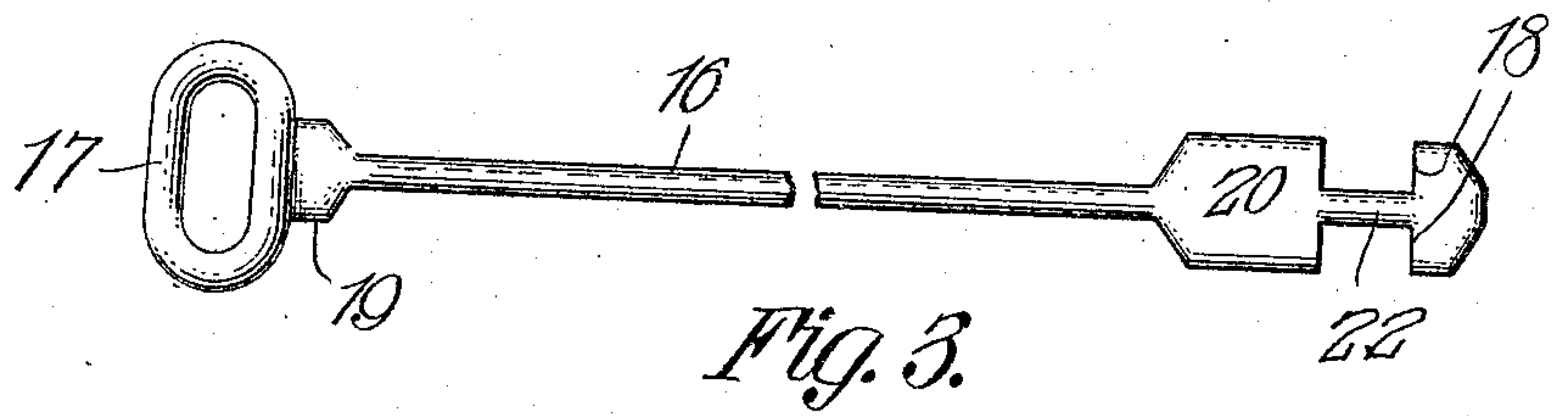
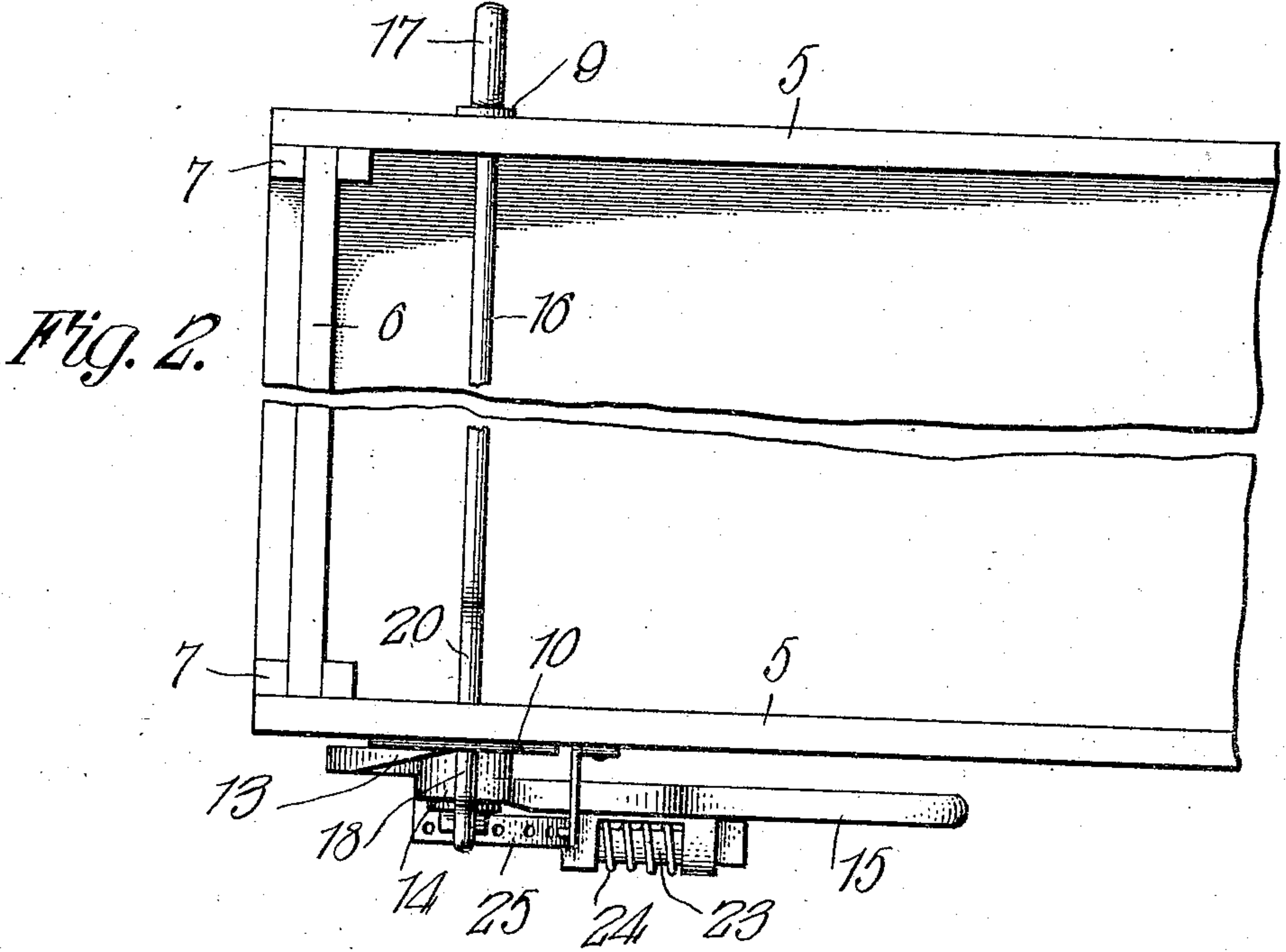
