

No. 767,332.

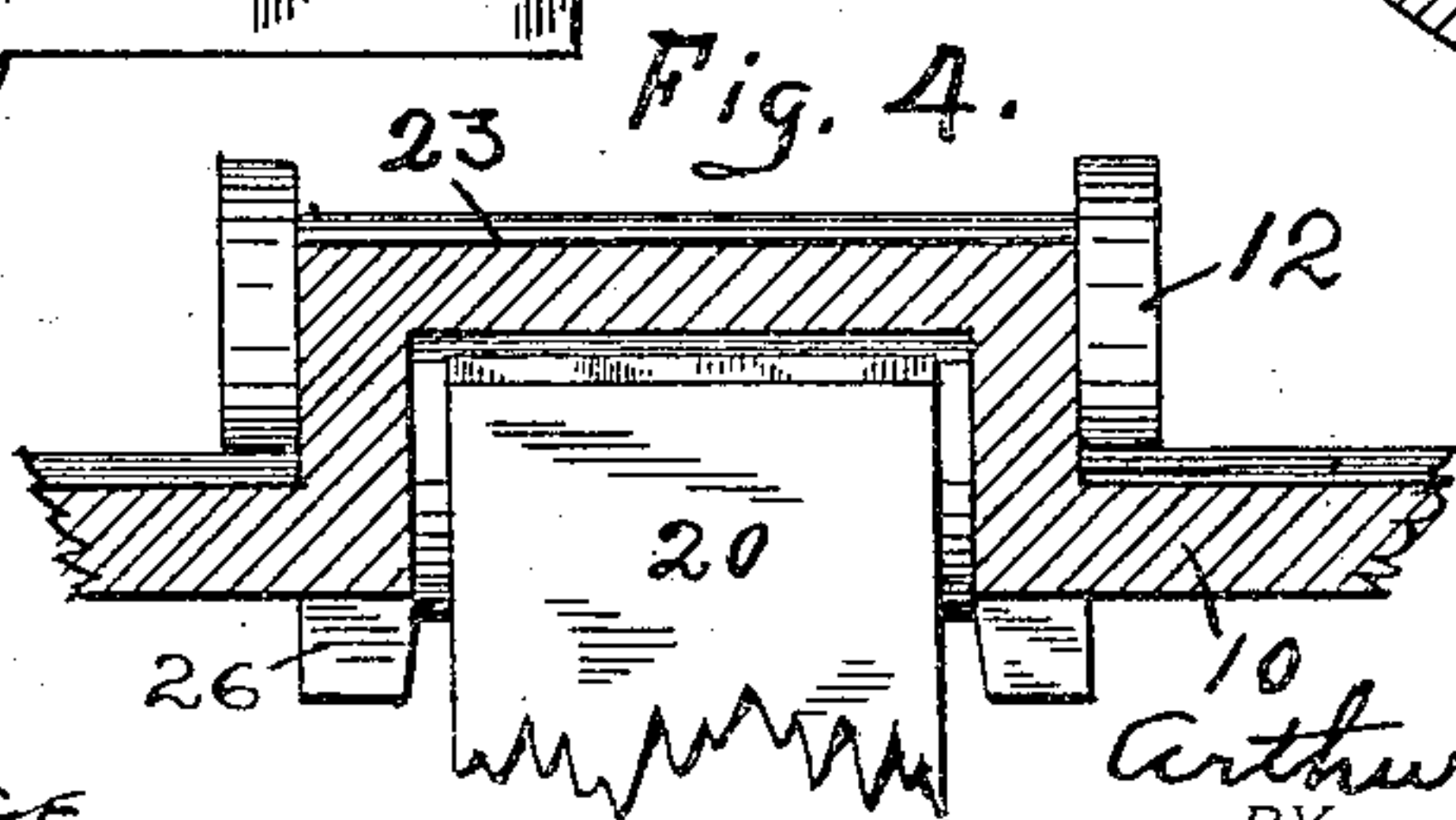
