N. ROE.

AWNING GEARING.

APPLICATION FILED NOV. 1, 1910.

**1,006,404.** **Patented Oct. 17, 1911.**

Fig. 1.

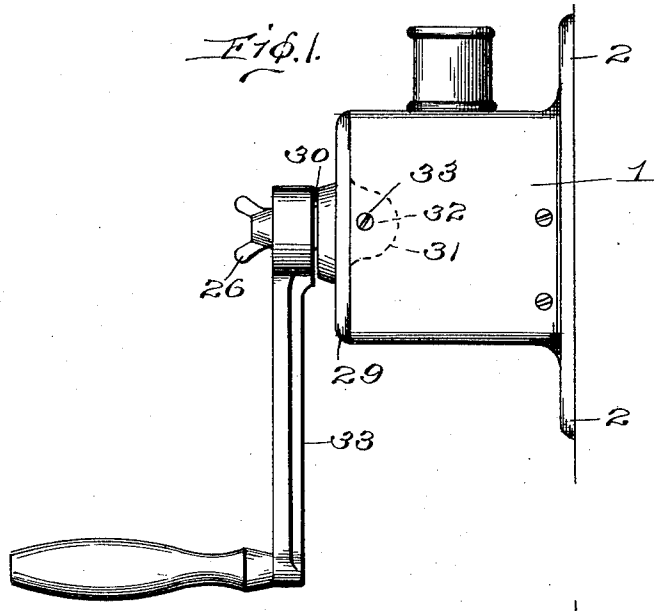



Fig. 2.

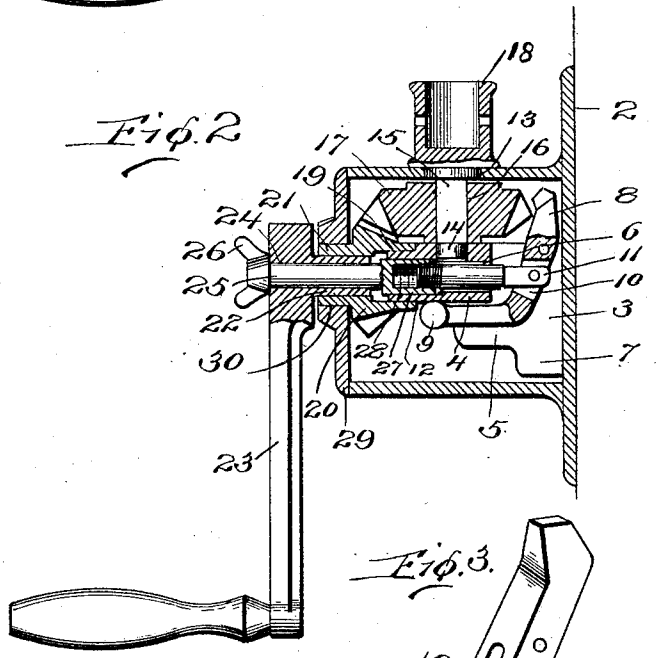
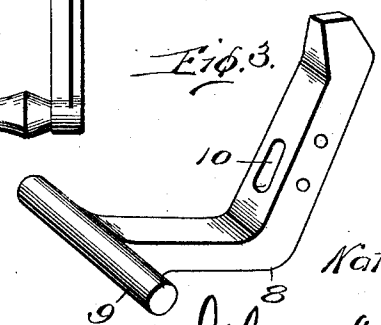



Fig. 3.




Witnesses

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# UNITED STATES PATENT OFFICE.

NATHANIEL ROE, OF PATCHOGUE, NEW YORK.

## AWNING-GEARING.

1,006,404. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed November 1, 1910. Serial No. 590,224.

*To all whom it may concern:*

Be it known that I, NATHANIEL ROE, a citizen of the United States, residing at Patchogue, in the county of Suffolk and State of New York, have invented certain new and useful Improvements in Awning-Gearing, of which the following is a specification.

This invention relates to awning gearing and more particularly to that part known as the crank box.

The object of my invention is to provide a device of the character above described and to construct the same in a unique, compact and durable manner.

A further object of my invention is to provide a device for operating awnings, consisting of a gear box having gears mounted therein, in a novel manner of construction and arrangement, and to provide said gears with a locking device, which can only be operated after the handle or crank has been put in place.