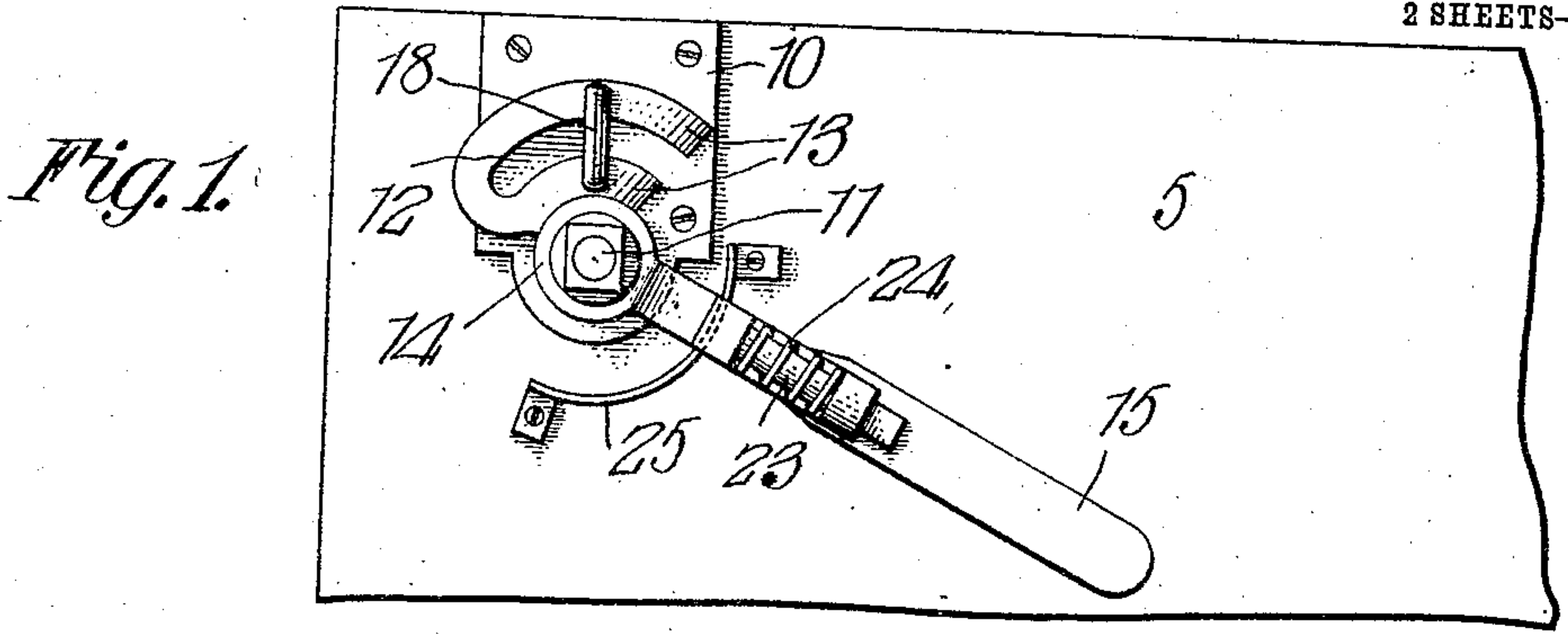


