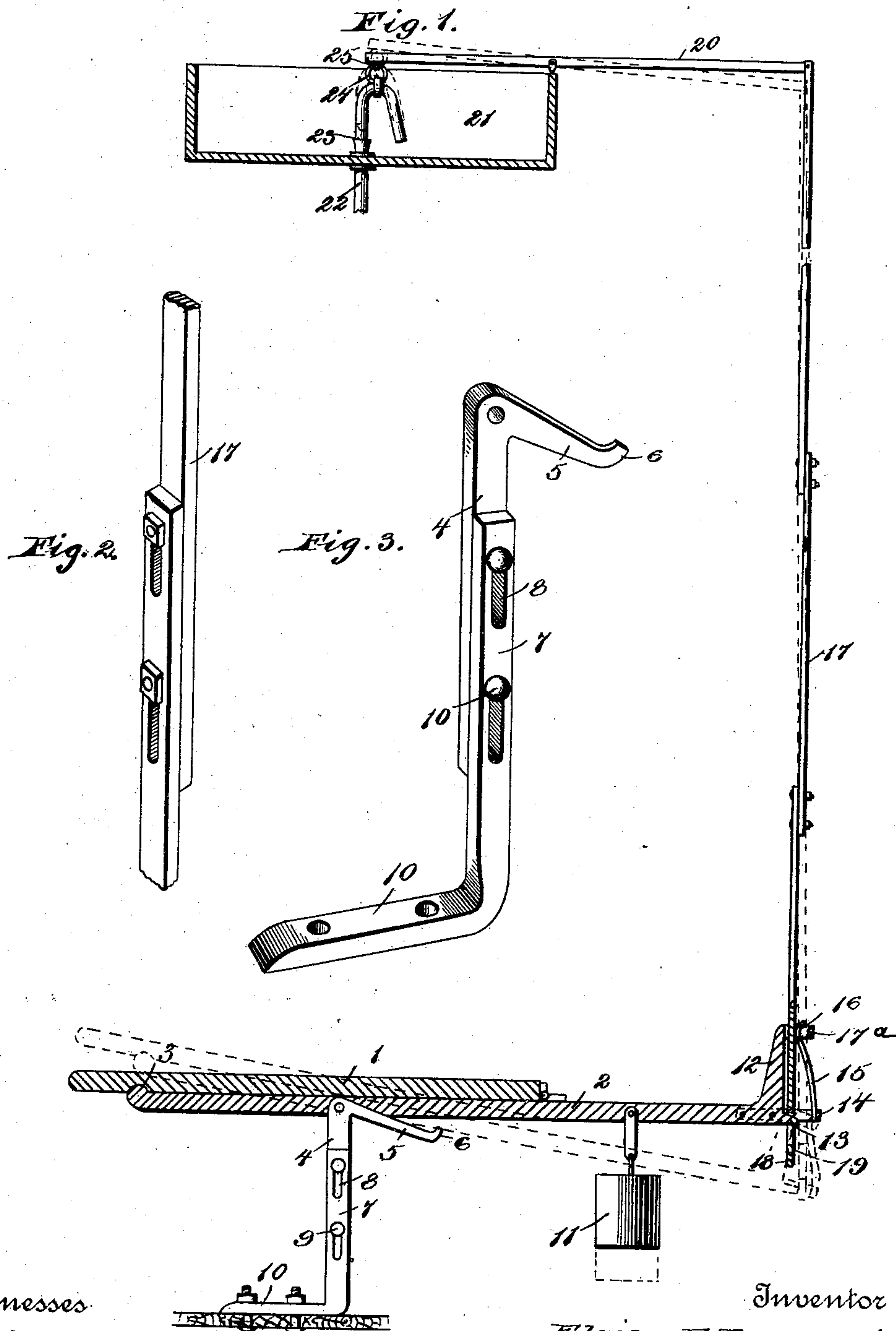


(No Model.)

E. E. TOWNSEND.
SEAT TRIP MECHANISM FOR FLUSHING TANKS OF WATER CLOSETS.
No. 605,150.

Patented June 7, 1898.



Witnesses
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UNITED STATES PATENT OFFICE.

ELVIN ELWIN TOWNSEND, OF CAPITOLA, CALIFORNIA.

SEAT TRIP MECHANISM FOR FLUSHING-TANKS OF WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 605,150, dated June 7, 1898.

Application filed July 12, 1897. Serial No. 644,271. (No model.)

To all whom it may concern:

Be it known that I, ELVIN ELWIN TOWNSEND, of Capitola, in the county of Santa Cruz and State of California, have invented certain new and useful Improvements in Seat Trip Mechanisms for Flushing-Tanks of Water-Closets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to flushing devices for water-closets; and it consists of the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

The object of the invention is to provide means, in connection with the movable seat, whereby a siphon located in the flushing-tank may be raised and lowered automatically by intermediate devices which are simple and effective in their construction and operation, strong and durable, and easily and readily applied in operative position.

