

(No Model.)

J. WOLF.  
LOCK HINGE.

No. 365,160.

Patented June 21, 1887.

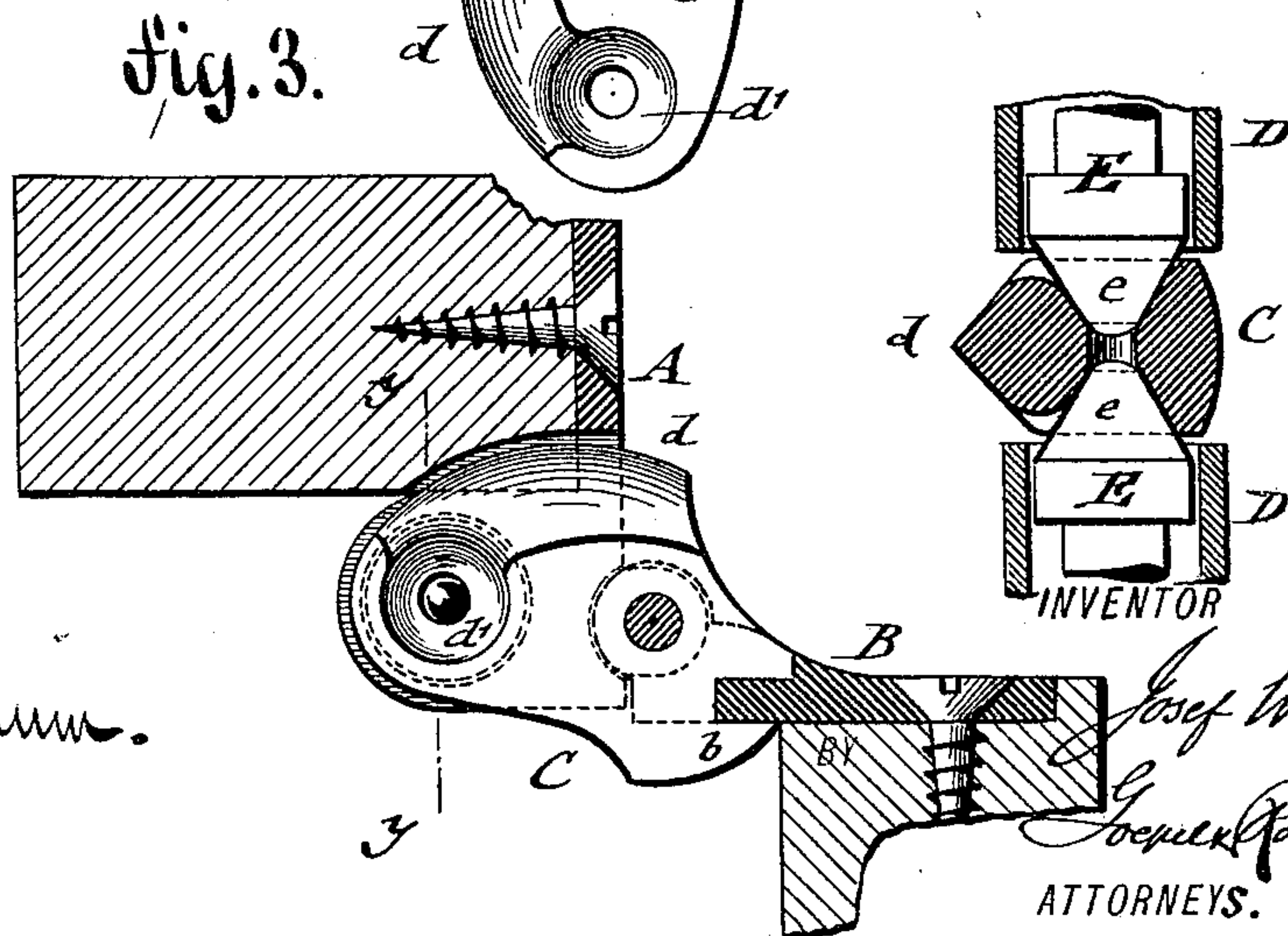
