

No. 834,410.

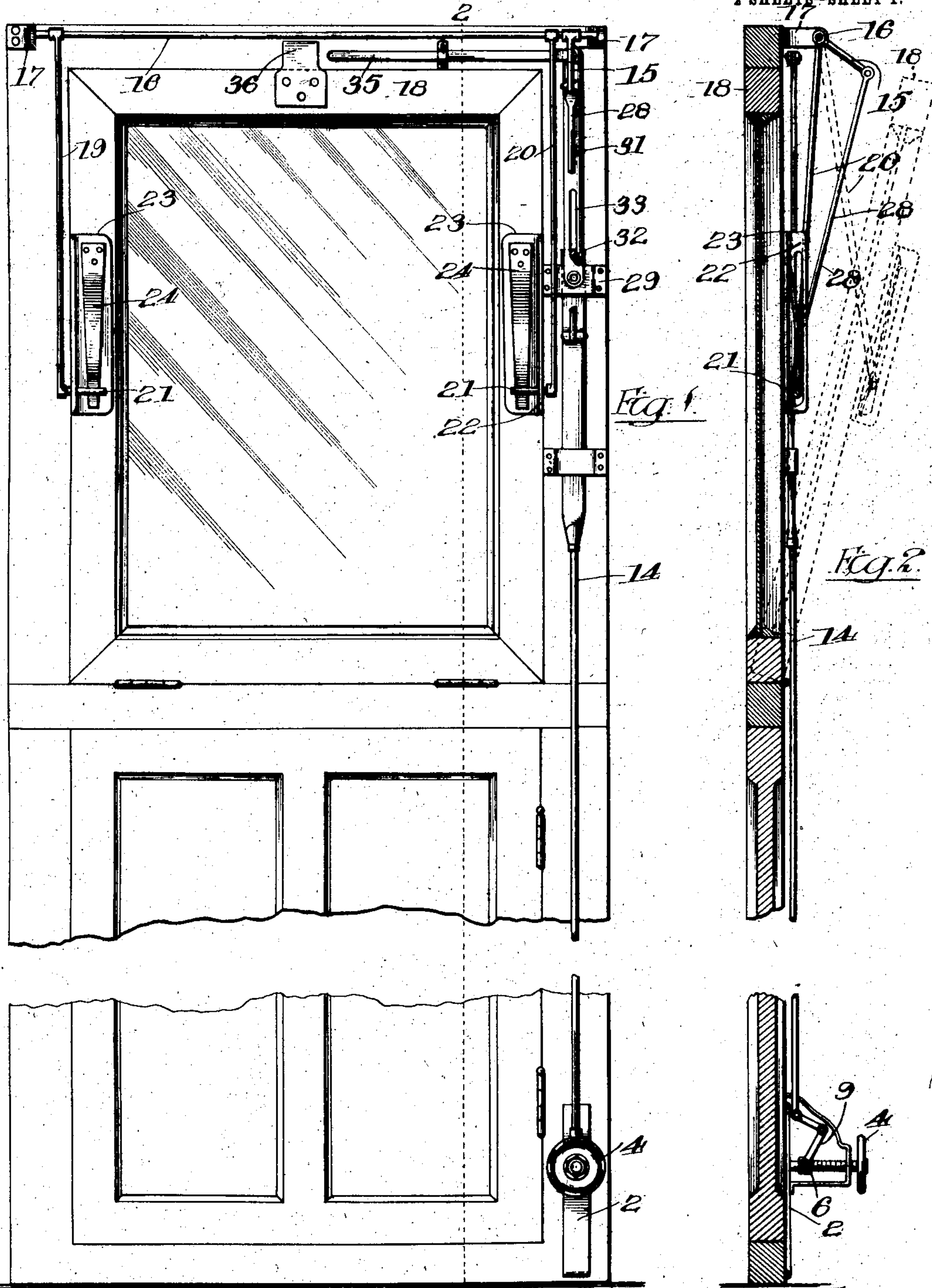
PATENTED OCT. 30, 1906.

