

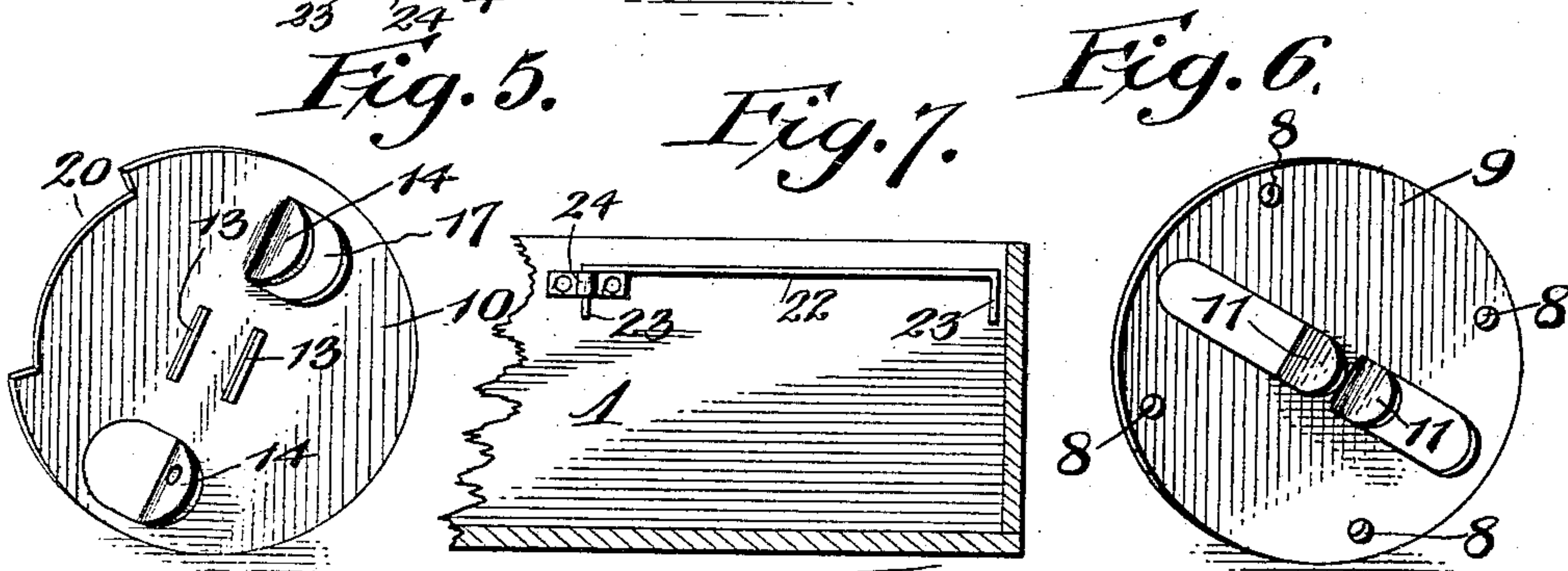
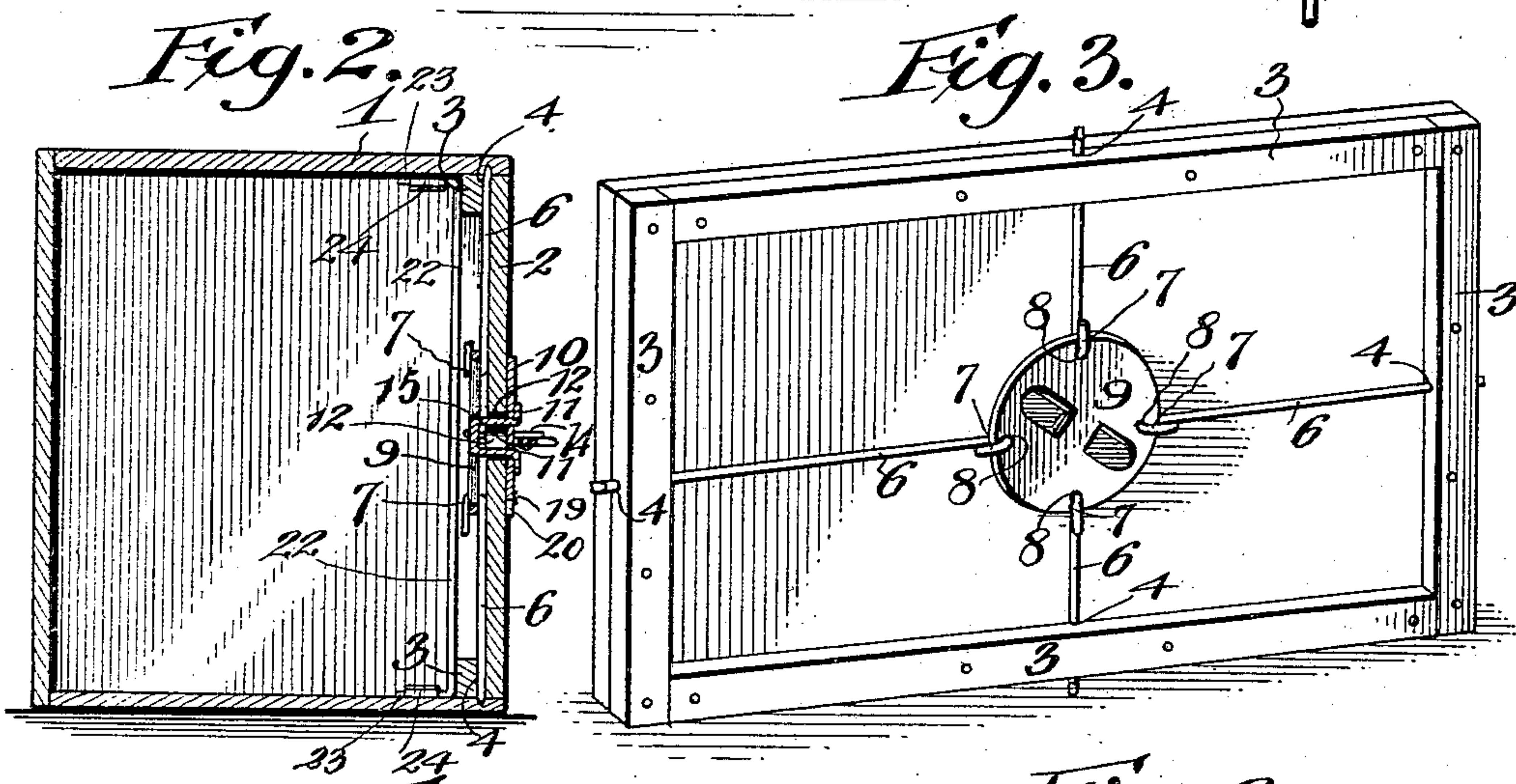