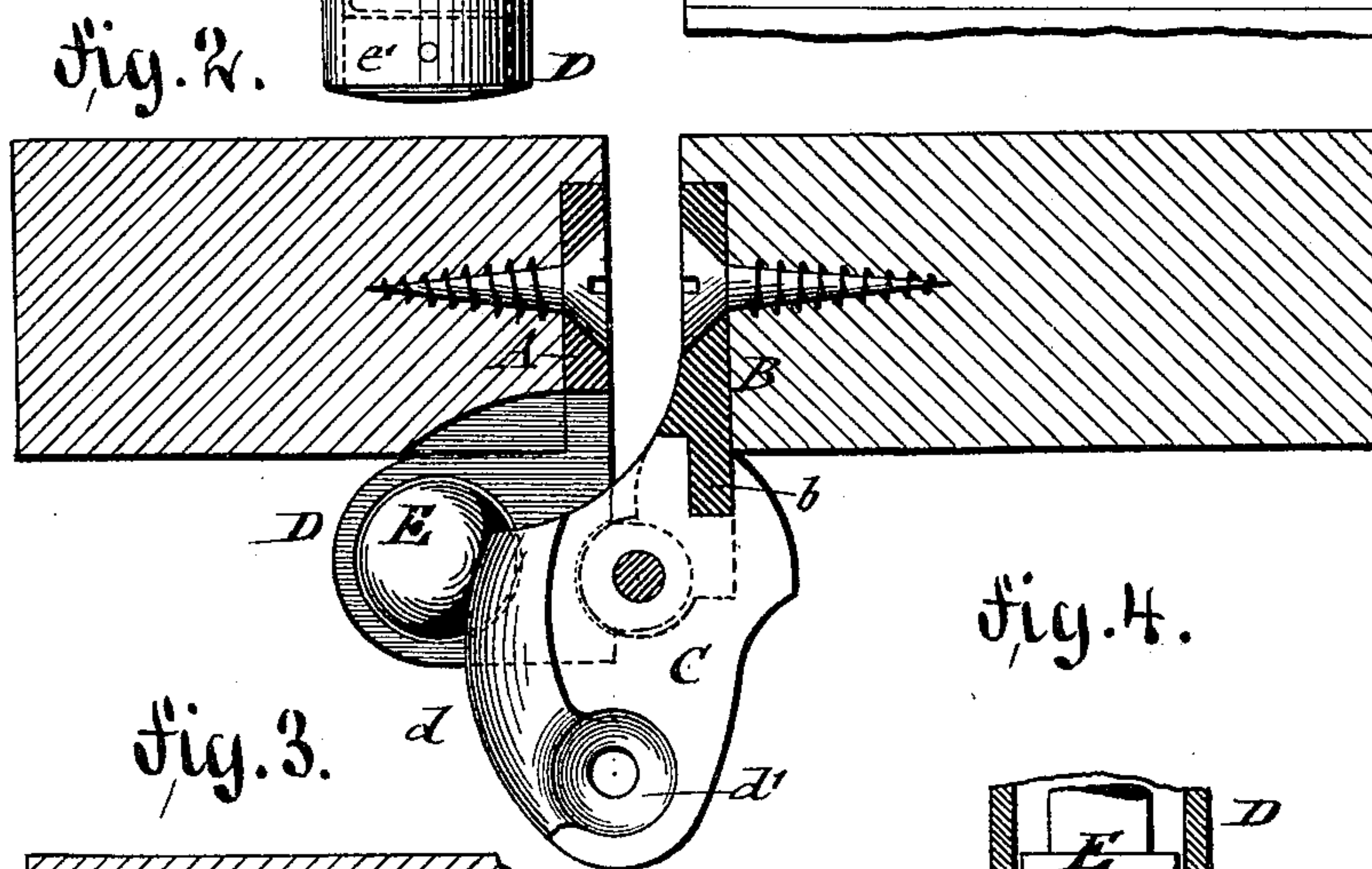
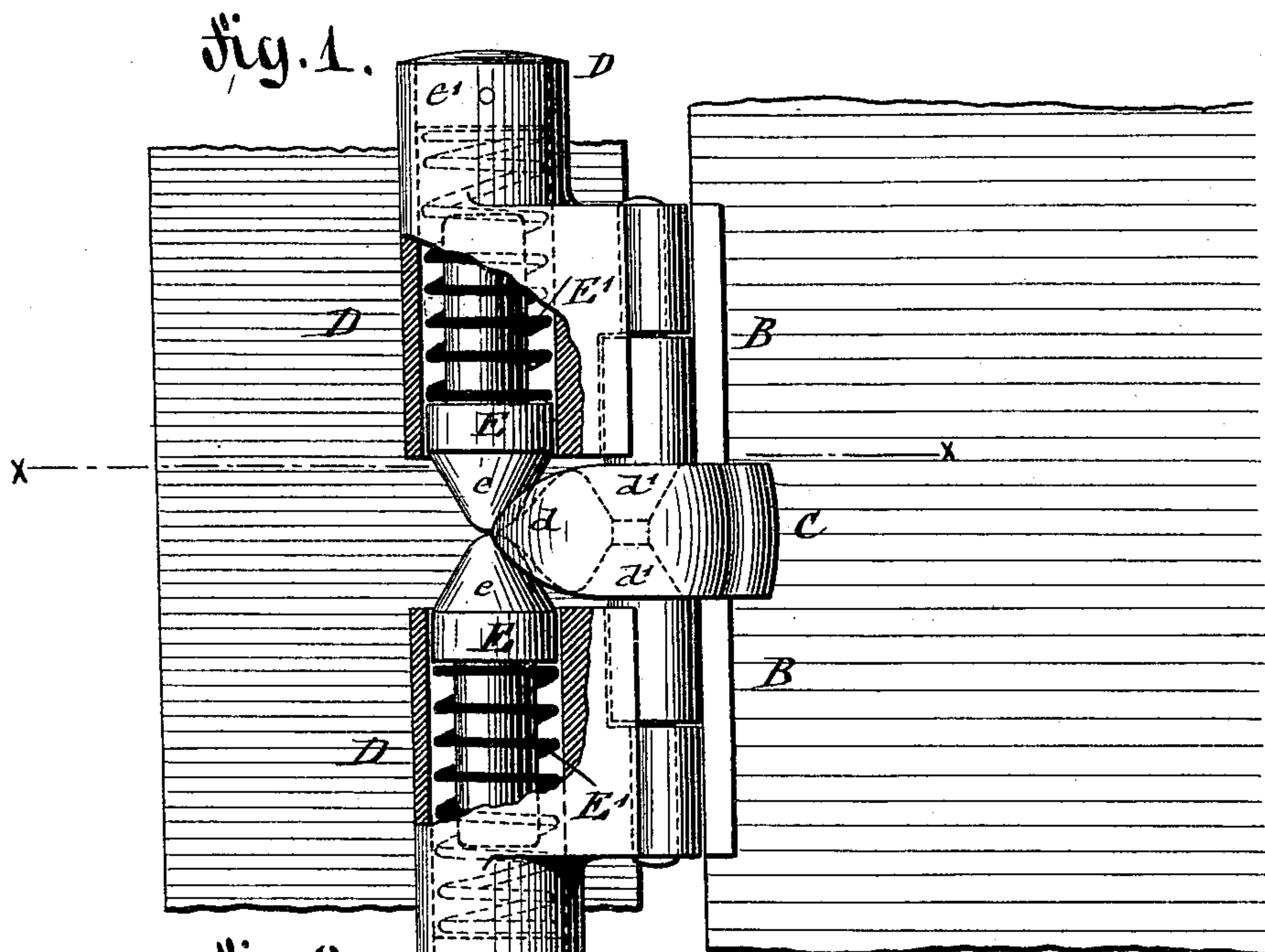