T. M. DICE.  
 END GATE FASTENER.  
 944,544.  
 APPLICATION FILED MAY 29, 1908.  
 Patented Dec. 28, 1909.  
 2 SHEETS—SHEET 1.



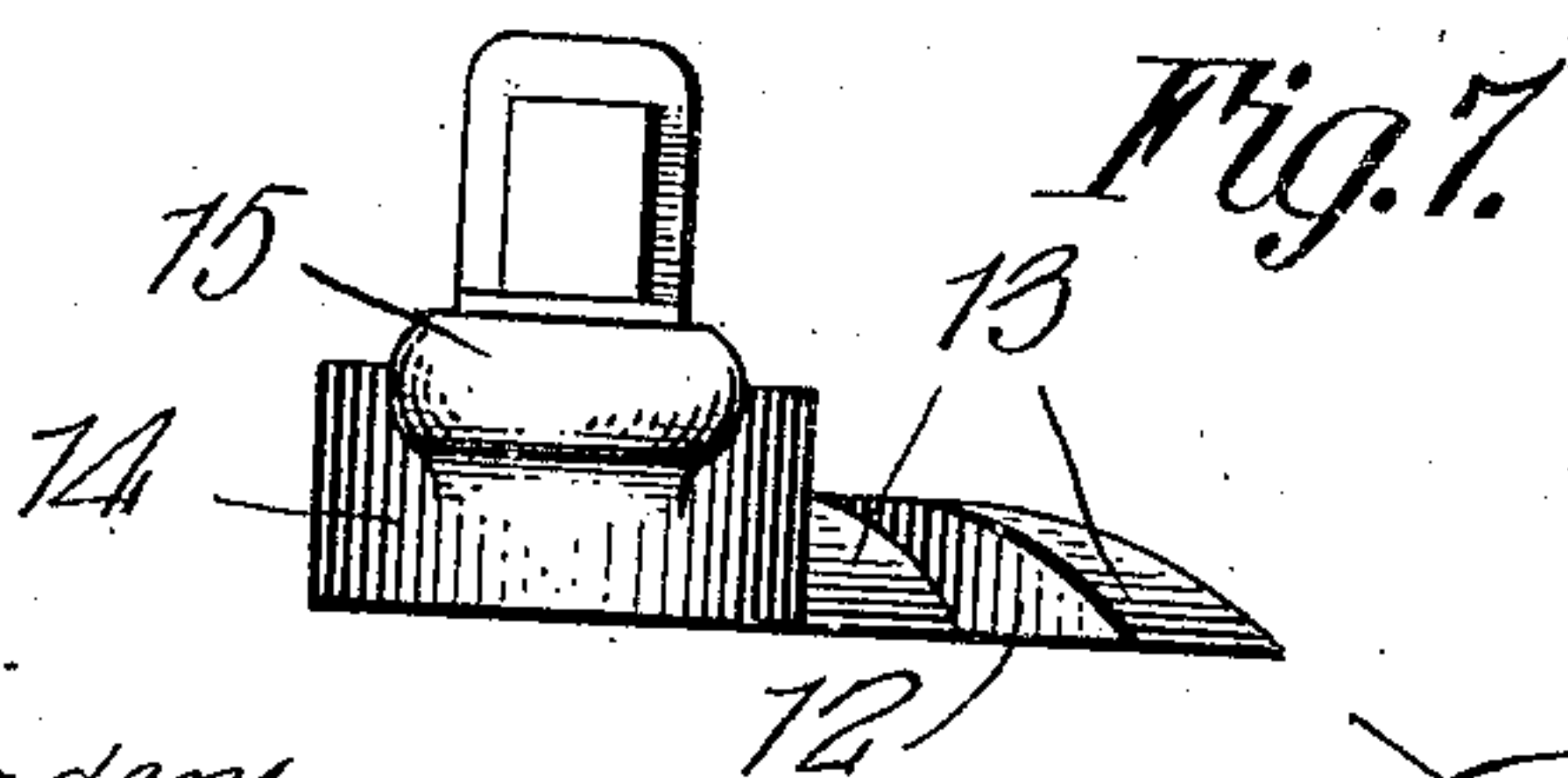
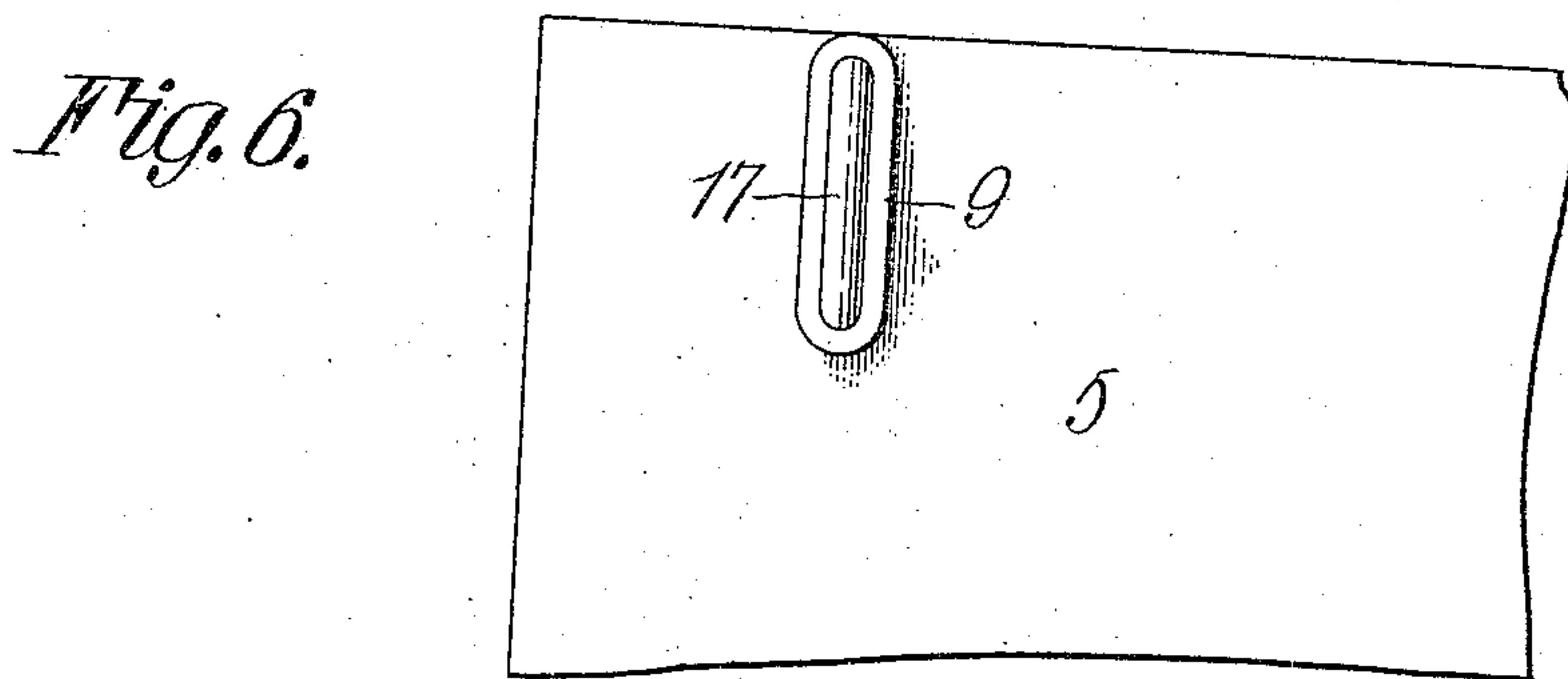
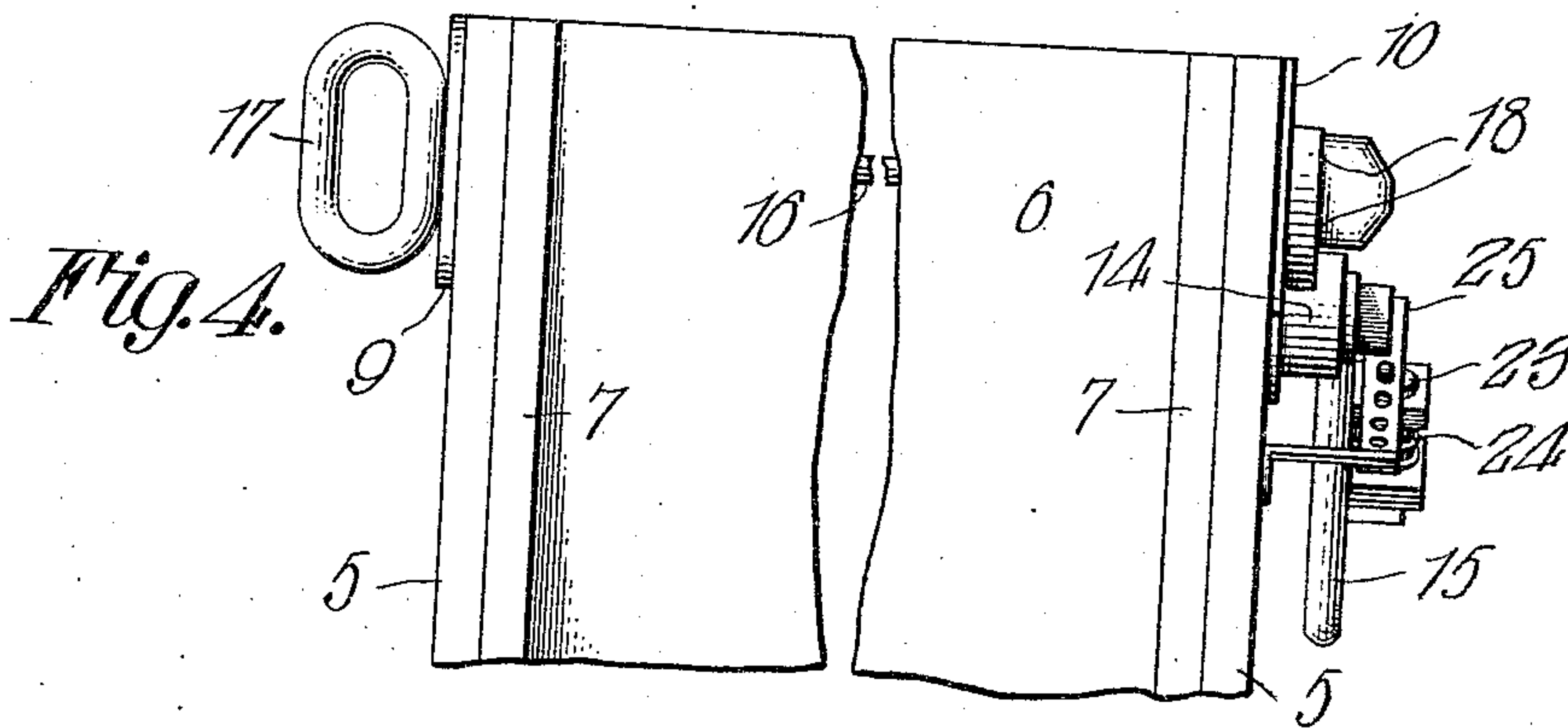