In the accompanying drawings, Figure 1 is a sectional elevation of the seat and flushing-tank, showing the improved device applied thereto, parts being shown in dotted lines. Fig. 2 is a detail view of the connecting-rod between the seat and the siphon trip-lever. Fig. 3 is a similar view of a part of the seat-support.

Referring to the drawings, wherein similar numerals of reference are employed to indicate corresponding parts in the several views, the numeral 1 designates a seat which is hinged at its rear end to a seat trip-lever 2, having an outer upwardly-curved end 3, adapted to rest against the under side of the seat and fulcrumed on a support 4, having an arm 5 extending therefrom, with an upwardly-projecting nose 6 to limit the downward movement of the said lever. The support 4 is adjustable and is composed of two oppositely-situated members 7, each having slots 8 therein, through which are passed adjusting-bolts 9. The lower member has a right-angular extension 10, which is fastened rigidly to a suitable base, and by adjusting the members the movement of the trip-lever may be regulated.

To the rear part of the trip-lever is pivotally

attached a weight 11, and at the rear upper side the trip-lever is formed with an upwardly-extending right-angular projection 12 and a lower lug 13. Also extending outwardly from the said lever above the lug 13 is a clasp 14, which stands in part away from the rear end of the said trip-lever, and to the lower end thereof is secured the lower end of a flat or plate spring 15, having an upper dish or curved end 16, which is embraced and held in proper position by a surrounding clasp 17^a, projecting rearwardly from the upper end of the extension 12. A connecting-rod 17 is provided and is preferably made of sections which are adjustably united by bolts passing through slots therein, and at the lower end of said connecting-rod an enlargement 18 is formed having a slot 19 extending there-through which is engaged by the lug 13, and against the said connecting-rod the upper curved end 16 of the spring 15 has bearing to hold the said rod in relative position to the rear end of the said trip-lever. The upper end of the connecting-rod 17 is secured to the siphon trip-lever 20, whose opposite end extends over a flushing-tank 21, having a lower outlet 22, in which is removably fitted the lower end of a siphon 23. To the upper portion or elbow of the siphon a ring 24 is secured which is engaged by a loop 25, carried by the said siphon trip-lever 20.

The siphon 23 rests on its seat normally, and when pressure is relieved from the seat the seat trip-lever is drawn downwardly through the operation of the weight 11 and the connecting-rod 17 depressed, thereby elevating the siphon trip-lever 20 and removing the siphon 23 from its seat in the outlet 22 to start the siphon to work, and the latter then drops back to its seat in the outlet 22 as the slot 19 is shoved off the lug 13 by the upper extending right-angular projection 12, and the parts remain in this position until the device is used again.

It will be seen from the foregoing that the several parts are positive in action and are of such strength as to withstand sudden jars or vibrations without breakage.

The adjusting feature of the connecting-rod 17 makes it possible to apply the device in connection with tanks at varying heights,

and correspondingly the fulcrum-support of the seat-lever is likewise adjustable to vary the length of stroke of the connecting-rod 17.

The several parts will be properly concealed 5 and are firmly and rigidly applied in operative position, and it is obviously apparent that many minor changes in the construction and arrangement of the several parts might be made and substituted for those shown and 10 described without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

1. In a device of the character set forth, the 15 combination of a seat trip-lever, an adjustable fulcrum-support having a stop-arm, a weight attached to said seat trip-lever, a connecting-rod with a slot therein arranged to engage said trip-lever, a spring bearing against 20 said rod, a siphon, and a siphon trip-lever attached to said siphon and adapted to be operated by the said connecting-rod, substantially as described.

2. In a device of the character set forth, the 25 combination of a seat trip-lever to which a seat is attached, a weight connected to said seat trip-lever, a clasp and lug extending rearwardly from the said seat trip-lever, a

connecting-rod having a slot therein engaged 30 by the said lug, a spring attached to the said clasp and bearing upon the said connecting-rod, a siphon, and a siphon trip-lever adapted to be operated by the upper end of said connecting-rod, substantially as described.

3. In a device of the character set forth, the 35 combination of a seat trip-lever adapted to support a seat and having a rear clasp a lug and an upwardly-projecting extension also provided with a clasp, a weight pivotally connected to said trip-lever, a connecting-rod 40 having a slot therein adapted to be engaged by the said lug, a spring attached to the clasp on the trip-lever and bearing against the said connecting-rod within the clasp on the extension of said lever, a siphon, and a siphon trip- 45 lever connected to said siphon and adapted to be operated by the upper end of said connecting-rod, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib- 50 ing witnesses.

ELVIN ELWIN TOWNSEND.

Witnesses:

ALBERT LEMUEL WRIGHT,
JOHN HOKKS VANDERVOORT.