

L. H. DYER.
 TRANSOM LIFT.
 APPLICATION FILED MAY 20, 1910.

983,485.

Patented Feb. 7, 1911.

Fig. 1

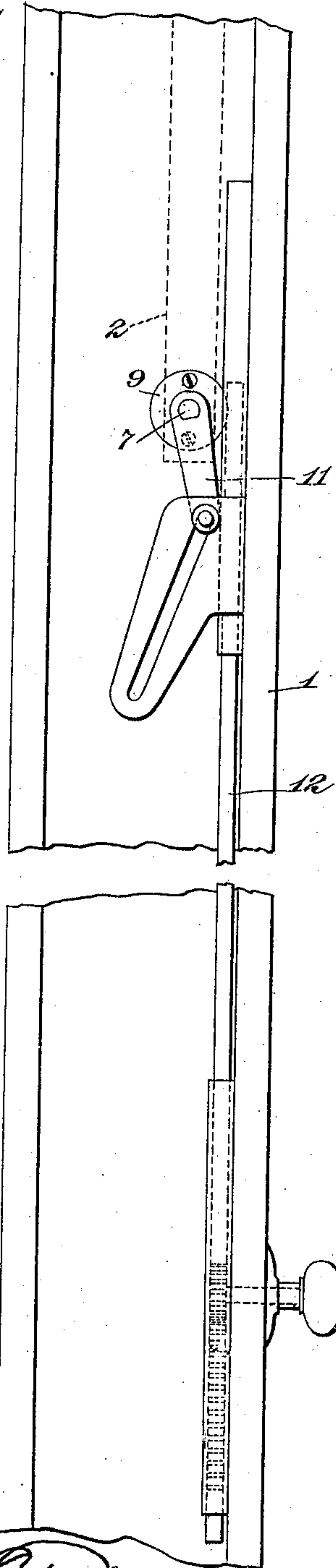
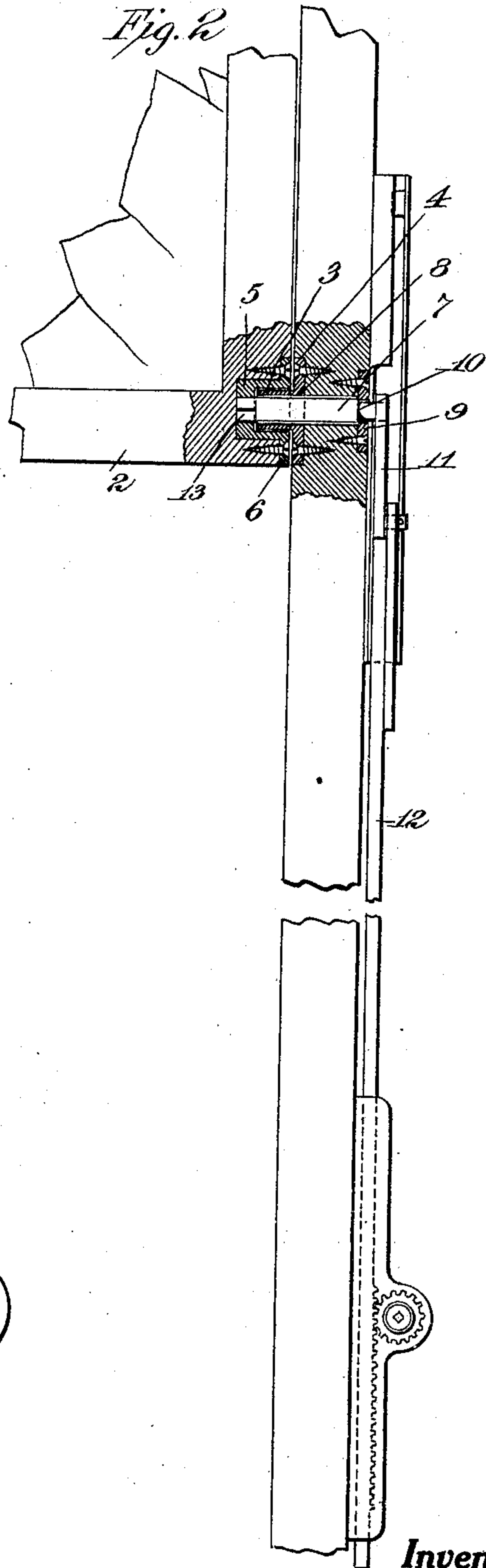


Fig. 2



Witnesses:

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Inventor

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UNITED STATES PATENT OFFICE.

LEONARD H. DYER, OF GREENWICH, CONNECTICUT, ASSIGNOR TO THE CONCEALED
TRANSOM LIFT COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

TRANSOM-LIFT.

983,485.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed May 20, 1910. Serial No. 562,432.

To all whom it may concern:

Be it known that I, LEONARD H. DYER, a citizen of the United States, and residing in the town of Greenwich, county of Fairfield, and State of Connecticut, have invented a certain new and useful Improvement in Transom-Lifts, of which the following is a specification.