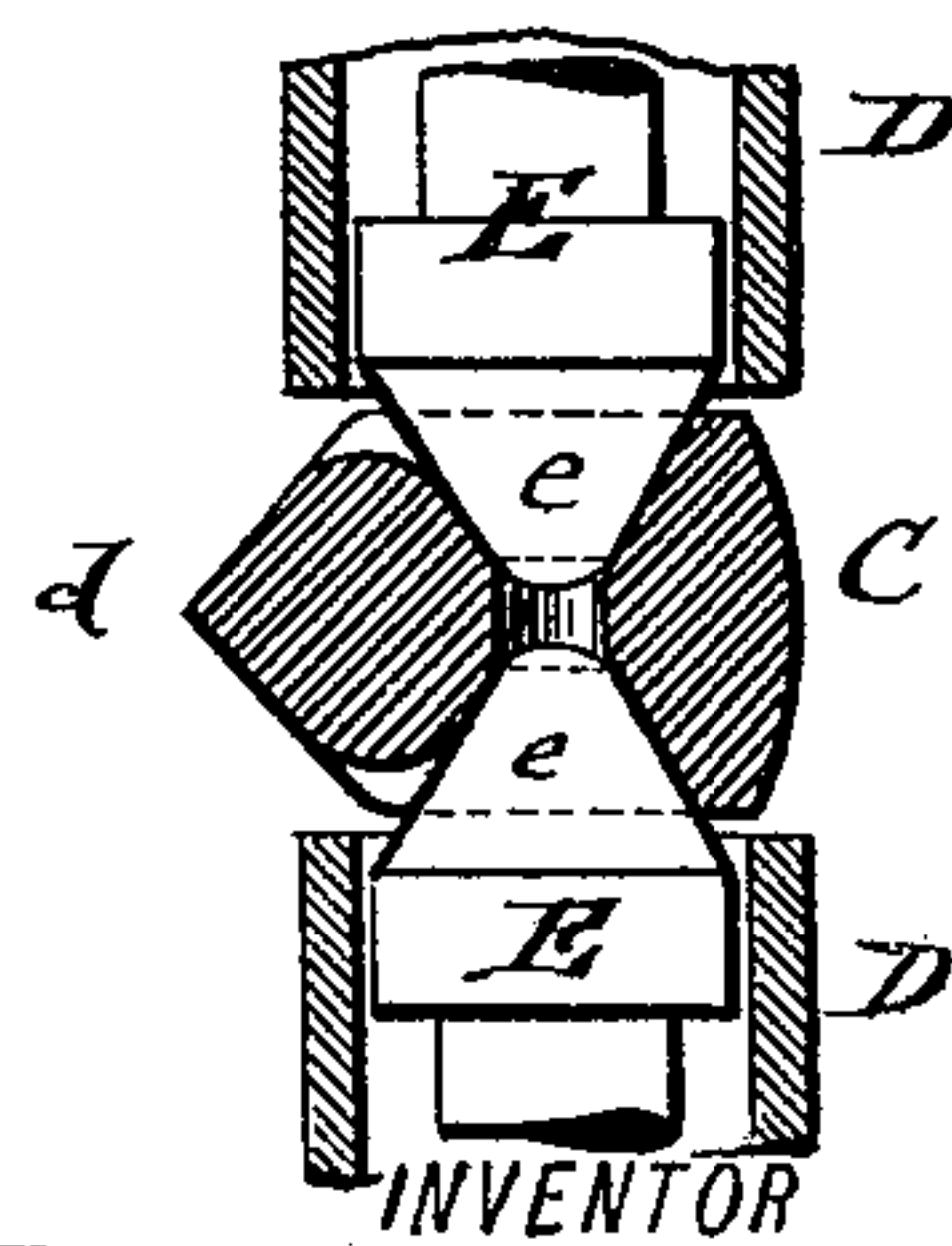