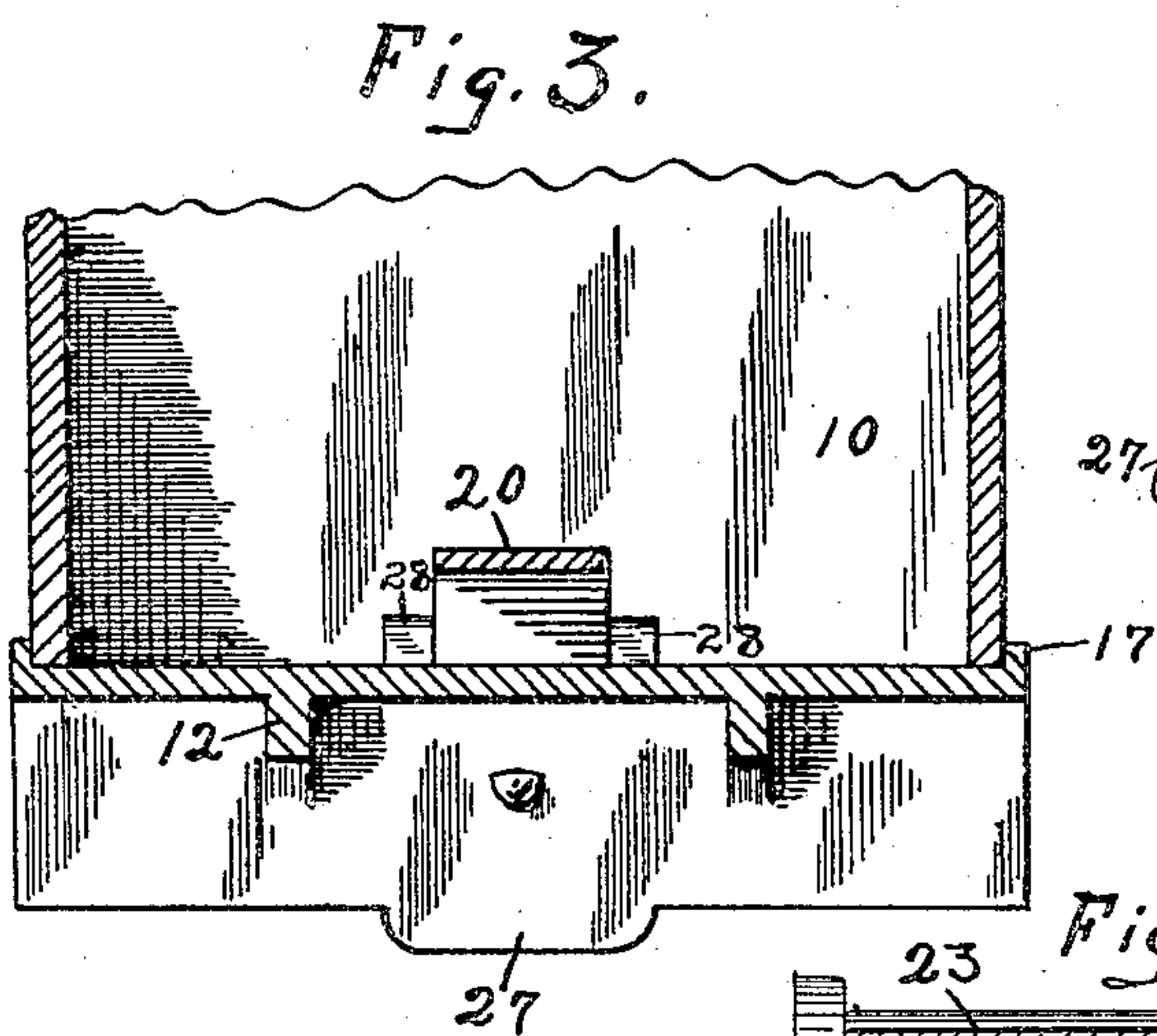