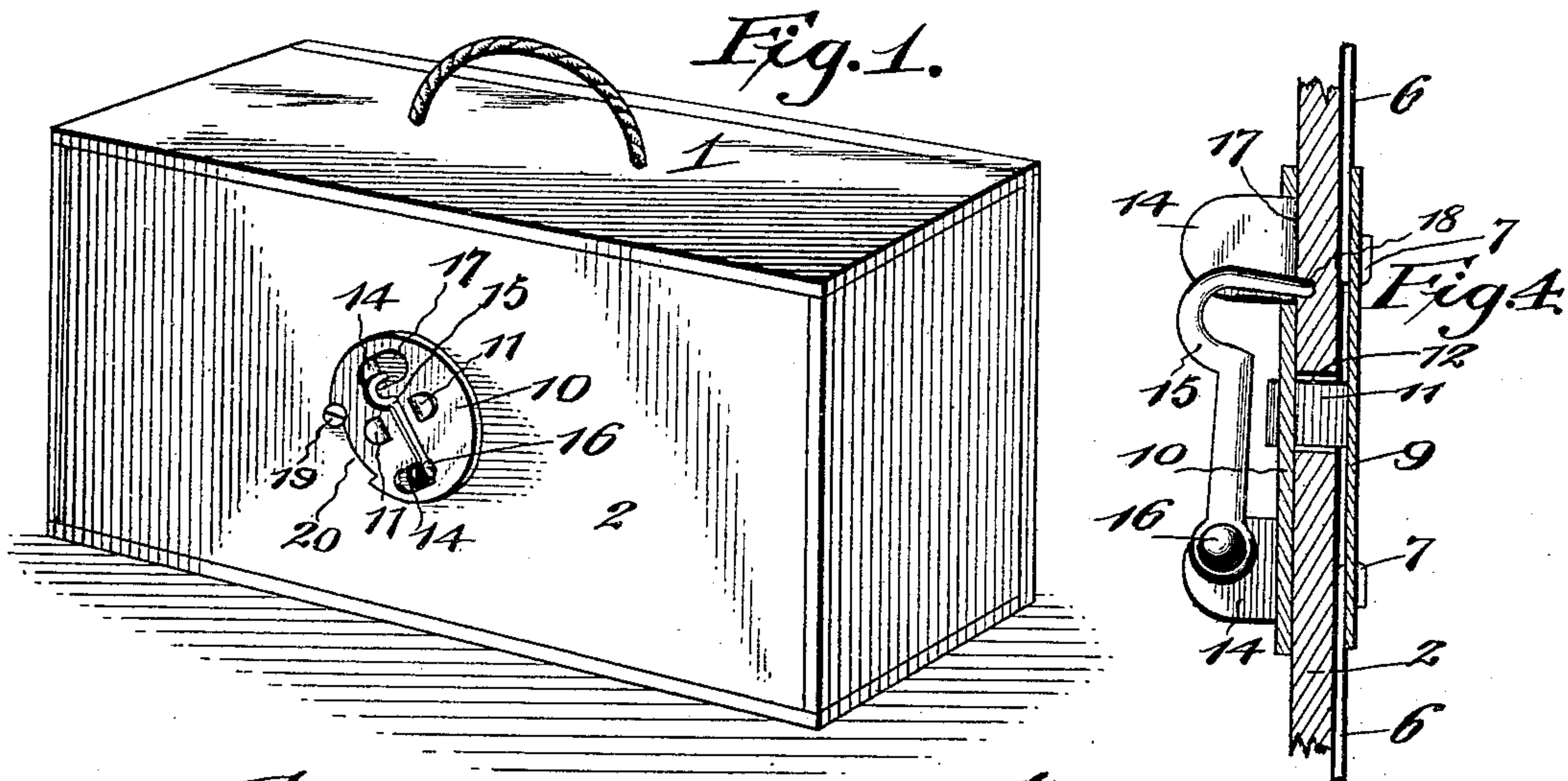
No. 618,201.