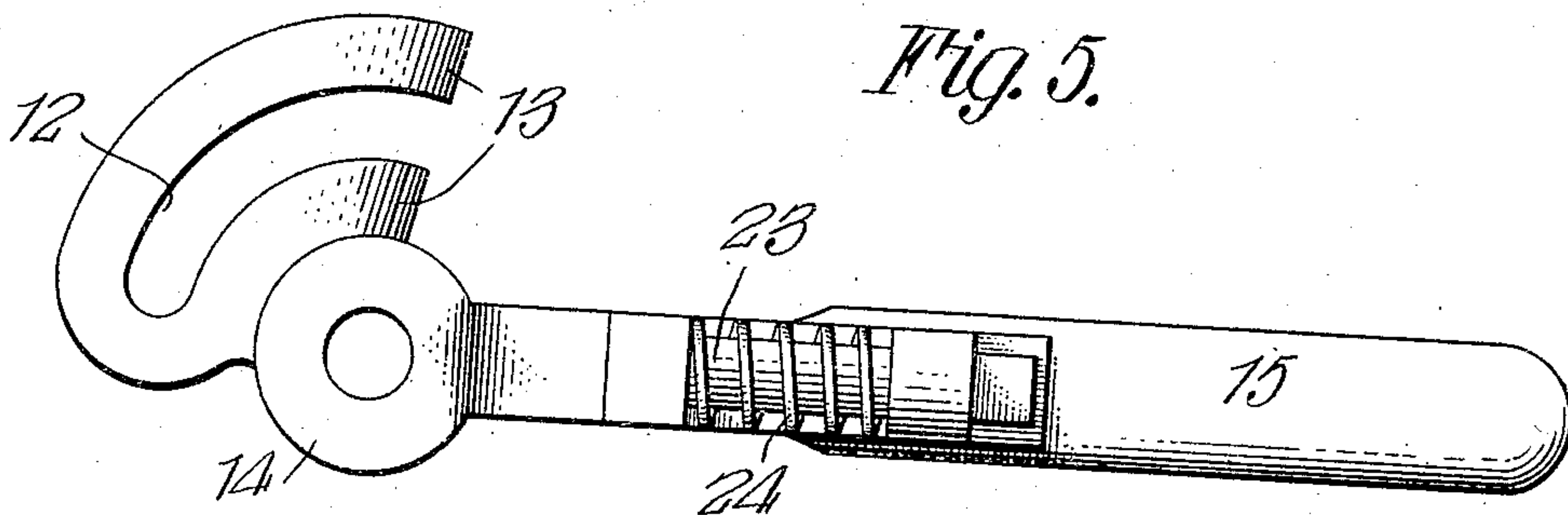
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# UNITED STATES PATENT OFFICE.