C. ROSENHEIM & G. MOMBEL.

TRANSOM LIFTER.

APPLICATION FILED DEC. 5, 1904.

2 SHEETS—SHEET 1.



Witnesses:-

C. H. Crawford

L. Waldman

Charles Rosenheim
Georges Mombel
by B. Smith.

Inventors:-

Att.

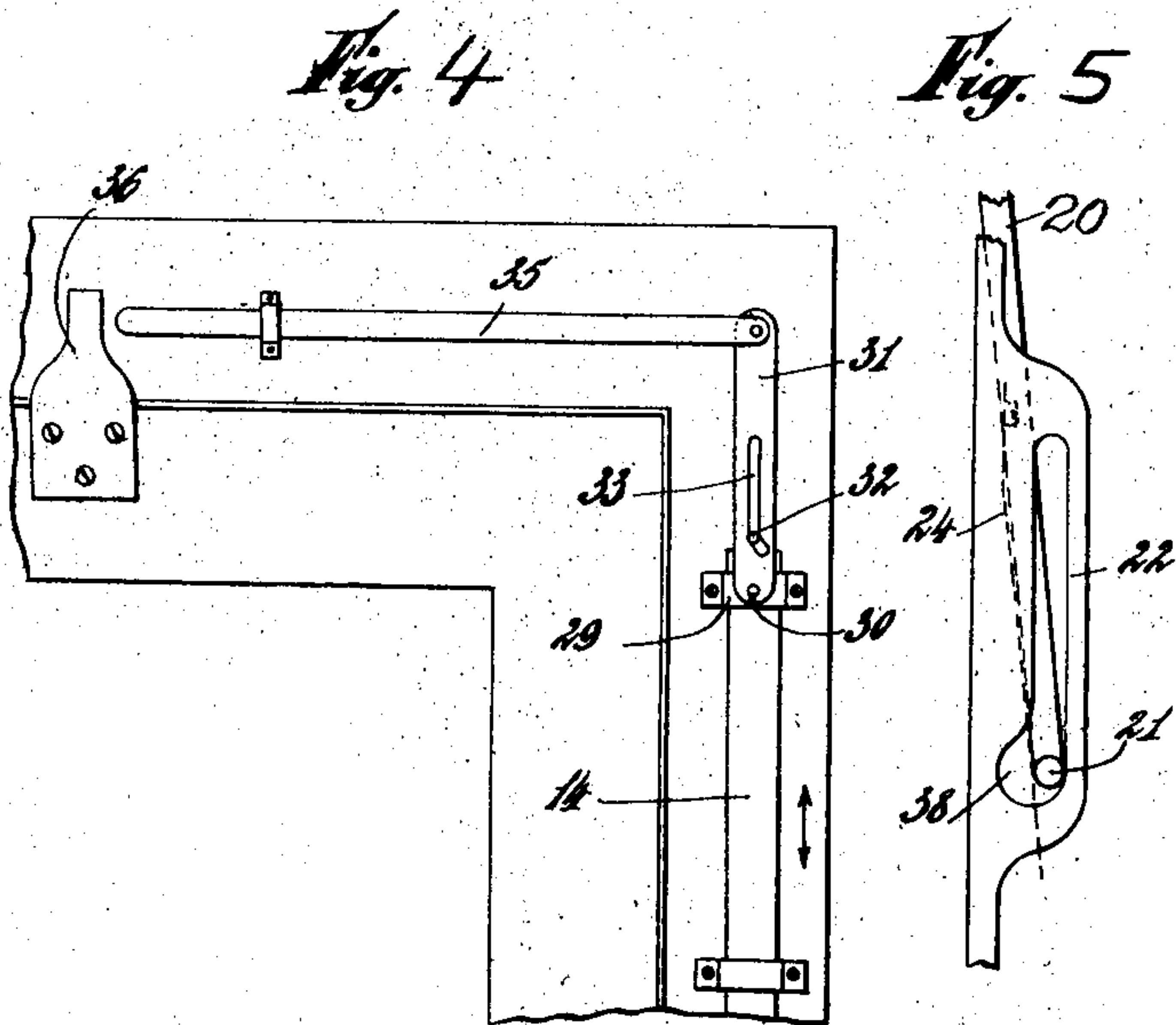
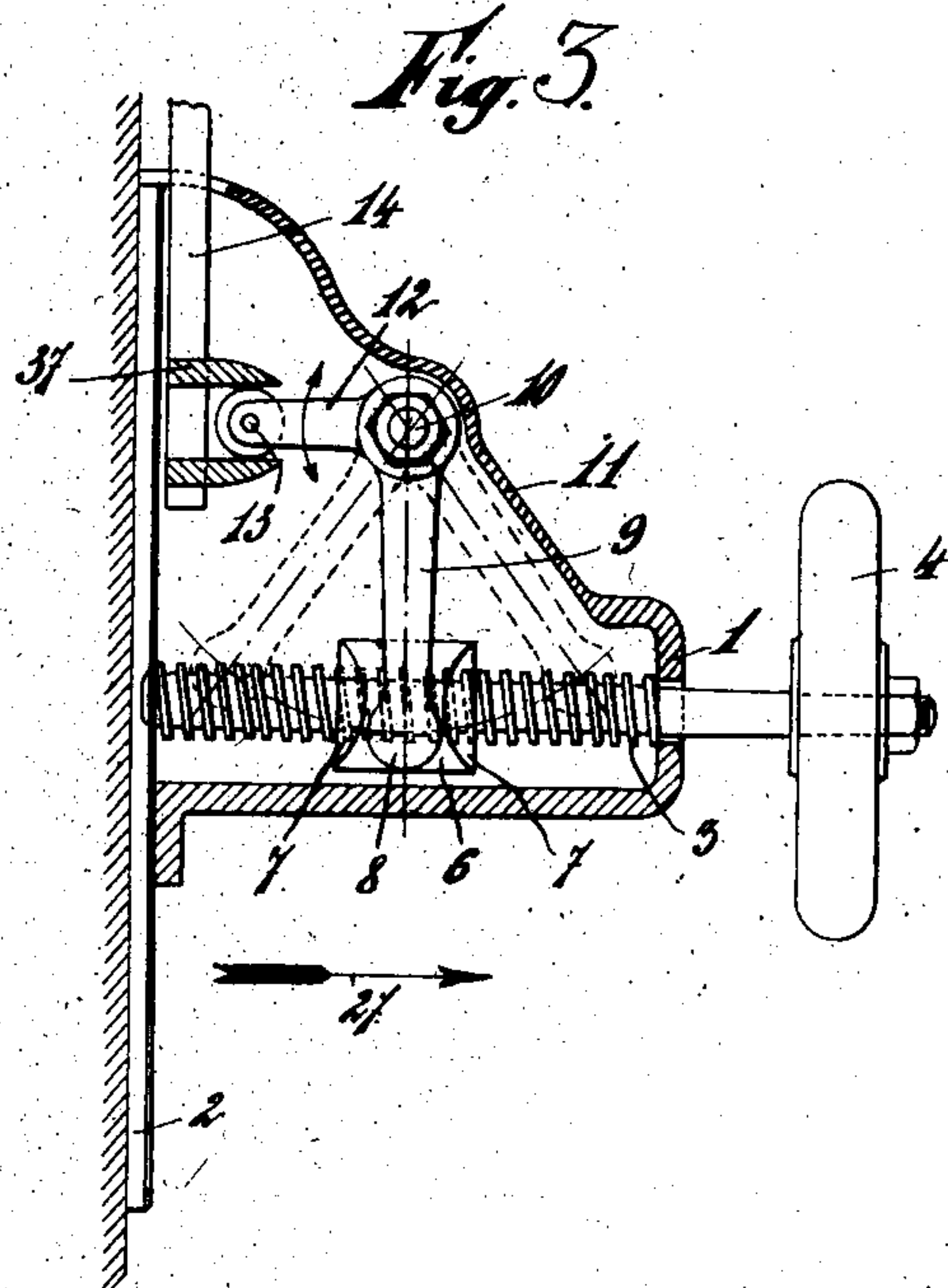
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2 SHEETS—SHEET 2.



