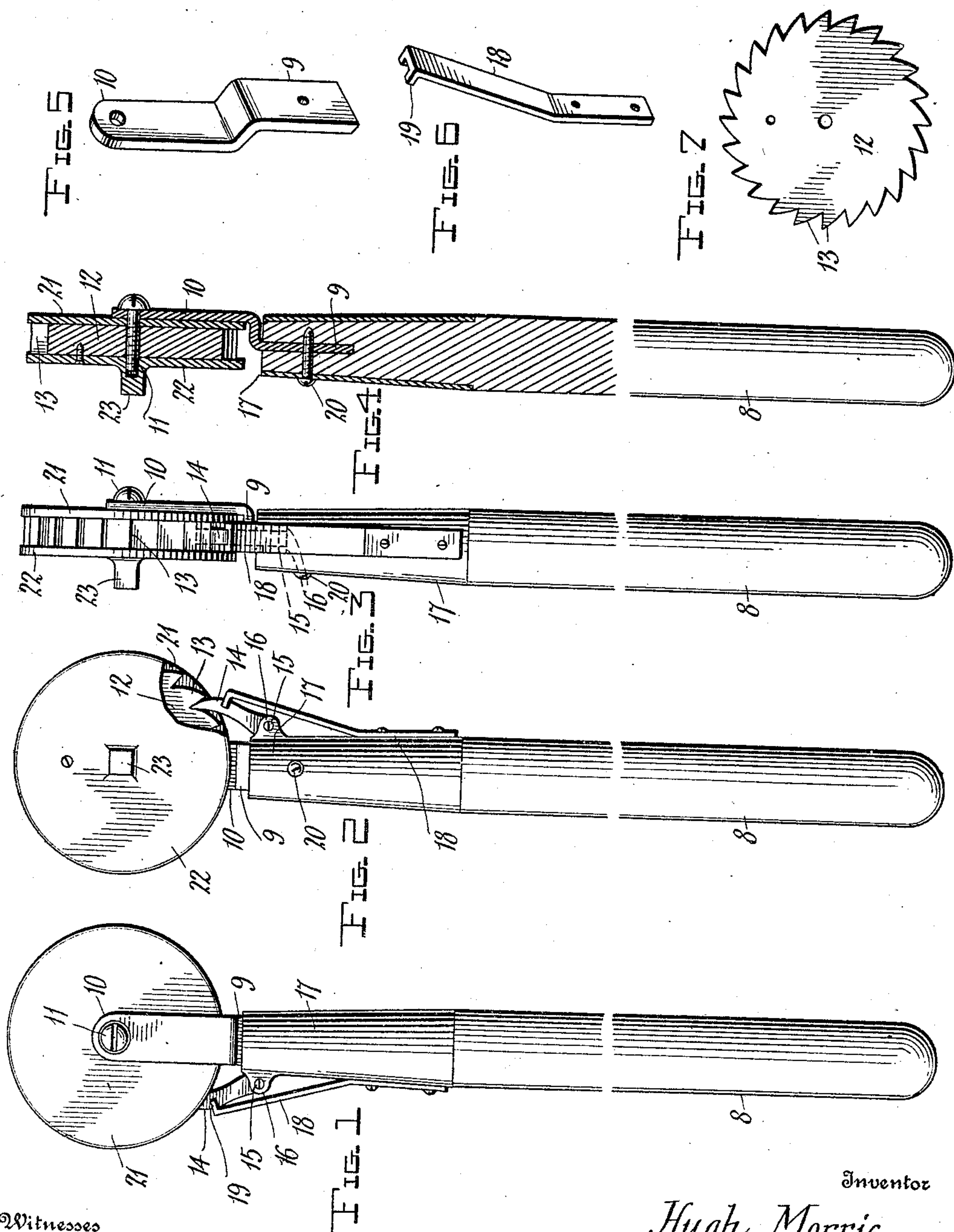


H. MORRIS.
WINDOW OPENER.
APPLICATION FILED FEB. 26, 1909.

944,628.

Patented Dec. 28, 1909.