THEA M. DICE, OF PAXICO, KANSAS.

END-GATE FASTENER.

944,544.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed May 29, 1908. Serial No. 435,787.

*To all whom it may concern:*

Be it known that I, THEA M. DICE, a citizen of the United States, residing at Paxico, in the county of Wabaunsee, State of Kansas, have invented certain new and useful Improvements in End-Gate Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to a new and useful improvement in end gate fasteners.

The purpose of my invention is, to provide a simply constructed, positively operating device, by means of which the sides of a wagon box may be firmly secured to the end gate, to brace the wagon box at the rear end.

In the accompanying drawings, I have shown in Figure 1 a portion of a wagon box provided with my end gate fastener, the wagon portion being shown in side elevation. Fig. 2 shows the fastener in top view in an unlocked position. Fig. 3 shows a side elevation of the end gate rod. Fig. 4 shows an end view of a wagon box equipped with my improvement. Fig. 5 shows a detail view of the locking cam and lever. Fig. 6 shows the stop head of the end gate rod in position in the wagon box. Fig. 7 is an end view of Fig. 5.

My invention consists in a pivotally held cam head, having a curved race within which the stem of the end gate rod is held, this rod having a head brought into frictional engagement with the sloping cam surface of the head, so that with a simple motion a powerful pull may be exerted upon the rod, to firmly clamp the end gate, between the sides of the wagon box, the cam head being arranged to be adjustably secured at any desired point.

In the accompanying drawings 5, 5 represent the sides of a wagon box and 6 the end gate which is held between the cleats 7, 7. Upon one side the wagon box is provided with the stop plate 9, while upon the opposite side the wagon box is provided with the rub plate 10, both the stop plate and the rub plate are slotted. These wagon sides 5 are provided adjacent the rear ends with opposed elongated slots for the purpose of receiving part of a rod hereinafter described.

The rub plate 10 is perforated and pass-

ing through the perforation is the bolt 11 as clearly disclosed in Fig. 1, this bolt 11 serving as a pivot to the cam head used in connection with my invention. This locking head is in the form of a cam having the curved slot 12 to provide the two sloping cam surfaces 13 the bifurcated portion of this cam head being wedge-shaped. The head 14 is perforated to pivotally engage the bolt 11, the lever 15 extending from this head 14 in the manner disclosed.

