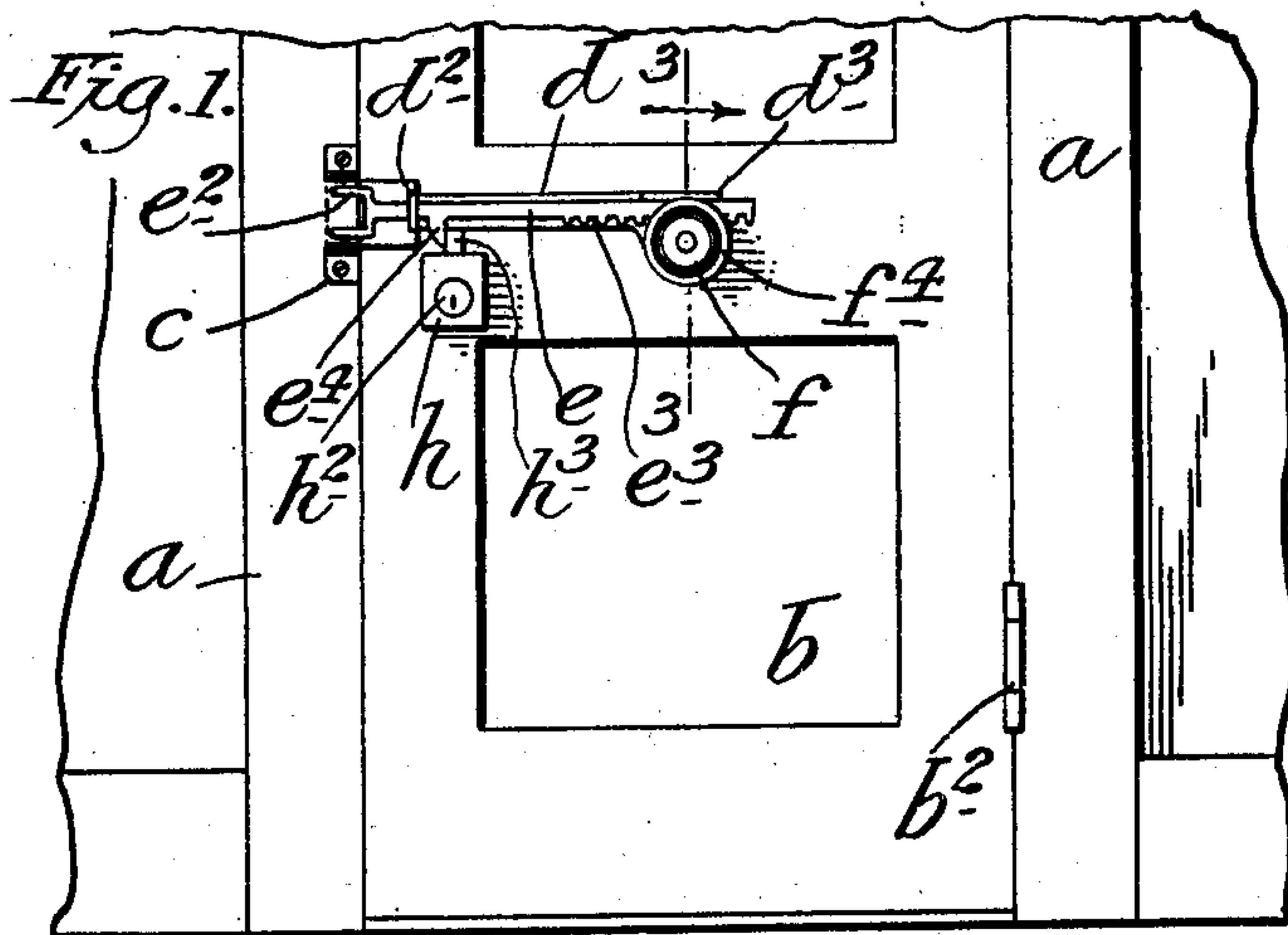


No. 898,014.

PATENTED SEPT. 8, 1908.

G. E. SPILTOIR.
DOOR LOCK.

APPLICATION FILED APR. 9, 1908.



WITNESSES

L. E. Murbreany
M. C. Doody

INVENTOR.

Gustave E. Spiltoir.

BY

Edgar Tate & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GUSTAVE E. SPILTOIR, OF NEW YORK, N. Y.

DOOR-LOCK.

No. 898,014.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed April 9, 1908. Serial No. 426,036.

To all whom it may concern:

Be it known that I, GUSTAVE E. SPILTOIR, a citizen of the United States, and 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.

This invention relates to door locks, and the object thereof is to provide an improved device of this class which is simple in construction and operation and which comprises a lock bolt adapted to be operated in both directions by the turning of a knob from either the outer side or inner side of a door and which is held in operative position by a supplemental lock adapted to be operated by a key from either side of the door.