Witnesses.

J. H. Green
Franklin

Inventors

Charles Rosenheim
Georges Mombel
by B. Singer atty

UNITED STATES PATENT OFFICE.

CHARLES ROSENHEIM AND GEORGES MOMBEL, OF BRUSSELS, BELGIUM.

TRANSM-LIFTER.

No. 834,410.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed December 5, 1904. Serial No. 235,593.

To all whom it may concern:

Be it known that we, CHARLES ROSENHEIM, engineer, residing at 64 Rue Rubens, and GEORGES MOMBEL, trader, residing at 33 Rue Saint-Lazare, Brussels, in the Kingdom of Belgium, subjects of the King of Belgium, have invented new and useful Improvements in or Relating to Transom-Lifters, of which the following is a clear, full, and exact description.

This invention relates to improvements in a combined locking and operating device for transoms.

The invention consists, generally, of a reciprocating transom-rod operatively connected with devices for opening and closing the transom, together with a controlling device for operating said rod, the latter also being operatively connected with a locking device, whereby the transom may be locked when closed, said devices being associated in a manner to permit the transom to be opened and closed without being locked.

The invention will be more fully described in connection with the accompanying drawings, and will be more particularly pointed out and ascertained in and by the appended claims.

In the drawings, Figure 1 is a face view of a casing including in its upper part a transom showing the improved operating device in connection therewith. Fig. 2 is a vertical sectional view on line 2 2 of Fig. 1, illustrating the transom in dotted lines, as it would appear in an open position. Fig. 3 is a vertical sectional view of an improved controlling device for the transom-rod. Fig. 4 is a fragmentary elevation of a portion of the transom and casing, showing the improved locking device. Fig. 5 is a detail view of one portion of the operating device connected with the transom.

Like characters of reference designate similar parts throughout the different figures of the drawings.

First describing the operating devices as shown in Fig. 1, the same desirably consist of the following parts: The transom 18 is provided on its opposite sides with slotted guide-plates 22, provided with flanges 23, adapted to be secured to the transom. The slots in said guides are of uniform size throughout, the upper ends of the guides and are enlarged at their lower ends 38, and the flanges 23 are provided with springs 24, which are secured at their upper ends and are free at their lower

ends and which normally flex outwardly. Above the transom and mounted in bearings 17 there is provided a rock-shaft 16, to which are rigidly secured arms 19 and 20. Said arms are provided on their lower ends with pins 21, adapted to project through the slotted guides 22 and to be engaged by the springs 24 to hold the pins normally in an outward position in said slots. The transom 18, as shown, is hinged to the casing at its lower side and as the shaft 16 is rocked forces the arms 19 and 20 outwardly, as shown in dotted lines in Fig. 2, the pins 21 traveling back and forth in said guides. Rock-shaft 16 is provided between the arm 20 and its bearing 17 with a crank 15, which latter is connected by a link 28 with a reciprocating transom-rod 14. Said rod is reciprocated vertically by means of a controlling device, which, as shown in Figs. 2 and 3, consists of a horizontally-disposed threaded shaft 3, carrying on its outer end a main wheel 4, and journaled in the inner and outer walls of a metallic casing 11, which incloses the controlling device and is secured to the casing. The upper end of said casing 11 is provided with an opening to receive the lower end of the transom-rod 14, which carries on its lower end jaws 37. A bell-crank lever provided with arms 9 and 12 is pivoted at 10 in said casing and is operatively connected with the transom-rod and shaft 3 in the following manner: A roller 13 is mounted upon the arm 12 and fits snugly between the jaws 27 of the transom-rod, and the arm 9 engages a nut 6, provided with lateral projections 7, said arm being bifurcated, the ends 8 fitting between the projections 7.