A still further object of my invention is to provide an awning operating device consisting of a crank box having mounted therein, a novel construction of gears and a locking means, which are held in place by the top of said box, and to provide a crank which when adjusted and locked in position automatically unlocks the gear.

With these objects in view and such others as may hereinafter appear, my invention consists in the particular construction of the various parts and in the novel manner of combination and arrangemet of said parts, all of which will be more fully described and specifically pointed out in the appended claims.

In the drawings forming a part of this specification: Figure 1 is a perspective view of my invention complete, illustrating the handle locked in position. Fig. 2 is a vertical sectional view and Fig. 3 is a detailed view of the locking device.

Referring by numerals to the drawings: 1 represents the crank box consisting of a square, hollow casting having flanges 2 thereupon, by means of which it may be secured to a building. Secured in the bottom of this box by screws or any other desirable means, is a plate 3, having an enlarged central boss 4, which is provided with a slot 5 and a central bore 6, which is enlarged at the outer end as shown at 7. Pivotally mounted in the slot 5, is a pawl 8, which is provided upon its lower end with a weight 9. The pawl 8 is provided with a slot 10, in which is pivoted an arm 11, which rests in the central bore 6, and is provided upon its free end with threads 12, the object of which will hereinafter appear.

In the top of the casing, is an aperture 13, which registers with a recess 14 in the top of the boss. The aperture 13 and the recess 14 are adapted to receive an axle 15, which is provided with a square portion 16, upon which is mounted a beveled gear 17; said gear being held upon the axle by the top of the casing and the boss, said axle 15 being provided with a sleeve 18, adapted to receive the driving rod or shaft.

The boss 4 is provided upon its free end with a sleeve or collar 19, upon which is mounted a beveled gear 20 in mesh with the beveled gear 17. The gear 20 is provided with a sleeve 21, having a square aperture therein, adapted to receive the square sleeve 22 upon the crank 23. The square sleeve 22 carried by the handle has a central bore 24, in which is mounted a shaft 25, having mounted upon one end thereof, a thumb nut 26 and formed upon its other end a sleeve 27, which is internally screw threaded as shown at 28, the threads 28 being adapted to engage the threads 12 upon the free end of the pivoted arm 11.

Fitted over the casing 1 is a plate or top 29, which is provided with a central aperture 30 adapted to fit over the sleeve 27 on the gear 20. This plate is further provided with oppositely disposed ears 31, having screw threaded apertures 32 therein adapted to register with the corresponding apertures 33 in the wall of the casing, said threaded apertures being adapted to receive screws for securing the gears within the box.

It will be readily seen that when the gears are assembled, they are normally held in a locked position and can only be unlocked by putting the handle in place and tightening the thumb nut. It will also be observed that upon tightening the thumb nut the handle is fastened by the same operation or means through which the gears are unlocked.

I deem the foregoing explanation sufficiently plain for the invention to be readily understood by all conversant with such matters.

I claim:—

1. In a device of the character described, a housing, beveled gears in mesh arranged

within said housing, a weighted pawl normally engaging one of said gears, a crank handle adapted to operate said gears, said crank having means for locking the same upon the gear and at the same time disengaging said pawl, substantially as specified.

2. In a device of the character described, a housing, beveled gears in mesh mounted in said housing, a pawl normally engaging one of said gears, a detachable crank adapted to engage one of said gears, means carried by the crank for locking the same to the gear and disengaging the pawl, substantially as specified.

3. In a device of the character described, a housing, having arranged therein a boss provided with a central bore and a slot, a weighted pawl pivoted in the slot, a threaded arm resting in the bore, said arm being pivoted to the pawl, a beveled gear mounted upon the top of the boss, a beveled gear mounted upon the end of the boss, said gears being in mesh, a crank for operating the gear upon the end of the boss, a threaded sleeve carried by said crank, said sleeve being adapted to receive the threaded arm, and means for tightening the sleeve, upon the arm, substantially as specified.

4. In a device of the character described, a housing, having arranged therein a boss provided with a central bore and a slot communicating with said bore, a weighted pawl pivoted in said slot, a threaded arm pivoted in said pawl, said arm resting in the central bore, a beveled gear mounted upon the top of the boss, a beveled gear mounted upon the end of the boss in mesh with the gear upon the top of the boss, a crank for driving the gear upon the end of the boss, a threaded sleeve mounted in the crank, said sleeve being adapted to engage the threaded arm, and a thumb nut for tightening the sleeve upon the arm substantially as specified.

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