Fig. 4.



WITNESSES:

For. H. Rosenbaum.  
Martin Petry.

INVENTOR  
Josef Wolf  
Joseph Paegener  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOSEF WOLF, OF HOBOKEN, NEW JERSEY, ASSIGNOR OF ONE-HALF TO  
AUGUST MULLER, OF NEW YORK, N. Y.

## LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 365,160, dated June 21, 1887.

Application filed March 9, 1887. Serial No. 230,179. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEF WOLF, of Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and  
5 useful Improvements in Lock-Hinges, of which the following is a specification.

This invention relates to an improved lock-hinge for the doors of railway-cars, main doors of dwellings, &c., by which said doors are re-  
10 liably locked in open position without any locking devices on the floor; and the invention consists of a lock-hinge, one leaf of which is attached to the door-casing and the other  
15 leaf to the door, the latter being provided with a fixed knuckle that is beveled at one side and provided with tapering sockets, while the leaf of the casing is provided with guide-sockets and with spring-actuated bolts having  
20 tapering ends, that in opening the door pass over the beveled edge of the knuckle and are sprung into the sockets of the same, so that the door is firmly held in position.

In the accompanying drawings, Figure 1 represents a side elevation, with parts broken  
25 away, of my improved lock-hinge for doors, showing the door in closed position. Fig. 2 is a horizontal section on line *x x*, Fig. 1. Fig. 3 is also a horizontal section on line *x x*, Fig. 1, showing the door in open position; and  
30 Fig. 4 is a detail transverse section on line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A and B represent the leaves of my improved lock-hinge for  
35 doors, said leaves being applied, respectively, to the casing and door. The leaves A and B are hinged together in the usual manner and constructed of sufficient strength for the pur-  
40 pose for which they are intended. The leaf B is provided with a center recess between the pintle-sockets, and with a projecting lip, *b*, for supporting a fixed knuckle, C, which is provided with a recess for said lip and rigidly at-  
45 tached to the leaf B. The knuckle C is beveled at the edge next to the leaf A, the beveled edge *d* communicating with conically-tapering sockets or eyes *d'*, located in the outer end of the knuckle, said eyes being axially in line  
50 with each other. The sockets or eyes *d'* are rounded off at those portions of their circumference where they communicate with the beveled edge *d* of the knuckle C, as shown in Fig. 4. The leaf A is provided at the upper and

lower end, respectively above and below the 55 knuckle C, with guide-sockets D D, in which are located spring-bolts E, having tapering heads *e*. The actuating-springs E' of the bolts E are interposed between the heads of the same and closing-plugs *e' e'*, that are riveted, screwed, 60 or otherwise attached to the ends of the sockets D. (Shown in Fig. 1.) The spring-bolts E E are arranged axially in line with each other, so that when the door is opened the knuckle enters by its beveled or wedge-shaped 65 edge between the tapering heads of the spring-bolts and moves them apart until they have passed over the beveled edge *d* and are forced by their springs into the eyes of the knuckle, as shown in Fig. 4. The spring-bolts E E in- 70 terlock thereby rigidly with the knuckle C and lock the door firmly in open position. For closing the door, the same is moved toward the casing, so that the spring-bolts release the eyes *d'* and pass along the beveled edge *d* of the 75 knuckle, the bolts clearing the edge entirely when the door arrives in closed position. In this position the heads of the bolts form contact with each other, as shown in Fig. 1.

My improved lock-hinge is specially adapted 80 for the doors of railway-cars, but can also be used with advantage for heavy doors of all kinds, such as the main doors of dwellings, warehouses, and the like. It dispenses with other locking devices on the floors or walls, 85 and holds the door reliably in open position until it is desired to close the same, which is readily accomplished by taking hold of the door and giving a sufficient pull to the same, so as to overcome the tension of the springs 90 and the friction of the locking-bolts.

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

The combination, in a lock-hinge for doors, 95 of a leaf, a knuckle attached to said leaf and provided with a beveled edge, and with sockets or eyes at the outer end of said knuckle, a second leaf having guide-sockets, and spring-  
100 bolts in said sockets, said bolts being provided with pointed heads, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOSEF WOLF.

Witnesses:

PAUL GOEPEL,  
MARTIN PETRY.