

No. 666,600.

Patented Jan. 22, 1901.

J. CARNEGIE.
DETACHING DEVICE FOR LIFE BOATS.

(Application filed May 14, 1900.)

(No Model.)

Fig. 1.

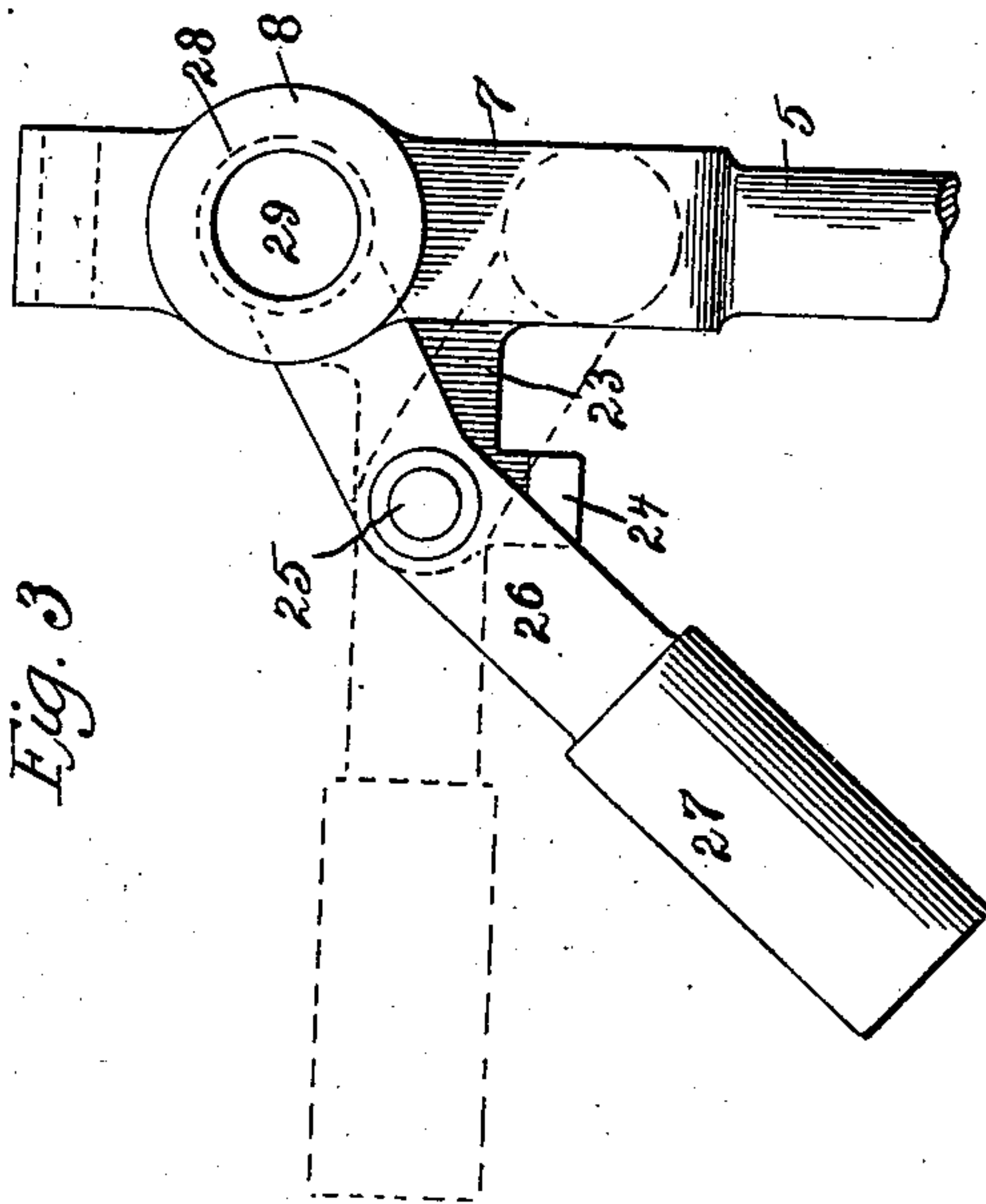
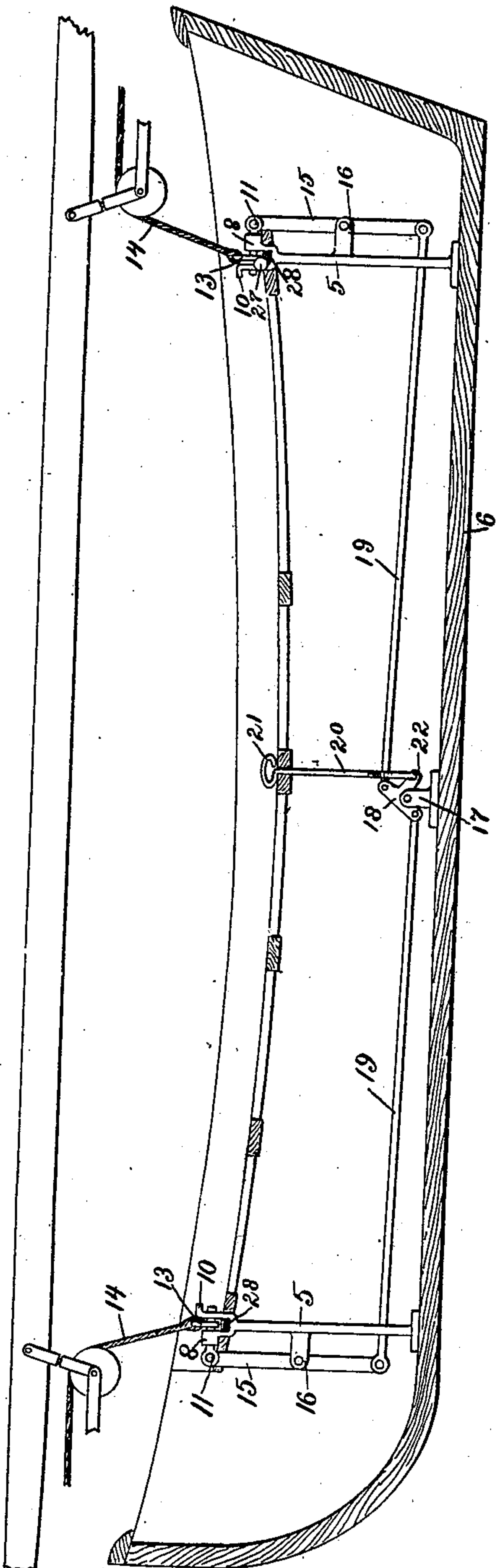
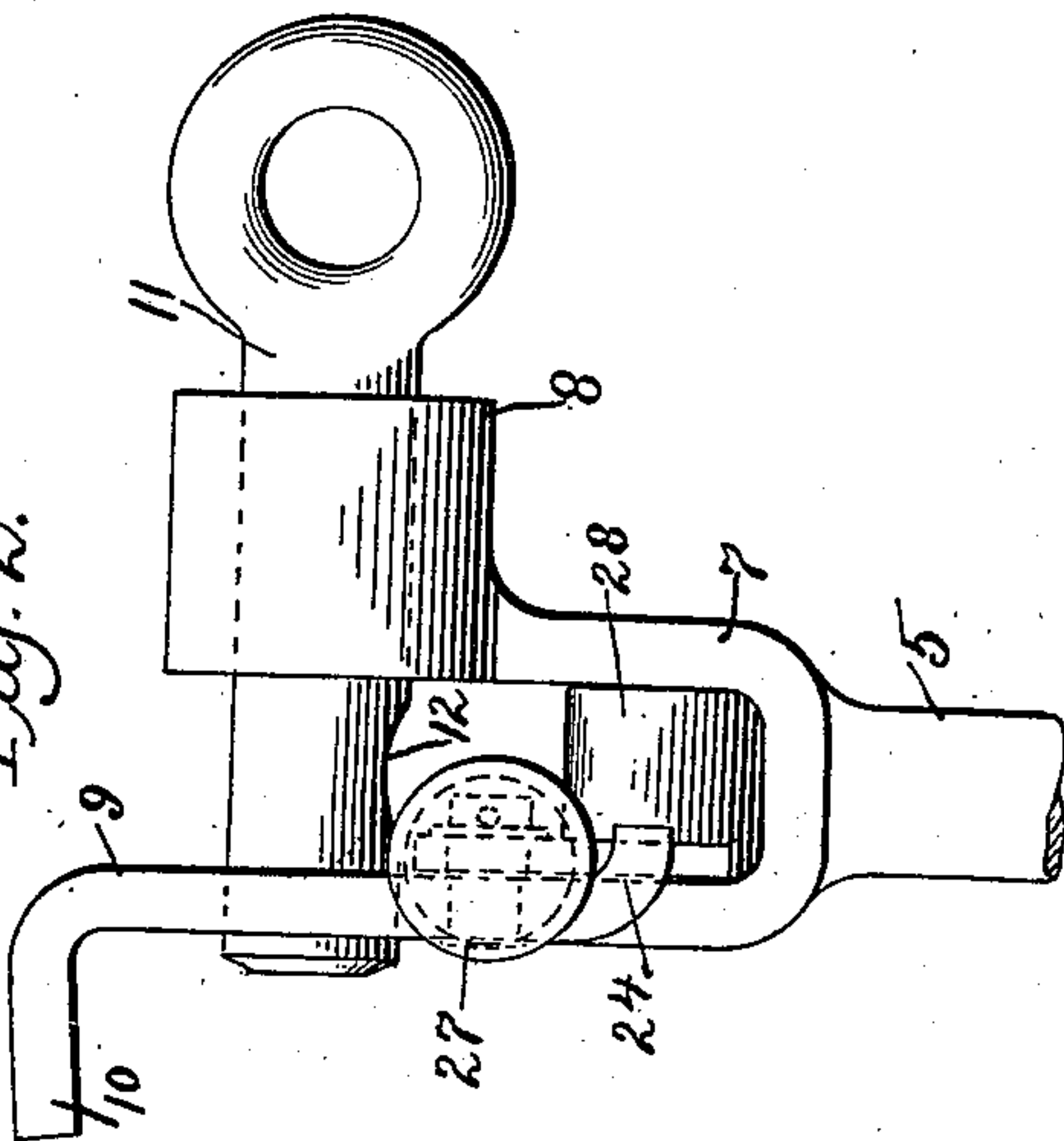