Patented Jan. 24, 1899.

J. M. FULTZ.  
BOX FASTENER.

(Application filed July 28, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN MANN FULTZ, OF QUINCY, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
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## BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 618,201, dated January 24, 1899.

Application filed July 28, 1898. Serial No. 687,131. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MANN FULTZ, a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented a new and useful Fastener for Crates, Boxes, &c., of which the following is a specification.

The invention relates to improvements in fasteners for crates, boxes, &c.

10 The object of the present invention is to improve the construction of fastening devices for securing the lids of boxes, crates, and analogous receptacles to the bodies thereof and to provide a simple, inexpensive, and efficient  
15 fastener adapted to engage the inner faces of the sides and ends of the body of a receptacle at any point between the top and bottom thereof, so that the lid or cover may be adjusted to suit the contents of the body.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a case or crate provided with a fastening device constructed in accordance with this invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a perspective  
30 view of the lid or cover, showing the inner face thereof. Fig. 4 is an enlarged detail sectional view illustrating the construction of the locking mechanism for holding the disk or plate against rotation. Fig. 5 is a detail  
35 perspective view of the upper or outer disk or plate. Fig. 6 is a similar view of the inner or lower disk or plate. Fig. 7 is a detail view illustrating the manner of folding the bracing-rod against one side of the crate.

40 Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a case or crate having a lid or cover 2 arranged to fit within the sides thereof, as clearly illustrated in Figs. 1 and 2 of the accompanying drawings, and it will be readily apparent that the locking device is applicable to all kinds of shipping cases, crates, boxes, and analogous receptacles.  
50 The lid or cover is provided on its inner face

with strips or cleats 3, arranged at the side and end edges and provided with perforations 4, receiving and forming guides for the outer portions of locking rods or bolts 6, which have oppositely beveled or pointed ends adapted  
55 to be embedded in the walls of the body 1 of the case or crate, whereby the lid or cover is secured at any desired adjustment and is adapted to be arranged to fit the contents.

The inner ends of the rods or bolts 6 are provided with eyes or hooks 7, which are linked into perforations 8 of an inner or lower rotary disk or plate 9, and when the latter is partially rotated the rods or bolts will be simultaneously reciprocated and caused to  
60 move inward or outward, according to the direction of rotation, to engage them with the body of the case and to disengage them therefrom. The inner disk or plate is connected with an outer disk or plate 10 by a pair of  
65 tongues 11, struck up from the body of the inner disk or plate and formed by substantially U-shaped cuts extending outward from points at opposite sides of the center of the disk or plate 9 and terminating short of the  
70 periphery thereof.