This invention relates to apparatuses for supporting and turning transoms, windows and analogous structures, and the objects I have in view are to increase the rigidity of the support, to reduce friction and to avoid the danger of breakage. These and further objects will more fully appear from the following specification and accompanying drawings considered together or separately.

This invention is an improvement on a transom lift, disclosed and described in an application for patent of Ernest E. Bell, filed October 19, 1909, Ser. No. 523,395.

In the drawings, Figure 1 is a side view of a portion of the trim, showing an apparatus embodying my invention applied thereto. Fig. 2 is a view at right angles thereto, partly in section.

In both of the views, like parts are designated by the same reference characters.

1 represents the trim and 2 the transom. One end of the transom is supported by the mechanism illustrated in the drawings. The other end of the transom is supported by the ordinary hook pintle, which is not illustrated. The mechanism carried by the trim includes the device for supporting the transom, and also includes the device for turning the transom.

The device for supporting the transom includes a boss or projection 3, secured to and supported by the trim 1, and entering a bearing in the transom. This boss I prefer to make with a flange 4, which I also prefer to counter-sink into the trim, and secure it in place by screws, as shown. The bearing 5 in the transom is also counter-sunk, and I also prefer to provide it with a flange 6, which is secured by screws, as shown, to the transom. The length and diameter of the boss are proportioned so as to provide a firm, substantial and adequate support for that end of the transom. The bearing 5 is also properly proportioned, although it is to be understood that the bearing may, if the material of the transom permits it, be formed of simply a round opening made into the

transom, in which the boss will lie. The supporting means reduced to its simplest aspect comprises a boss on the trim entering a bearing in the transom.

The operating or turning mechanism comprises a shaft 7 carried by the trim, and engaging with the transom to turn the latter. This shaft 7 passes through an opening in the trim, as shown, and is supported by bearings at each end. One of the bearings, indicated at 8, is made through the boss 3. The boss 3, therefore, becomes a tubular extension on a plate or flange 4. The outer end of the shaft 7 is supported in a bearing made in a plate 9. This plate 9 I prefer to counter-sink, as shown, and secure it in place by screws, as shown. I prefer to reduce that end of the shaft 7, thus forming a shoulder 10. This shoulder 10 is larger than the bearing in the plate 9; hence the shaft is kept seated by engagement of the shoulder with the plate. On the outer end of the shaft is the operating mechanism, which may be of any character or type, that shown comprising a lever 11. This lever is actuated by the operating mechanism 12, which forms no part of this invention, that chosen for illustration being similar to that illustrated in the application of Ernest E. Bell, before identified.

In order to provide a connection between the shaft 7 and the transom, for rotating the latter, the inner extremity of the shaft is squared at 13. Instead of being squared, the extremity of the shaft may be made otherwise irregular or non-circular. This enters a recess of the same shape in the transom, forming a locking connection. If the bearing 5 is separate from the transom, as shown in Fig. 2, then the recess in which the squared portion 13 of the shaft enters is made in that bearing.

As the rotating or operating mechanism takes no weight of the transom, it is apparent that it may be much lighter than if it did have to support the transom. This also requires a smaller opening through the trim than if the operating mechanism had to support the weight of the transom. Also it will be apparent that the bearing on the boss 3 is of large size so as to produce a firm and wholesome support for the free end of the transom. The parts are assembled by introducing the bearing 5 over the boss 3, the other end of the transom being sup-

ported by means of the hook pintle in the ordinary manner. The introduction of the bearing 5 over the boss may be made with the shaft 7 in place or not, as desired. If it is made without the shaft 7 being in place, the latter may then be introduced, together with the plate 9, the square end of the shaft entering the squared recess in the base of the bearing 5.

10 In accordance with the provisions of the patent statutes, I have described the principle of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire 15 to have it understood that the apparatus shown is merely illustrative and that the invention can be carried out in other ways.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:—

20 1. In a transom lift, the combination with a transom and a trim, of a boss carried by the trim and entering a bearing in the transom, a shaft passing through the boss and 25 engaging with the transom by a locking connection to rotate the transom.

2. In a transom lift, the combination with a transom and a trim, of a boss carried by the trim, a bearing carried by the transom, said bearing having a squared or non-circular recess, a shaft carried by the trim and passing through the boss, said shaft having a non-circular extremity engaging with the recess and means for rotating the shaft. 30

3. In a transom lift, the combination of a transom and a trim, a boss carried by the trim, a bearing carried by the transom, said bearing having a non-circular recess, a shaft passing through the trim and having a non-circular extremity which engages with the recess, a plate on the face of the trim opposite to the boss, said plate having a bearing, said shaft having a shoulder of greater diameter than the bearing in the plate, and means for rotating the shaft. 45

This specification signed and witnessed this 29th day of April, 1910.

LEONARD H. DYER.

Witnesses:

JOHN L. LOTSCH,
HENRY F. CONRAD.