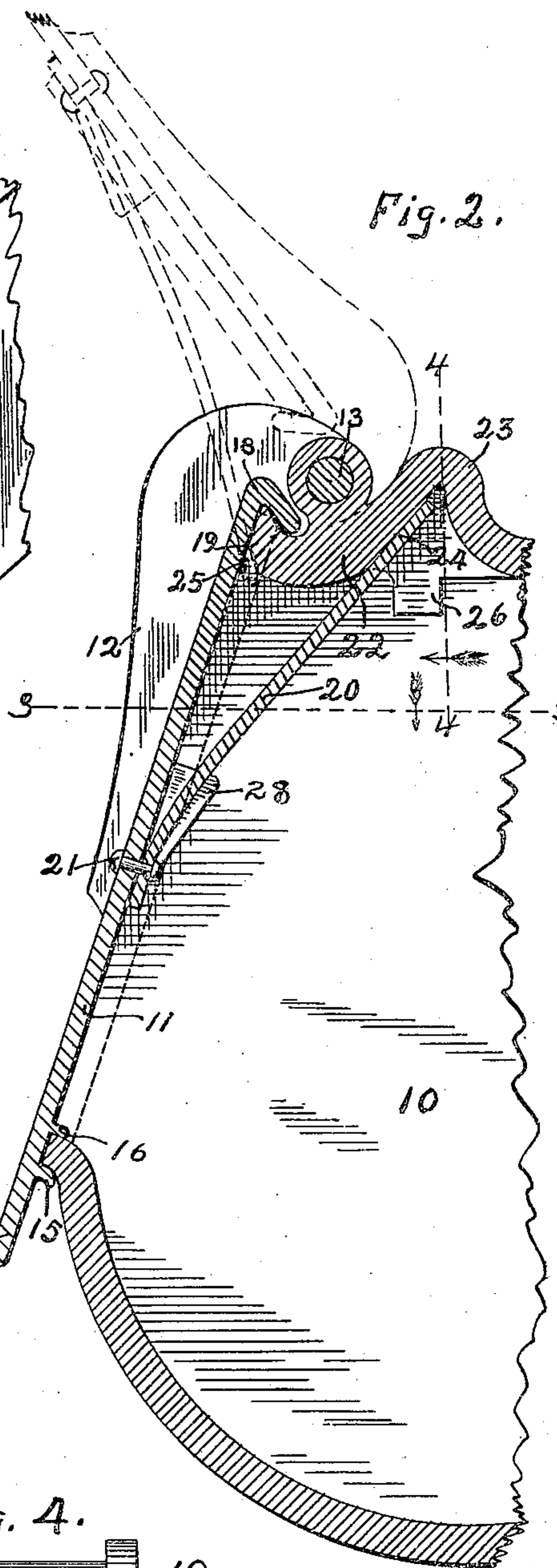