The lid or cover is provided with a central circular opening 12 to receive the tongues, which are passed through slots 13 of the outer disk or plate and bent against the outer face  
80 of the same, thereby connecting the inner and outer disks or plates; but the tongues may be secured to the outer disk or plate in any other suitable manner.

The outer or operating disk or plate is provided at opposite sides with lips or flanges 14, forming finger-holds and struck up from the body of the plate. The lips or flanges, which have curved outer edges, are formed by substantially U-shaped cuts like the tongues 11,  
85 and the openings resulting from the formation of the lips or flanges are disposed in opposite directions.

In order to lock the rods or bolts in engagement with the body, a hook 15 is employed  
90 and is pivoted at the inner end of the shank to one of the lips or flanges by a rivet 16 or other suitable fastening device, and the bill or engaging portion of the hook operates through the opening 17 at the opposite side of  
100



the disk or plate and is adapted to fit in a recess or socket 18 of the lid or cover, whereby the disk or plate is locked against rotation. The shank of the hook, which is provided with  
 5 an eye to receive the rivet or pivot, extends across the space between the lips or flanges and is adapted to be readily grasped by the operator to manipulate it.

The rotation of the outer disk or plate is  
 10 limited by a screw or other suitable fastening device, forming a stop 19 and arranged in a peripheral recess 20 of the operating disk or plate. The screw is mounted on the lid or cover and projects from the upper face of the  
 15 same, as clearly shown in Fig. 1 of the drawings.

In order to strengthen and support the crate, it is provided with a detachable bracing-rod 22, adapted to be readily detached or folded  
 20 against one side of the crate to permit the latter to be readily filled. The ends 23 of the bracing-rod are bent downward at right angles and engage horizontal keepers 24, consisting of metal straps secured to the inner  
 25 faces of the sides of the crate. When it is desired to fold the bracing-rod against one side of the crate, as illustrated in Fig. 7 of the accompanying drawings, one of its ends is disengaged from the keeper to free it, and  
 30 it is then swung horizontally across the crate to the other side, the end 23 in engagement with the keeper 24 forming a hinge-joint to permit this operation. After a crate has received its contents the bracing-rod may be  
 35 readily arranged in operative position.

The invention has the following advantages: The fastening device, which is exceedingly simple and inexpensive in construction, is easily operated and is adapted to secure a  
 40 lid at any point within a box or crate to suit the contents thereof. The rotary disks or plates, which actuate the reciprocating locking rods or bolts, are securely held against accidental movement to retain the rods or bolts  
 45 in engagement with the sides of the crate. A simple and efficient brace for supporting the crate is provided, and it is readily removable and adapted to be folded against one side of the same.

50 Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention. What I claim is—

1. In a device of the class described, the  
 55 combination with a lid or cover provided with an opening, of an inner plate having tongues extending through the opening of the lid or cover and arranged on the inner face of the  
 60 same, a series of rods or bolts guided on the inner face of the lid or cover and connected with and actuated by the inner plate, and an outer operating-plate arranged on the outer face of the lid or cover and having said tongues  
 65 secured to it, substantially as described.

2. The combination with a lid or cover provided with an opening, of an inner plate provided with tongues struck up from it and extended through said opening, an outer operating-plate provided with slots receiving said  
 70 tongues, and locking rods or bolts arranged on the inner face of the lid or cover and connected with the inner plate substantially as described.

3. The combination with a lid or cover, of a  
 75 series of rods or bolts arranged on the inner face of the lid or cover, an operating-plate arranged on the exterior of the same and provided with integral lips or flanges struck up from the plate and forming openings therein,  
 80 connections between the operating-plate and the rods or bolts, and a locking device mounted on one of the lips or flanges and operating through the opening formed by the other lip or flange and engaging the lid or cover, substantially as described.

4. The combination with a lid or cover, of a series of rods or bolts arranged on the inner face of the lid or cover, an inner plate connected with the rods or bolts, an outer plate  
 90 provided with a curved recess and connected with the inner plate, said outer plate being provided with lips or flanges struck up from the body of the plate and forming openings,  
 95 a hook pivoted to one of the lips or flanges and operating through the opening formed by the other lip or flange and engaging the lid or cover, and a stop mounted on the lid or cover and arranged in the said recess, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN MANN FULTZ.

Witnesses:

W. A. VAN ALSTINE,  
 JOSEPH A. ROY.