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

Figure 1 is an inside view of a part of a door frame and door provided with my improved lock; Fig. 2 an outside view thereof; Fig. 3 a section on the line 3—3 of Fig. 1; Fig. 4 a view similar to Fig. 1 but showing my improvement applied to two swinging doors, and;—Fig. 5 a section on the line 5—5 of Fig. 4.

In the drawing forming part of this specification, I have shown at *a* in Figs. 1 and 2 a door frame and at *b* a door hinged to one side of the frame at *b*², and in the practice of my invention I provide a catch or keeper *c* which is secured to the door frame opposite the hinge or hinges of the door, and I also secure to the door in transverse line with the catch or keeper *c*, when the door is closed, a bolt holding plate *d* having a keeper *d*² at its outer end and a flange *d*³ at its inner end, and mounted on said plate and passing through the keeper *d*² is a longitudinally movable bolt *e*, the outer end of which, in the form of construction shown, is provided with a U-shaped fork *e*² adapted to enter the catch or keeper *c* and the inner end of which is provided on one edge thereof, the bottom edge as shown in the drawing, with teeth *e*³ which form a rack bar. On the inner side of the door is a knob or handle *f* provided with a spindle *f*², and the knob or handle *f* is pro-

vided with a hub *f*³ having a collar or flange *f*⁴ which bears on the lock bolt *e* and operates in connection with the flange *d*³ of the plate *d* to form a keeper for said bolt, and on the inner side of the flange or rim *f*⁴, the hub *f*³ of the knob or handle *f* is provided with teeth *f*⁵ which operate in connection with the teeth *e*³ on the bolt *e* to move said bolt inwardly or outwardly according to the direction in which the knob or handle *f* is turned. The spindle *f*² of the knob or handle *f* also passes through the door and is provided on the outer side thereof with a knob or handle *g*, and said spindle may thus be turned or operated from either side of the door so as to operate the bolt *e* and lock or unlock the door.

The bolt *e* is provided at a predetermined point with a depending or downwardly directed tooth or projection *e*⁴, and secured to and in the door below said bolt, or below the plate *d*, is an ordinary cylinder lock *h* having a cylinder *h*² which passes through the door and is adapted to be operated by a key in the usual manner from either side of the door, and the lock *h* is provided with a vertically movable bolt *h*³ adapted in its operative position to engage the tooth or projection *e*⁴ on the bolt *e* as shown in Fig. 1, and said bolt *h*³ is operated in both directions by the key.

As thus constructed, it will be seen, that when the bolt *h*³ of the lock *h* is out of operative position or is turned down the lock bolt *e* of the door may be moved in either direction from either side of the door by means of the knobs or handles *f* and *g*, and when it is desired to lock the door the lock bolt *e* is moved into the position shown in Fig. 1, and the bolt *h*³ of the lock *h* is operated by the key and thrown into the position shown in Fig. 1, in which position of the parts the door is securely locked and can only be opened by a key inserted into the cylinder *h*² of the lock *h* and manipulated so as to move the bolt *h*³ downwardly, after which the lock bolt *e* of the door may be moved inwardly.

In Fig. 4 I have shown my improved lock applied to two swinging doors *b*³ in which all the parts shown as attached to the door *b* in Fig. 1 are attached to each of the doors *b*³, and each door is provided at its free edge with a keeper *i* adapted to receive the forked shaped ends *e*² of the lock bolts *e*, and said U-shaped ends of the lock bolts *e* when in operative position overlap each other as shown in Fig. 5.

My invention is not limited to the U-shaped end e^2 of the lock bolt or bolts e in either form of construction, and said bolts may be provided with any suitable end head or other formation; and various changes in and modifications of the construction herein described may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages. It will also be apparent that my improved lock is not confined in use to a door, as the same may be applied to gates and various other devices of this class.

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

1. In a lock for doors, a main bolt movable transversely of the door, a spindle passing through the door and engaging said bolt and adapted to move it in both directions, said spindle being adapted to be operated from either side of the door, and a key operated lock secured to the door adjacent to said

main bolt and provided with a lock bolt movable toward and from said main bolt and adapted to engage the same, said key operated lock being adapted to be operated from either side of the door.

2. In a lock for doors, a main bolt movable transversely of the door and provided with gear teeth, a spindle passing through the door and adapted to be operated from either side thereof and provided with a gear meshing with said teeth, and a key operated bolt mounted vertically of the door and adapted to engage the main bolt, said key operated bolt being adapted to be operated from either side of the door.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 8th day of April 1908.

GUSTAVE E. SPILTOIR.

Witnesses:

C. E. MULREANY,
M. E. DOODY.