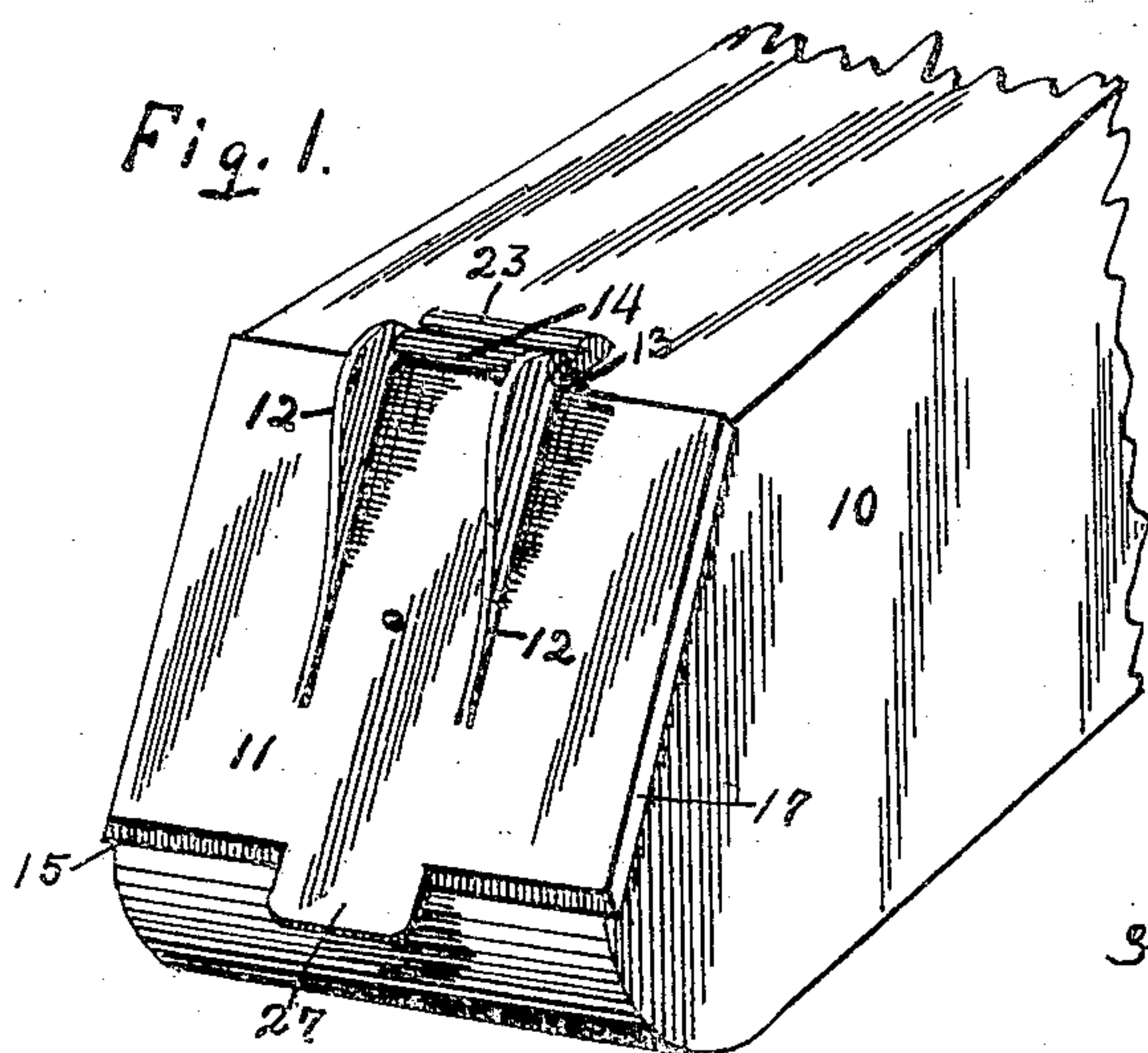
PATENTED AUG. 9, 1904.