By reference to Fig. 3 it will be seen that as the hand-wheel 4 is rotated in opposite directions the shaft 3 will cause the transom-rod 14 to travel up and down and open and close the transom.

By reference to Fig. 5 it will be noted that the enlargements 38 permit a slight extra play of the pins 21, which movement will permit the transom-rod 14 and the arms 19 and 20 to be moved slightly prior to actual opening of the transom and subsequent to the closing thereof, the purpose of which will now be described. On the upper portion of the transom 18 is provided a locking-plate 36, which projects some distance above the transom and engages a portion of the transom-casing. A lock-bar 35 is provided which is guided at one end through a loop 39

and is adapted for engagement with the projecting portion of the plate 36. Said bar is pivotally mounted at its opposite end to a bar 31, which in turn is pivoted at 30 upon a guide 29. Said bar 31 is provided with a longitudinally-disposed slot 33, inclined outwardly at its lower end and through which a pin 32 on the upper end of the transom-rod 14 projects. It will be obvious that when the transom is closed, as shown in Fig. 4, and the pins occupy an outward position in the enlarged portions 38 a slight extra play or further inward movement of the arms 19 and 20 is permitted against the action of springs 24. This additional inward movement of the arms 19 and 20 after the transom is closed and which is effected by full downward reciprocation of the transom-rod causes the pin 32 to engage the inclined portions of the slots 33, forcing the locking-bar 35 across the outside face of the plate 36 in a manner to lock the same against the transom-casing. It will be obvious that when the transom is open a reverse action will take place, consisting of an outward movement of the arms 19 and 20 and pins 21 from the inner to the outer walls of the enlargements 38, which movement brings the pin 32 above the inclined portion of the slot 33, thereby unlocking the transom prior to opening the same.

We claim—

1. A controlling device for transoms or the like comprising a vertically-acting transom-rod, a horizontally-disposed operating-screw, a nut for said screw, and a pivotally-mounted bell-crank having its arm connected with said nut and transom-rod.
2. A controlling device for transoms or the like, comprising a rock-shaft, a crank mounted on said shaft, a vertically-acting transom-rod connected with said crank, and an arm rigidly mounted on said rock-shaft, a pin on the outer end of said arm, a slotted guide mounted on said transom in which said pin travels, a spring on said guide adapted to en-

gage the said pin, and a locking device operatively connected with said transom-rod, said spring normally resisting the locking movement of said arm.

3. A locking device for transoms or the like comprising a vertically-acting transom-rod provided with an actuating-pin, a pivotally-mounted member provided with a slot extending in a plane parallel to the length of said member and having a lower inclined portion, said pin engaging the inclined and parallel portions of said slot, a locking-bar pivotally secured to said member, and a locking-plate on said transom adapted to be engaged by said bar.

4. A locking device for transoms or the like comprising a transom-rod provided with an actuating-pin, a member provided with a slot adapted to receive said pin, said slot having a portion parallel and a portion inclined with respect to said member, whereby said slotted member may be moved in opposite directions and a locking device for said transoms operated by said slotted member.

5. A locking device for transoms or the like comprising a reciprocating transom-rod provided on its upper end with a pin, a slotted member engaged by said pin, said slot having parallel and inclined portions.

6. A transom or the like provided with a transom-rod, a locking device actuated thereby serving to lock and unlock said transom, and means operatively connecting said locking mechanism and said rod, whereby upon an upward reciprocation of said rod the transom may be unlocked prior to the opening thereof, and whereby upon a downward reciprocation the transom may be locked subsequent to the closing thereof.

In witness whereof we have hereunto set our hands in presence of two witnesses.

CHARLES ROSENHEIM.
GEORGES MOMBEL.

Witnesses:

U. S. Roy,
MAURICE GERBEAULT.