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES CARNEGIE, OF PASSAIC, NEW JERSEY, ASSIGNOR OF FIVE-SIXTHS TO WILLIAM JOHN KENNEDY, HENRY BRINKMAN, JAMES B. MORSE, JAMES THOMSON, AND WILLIAM HEAVEY, OF JERSEY CITY, NEW JERSEY.

DETACHING DEVICE FOR LIFE-BOATS.

SPECIFICATION forming part of Letters Patent No. 666,600, dated January 22, 1901.

Application filed May 14, 1900. Serial No. 16,642. (No model.)

To all whom it may concern:

Be it known that I, JAMES CARNEGIE, a citizen of the United States, residing at Passaic, in the county of Passaic and State of New Jersey, have invented a new and useful Detaching Device for Life-Boats, of which the following is a specification.

My invention relates to life-boats, and especially to mechanism for freeing the same from the lowering mechanism; and it has for its special object to prevent the attaching of one end of the boat to the lowering mechanism without attaching the other end also.

The device is designed as an improvement upon the detaching device shown in the application of William John Kennedy, Serial No. 4,558, filed February 8, 1900, an interest in which I hold by assignment, and in addition to the special object of this invention stated above there are certain other improved features, which will be hereinafter more fully set forth in the specification and claims.

I attain the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a life-boat with my improved apparatus mounted therein. Fig. 2 is an enlarged view of a detail of the construction; and Fig. 3 is a view at right angles to that shown in Fig. 2, but with the sliding bolt removed and the block and weight in a different position.

In the accompanying drawings like numerals of reference refer to the same parts in each of the views, and in the practice of my invention I provide two uprights or standards 5, which I mount in the opposite ends of the boat 6, and at the top of each standard 5 is a jaw 7, one arm of which is provided with an enlarged part or boss 8, while the other arm 9 is provided at the end with an angled extension 10, and a sliding bolt 11 is mounted in the boss 8 and arm 9, and the extension 10 protects the end of the bolt 11 from being hit by any object, and thereby operating the bolt. The bolt 11 is provided on the under side with a transverse groove 12, as clearly shown in Fig. 2, so that the ring 13 of the lowering-rope 14 will be seated in said groove and will assist in holding the said

bolt in place, as will be readily understood. The sliding bolts 11 are hinged to levers 15, which are pivotally mounted in brackets 16, and at any point of the boat 6, preferably about the center thereof, I mount a standard or bracket 17, in which is pivotally mounted a bell-crank lever 18, and connecting-rods 19 connect the lever 18 with the lower end of the levers 15, as clearly shown in Fig. 1, and a rod 20, connected with said lever 18 and having a handle 21, serves to operate the lever 18, and consequently both sliding bolts 11, simultaneously. The rod 20 is preferably made yoke-shaped at the bottom, so as to straddle one of the connecting-rods 19 and the arm 22 of the lever 18, and the parts are so proportioned that when the lever 18 is operated to withdraw the bolts 11 the said bolts will be entirely retracted from the arm 10 and from the space intervening between the jaws, but cannot be drawn out of the boss 8, so that when it is desired to connect the apparatus with the lowering apparatus the bolts 11 are always in position to be operated by the handle 21 through the intervening parts and without any external guidance, and the thickness of the boss 8 also insures that the bolt 11 will have proper guidance.