A. T. DRULEY.

JOURNAL BOX FOR RAILWAY CARS.

APPLICATION FILED JAN. 14, 1903.

NO MODEL.



WITNESSES:

WITNESSES: 26
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ARTHUR T. DRULEY, OF MARION, INDIANA.

JOURNAL-BOX FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 767,332, dated August 9, 1904.

Application filed January 14, 1903. Serial No. 188,982. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR T. DRULEY, of Marion, county of Grant, and State of Indiana, have invented a certain new and useful Improvement in Journal - Boxes for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

The object of this invention is to improve the construction of journal-boxes for railway-cars to make them as nearly dust-proof as possible and also to make them cheap and the manipulation of the same very convenient.

The nature of the improvement will be understood from the accompanying drawings and the following description and claim.

In the drawings, Figure 1 is a perspective of a journal-box, one end being broken away, containing my improvements. Fig. 2 is a central vertical longitudinal section thereof, the lid being shown in its opened position by dotted lines. Fig. 3 is a horizontal section on the line 3 3 of Fig. 2. Fig. 4 is a vertical cross-section of a part of the top of the box on the line 4 4 of Fig. 2.

The device shown in the drawings consists of a journal-box 10, made mainly in the usual form, with the outer end having a somewhat contracted opening to form a chamber in the bottom of the box for lubricating material. This opening is made in the usual inclined position with the bottom and side edges thereof extending outward at a right angle to the lid 11 when closed.

The lid 11 has a pair of ribs 12, through the upper ends of which a bolt 13 extends for pivoting or coupling the lid to the bearing 14 on the top of the journal-box. The lid near its lower end has an inwardly-extending flange 15, that overlaps the lower edge of the journal-box at the opening in the same, as appears in Fig. 2. There is also a small flange 16, parallel to the flange 15, that forms, with the flange 15, a groove or recess into which the outer edge of the bottom of the journal-box extends, as shown in Fig. 2. These flanges 15 and 16 therefore overlap both the lower and

upper edges of the bottom of the box to make the same dust-proof. On each side of the lid there is also an inwardly-extending flange 17, that overlaps the edges of the sides of the box to render the box dust-proof, as appears in Fig. 3. There is also an inwardly-extending flange 18 along the upper edge of the lid, which is inclined downward to fit snugly over a projection or outwardly-extending ledge 19 from the top of the box that is inclined upwardly, as appears in Fig. 2. This construction at the upper end of the lid and box is new and important by way of making the box dust-proof, as when the lid is opened the dust cannot be raked or brushed off into the box. A recess is thus formed back of such flange that receives and holds the dust until it is swept off laterally. The lid in closing pushes the dust in such recess back and none can enter the box at any time.

The lid is held closed not only by gravity, but also by a flat spring 20, which at its lower end is secured by the rivet 21 to the lid, near the middle thereof, and at its upper end is free and bears against a downward extension 22 from the top of the box. The top of the box has an upward extension 23 to form a recess for the free end of the spring to enter when the lid is closed, as shown in Fig. 2. The extension 22 has a flat surface at 24, forming one face or wall of said recess, against which the spring bears when the lid is closed, so that some force must be applied to the lower end of the lid to open the same against the action of the spring.

The downward extension 22 is curved along the major portion of its surface over which the spring 20 slides as the lid is opened, and said extension has a flat surface at 25 near its outer extremity and beneath the ledge 19 to form a stop for the spring 20 when the lid is opened to the position shown by dotted lines and enable the spring to hold the lid open in that position. The upper ends of the ribs 12 when the lid is in such upper open position engage the top of the box and prevent the lid from being thrown appreciably farther backward than the dotted lines.

As the lid is closed the free end of the spring

passes around the under side of the downward extension 22. It is held from lateral displacement by the lugs 28. The lugs 26 are to stop the journal-key. A catch or finger-piece 27
5 extends from the lower end of the lid.

The operator catches beneath the finger-piece 27 and lifts the lid to the dotted position and after having attended to the lubricating material within the journal-box throws
10 the lid downward to its closed position. It holds itself in its upper position out of his way. In its closed position gravity and the spring 20 hold it securely in place, and the flanges 15, 16, 17, and 18 assist in holding it
15 in its closed position. The lid is dust-proof, because it has flanges on all four of its sides overlapping the adjacent edges of the box, and the flange 18 at the top fits down snugly
20 thereon both by gravity and the spring 20, so that no dust will enter there, and that is the point at which the most dust is liable to enter journal-boxes. In addition to this advantage
25 of its being dust-proof the construction is simple and cheap.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a journal-box, the combination of a box having a front opening and a top with a groove in its forward upper surface, a lid for the
30 opening fitted to the top and provided with an inwardly-projecting portion adapted to take down into the groove when the lid is closed, the walls of the groove in the top and of the projecting portion of the lid lying ap-
35 proximately tangential to circles concentric with the axis of rotation of the lid, and a spring secured at one end to the lid and at the other bearing against a projection on the top
40 below the pivot-point of the lid, so that the entire tension of the spring is brought to bear between the pivot-point and the lower bearing.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

ARTHUR T. DRULEY.

Witnesses:

AUSTIN R. CADY,

JAMES L. TEMPLIN.