In connection with my end gate fastener I use a rod 16 disclosed in Fig. 3 having the enlarged handle loop or stop ear 17 at one end and the bearing shoulders 18 at the other, the rod being provided with a shoulder 19 adjacent the enlarged handle loop 17 and the enlargement 20 near the terminal bearing shoulders 18, a cylindrical portion 22 being provided between the stop shoulders 18 and the enlargement 20 as clearly disclosed. The cylindrical part 22 of this end gate rod is of a size to snugly work within the curved race or guiding slot 12 within the cam head.

Secured to the lever 15 is a pawl pin 23 normally forced inward by means of the spring 24 so that this pin may find a seating within one of the openings of the quadrant 25 secured to the wagon side adjacent the cam head, as shown in Fig. 1.

The operation of securing the end gate between the sides of the wagon body is very simple. The lever 15 is first carried upward so that the cam nosings are carried rearward to uncover the slot within the rub plate, the end gate rod 16 is then carried through the stop plate 9 so that the shoulders 18 project beyond the rub plate. The operating lever 15 is then carried downward so that the neck portion 22 of the end gate rod will be engaged within the curved race or guiding slot 12 in which condition the cam face or surface 13 will be brought into frictional engagement with the under surfaces of the shoulders so that by a single motion a powerful pull may be exerted upon the rod 16 to firmly and securely clamp the end gate between the sides of the wagon body.

By means of the spring actuated pawl pin the lever 15 can be given any desired adjustment.

On loosening the securing mechanism the end gate may be immediately removed. No rattling of the wagon box or end gate is pos-



sible while the same is in a locked condition.

From the foregoing it will be seen that my device is simple of construction, and readily operated.

5 Having thus described my said invention what I claim as new and desire to secure by U. S. Letters Patent is—

10 1. The combination with a wagon body provided with opposed slots, of an end gate rod having a stop ear at one end and a bearing shoulder at the other, a cam head having an operating handle and a curved race pivotally held adjacent said rod, said cam head having a sloping face, said rod extending through said slots, said bearing shoulder being in frictional engagement with said sloping face, and means to adjustably secure said cam head.

20 2. The combination with a wagon body provided with opposed slots, of an end gate rod having a stop ear at one end and a bearing shoulder at the other, a cam head having an operating handle and a curved race pivotally held adjacent said rod, said cam head having a sloping face, said rod extending through said slot, said bearing shoulder being in frictional engagement with said sloping face, a quadrant and means to adjustably secure said handle to said quadrant.

30 3. The combination with a wagon body provided with sides having oppositely disposed slotted openings; of an end gate rod provided with enlarged portions adapted to fit said slots, a reduced portion formed beyond one of said portions provided with an enlarged head, an enlarged handle loop on the other portion adapted to form a stop, and means to engage beneath the head and tension the rod.

40 4. The combination with a wagon body provided with sides having oppositely disposed slotted openings, of an end gate rod

provided with enlarged portions adapted to fit said slots, a reduced portion formed beyond one of said portions provided with an enlarged head, an enlarged handle loop on the other portion adapted to form a stop, and means to engage beneath the head and tension the rod, said means comprising a handled cam engageable under the head. 50

5. The combination with a wagon body provided with sides having oppositely disposed slotted openings, of an end gate rod provided with enlarged portions adapted to fit said slots, a reduced portion formed beyond one of said portions provided with an enlarged head, an enlarged handle loop on the other portion adapted to form a stop, and means to engage beneath the head and tension the rod, said means comprising a handled cam provided with spaced cam surfaces to engage under the head on opposite sides of the reduced portion. 60

6. The combination with a wagon body provided with sides having oppositely disposed slotted openings, of an end gate rod provided with enlarged portions adapted to fit said slots, a reduced portion formed beyond one of said portions provided with an enlarged head, an enlarged handle loop on the other portion adapted to form a stop, means to engage beneath the head and tension the rod, said means comprising a handled cam provided with spaced cam surfaces to engage under the head on opposite sides of the reduced portion, and coacting locking devices on the wagon body and cam handle. 70 75

In testimony whereof, I affix my signature, in presence of two witnesses.

THEA M. DICE.

Witnesses:

WM. ROYGE,  
O. E. GLOGAN.