It might happen that in the excitement following a disaster one of the bolts 11 might be shot through the corresponding ring 13 of the lowering apparatus without the other bolt being shot through the other ring, and in operating the lowering apparatus one end of the boat would be lifted while the other would not, and a serious accident might occur if the boat were filled with passengers. It has been the special object of this invention to guard against such a contingency, and in carrying out this part of my invention I provide one of the arms of the jaw 7 with a bracket 23, the outer end of which is provided with a downwardly and inwardly extending arm 24, and on a stub-shaft 25 on the bracket 23 I pivotally mount a lever 26, the outer end of which is provided with a weight 27, and the inner end carries a block 28, which is normally held before the aperture 29 in the boss 8, as clearly shown in Fig. 3, so that the bolt 11 will encounter the said block 28 and can-

not be passed through the space intervening between the jaws until the block is removed.

In operation the rings 13 are pressed down between the jaws until the blocks are at the bottom of the jaws and the levers 26 are in the position indicated by dotted lines in Fig. 3. Then the bolts 11 can be shot through the rings; but if one block is depressed and the other not then the block that is not depressed will prevent the operation of the lever 18, and neither bolt can be operated until both blocks are depressed.

It is evident that the blocks 28 could be operated by springs; but as springs are not desirable on mechanism used on salt water I have not shown such a construction. It is also evident that other methods might be easily devised to hold the blocks in position before the aperture in the boss or to hold a plate before the aperture; but my invention consists more in mounting a preventing object before the aperture than in providing a special method of mounting the same.

When the boat is water-borne or in the chocks, it is an easy matter to withdraw the bolts 11, as there will be scarcely any weight on the rings 13; but when the boat is being lowered or raised it would take considerable force to slide the bolts 11 on account of the transverse groove 12.

I do not confine myself to the use of this device with my particular lowering device, as it can be used with the davits now in common use, as well as with the apparatus shown in the application cited above.

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

1. In a detaching device for life-boats, a standard at each end of the life-boat each of which is provided at the free end thereof with a jaw, a sliding bolt mounted in each jaw, levers and connecting-rods for operating said bolts in unison, and means to prevent the operation of the bolts when either ring of the lowering-ropes is disconnected from its respective jaw, as and for the purpose set forth.

2. In a detaching device for life-boats, a standard at each end of the life-boat each of which is provided at the free end thereof with a jaw, a sliding bolt mounted in each jaw, levers and connecting-rods for operating said bolts in unison, and a block normally held in each of said jaws in the path of the sliding bolts, as and for the purpose set forth.

3. In a detaching device for life-boats, a standard at each end of the life-boat each of which is provided at the free end thereof with a jaw, a sliding bolt mounted in each jaw, levers and connecting-rods for operating said

bolts in unison, a bracket on each jaw, a lever pivotally mounted on each bracket, a block on one end of each of said levers between the arms of said jaws, and a weight on the opposite end thereof, as and for the purpose set forth.

4. In a detaching device for life-boats, a standard at each end of the life-boat each of which is provided at the free end thereof with a jaw, a sliding bolt mounted in each jaw, levers and connecting-rods for operating said bolts in unison, a bracket on each jaw, a lever pivotally mounted on each bracket, a block on one end of each of said levers between the arms of the respective jaws, a weight on the opposite end of each lever, and an arm on each bracket adapted to limit the movement of the levers, as and for the purpose set forth.

5. In a detaching device for life-boats, a standard mounted at each end of the boat each of which is provided at the free end thereof with a jaw, one arm of each jaw having a boss through which the sliding bolt passes, and the other arm being provided with an angled extension, as and for the purpose set forth.

6. In a detaching device for life-boats, a standard mounted at each end of the boat, each of which is provided at the free end thereof with a jaw, a sliding bolt mounted in each jaw, levers and connecting-rods for operating said bolts in unison, each of said bolts having a transverse groove on the under side thereof, as and for the purpose set forth.

7. The herein-described detaching device for life-boats comprising a standard mounted at each end of the life-boat each of said standards being provided at the free end thereof with jaws, the outer arm of each jaw being provided with a boss, and the inner arm being provided with an angled extension, a bolt mounted in each jaw in apertures passing through the boss, a lever mounted on each standard and hinged to the respective bolt, a bell-crank lever mounted centrally of the boat, connecting-rods connecting said bell-crank lever with the levers on the said standards, a rod for operating said bell-crank lever, and a movable block mounted in each jaw in the path of the sliding bolt, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES CARNEGIE.

Witnesses:

JAS. THOMSON,

M. J. WEICHERT.