Witnesses
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HUGH MORRIS, OF OKLAHOMA, OKLAHOMA.

WINDOW-OPENER.

944,628.

Specification of Letters Patent.

Patented Dec. 28, 1909.

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To all whom it may concern:

Be it known that I, HUGH MORRIS, a citizen of the United States, residing at Oklahoma city, in the county of Oklahoma, State of Oklahoma, have invented certain new and useful Improvements in Window-Openers; 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.

The invention relates to a window and more particularly to the class of pull poles or sticks for unlocking, raising and lowering window sashes provided with sash fasteners disclosed in my copending application filed March 22, 1909, Serial No. 484,927.

The primary object of the invention is the provision of a pull pole for windows in which the sashes thereof can be unlocked when in closed position and at the same time the said sashes may be raised or lowered to any desired degree within the window frame when the occasion demands.

Another object of the invention is the provision of a pull pole of this character in which there is supported a ratchet disk which latter coöperates with a key for engaging a sash fastener to permit the unlocking thereof and also the opening of the window sash at predetermined distances.

A further object of the invention is the provision of a pull pole which is simple in construction, thoroughly efficient in function or operation, durable, cheap and inexpensive in the manufacture.

With these and other objects in view the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred form of embodiment of the invention and as brought out in the claims hereunto appended.

In the drawings:—Figure 1 is a side elevation of the invention. Fig. 2 is a similar view looking toward the opposite side thereof. Fig. 3 is an end elevation. Fig. 4 is a longitudinal sectional view. Fig. 5 is a detail perspective view of the supporting member or piece. Fig. 6 is a detail perspective view of the spring tongue. Fig. 7 is a detail view of the ratchet wheel detached from the pole.

Similar reference characters indicate cor-

responding parts throughout the several views in the drawings.

In the drawings the numeral 8 designates a pole or stick which is circular in cross section and may be of any desirable length, it being preferably constructed of wood and forming a handle. Mounted in the upper end of the said pole or stick 8 is a shank or supporting piece 9, the latter formed with an offset portion or terminal 10 containing an opening which receives a hub 11, the latter forming an axis and upon which is threaded a ratchet disk 12, the latter having at its periphery ratchet teeth 13 engaged by a pawl 14, the latter connected at its inner end by a pivot 15 to spaced parallel ears 16 formed integral with a sleeve or collar 17 surrounding the upper end of the pole or stick and reinforcing the same at this end.

Secured to the sleeve or collar 17 is a flat spring 18, the latter having its free end bent inwardly as at 19, the latter containing a notch to receive and engage the pawl 14 so as to normally hold the latter in engagement with the ratchet disk. To fasten the sleeve or collar 17 there is provided a screw fastener 20, the latter also passing through the pole and shank 9 to secure the same to the pole as well as the said sleeve or collar.

On one side of the ratchet disk 12 and fixed to the hub 11 rotatably mounted in the shank 9 is a disk 21, the latter being of greater diameter than the said ratchet disk and on the opposite side of the latter is a further disk 22 correspondingly shaped to the said disk 21 and it being also fixed to the said hub 11 so that the ratchet disk 12 and the disks 21 and 22 will move in unison with the hub.

It is obvious that due to the diameter of the said disks 21 and 22 with respect to the ratchet disk 12 they will serve as a guideway for the pawl 14 to prevent the same from any lateral displacement when engaging the ratchet disk. It is also apparent that when the pole is moved in one direction the ratchet disk will be engaged by the pawl so as to turn said ratchet disk toward the right, but upon shifting the pole or stick in the opposite direction the said pawl 14 will override the teeth 13 of the ratchet disk so as not to lock the same with the pole.

Formed centrally of the disk 22 and projecting therefrom is a squared lug 23, the latter serving as a key to engage a sash fas-

tener provided with a square socketed turning hub for unlocking the fastener and also permitting a window sash to be opened or closed as set forth and forming the subject
5 matter in my copending application Serial No. 484,927, filed March 22, 1909.

What is claimed is:—

1. A window opener comprising a pole, a toothed ratchet disk rotatably supported at
10 one end of the pole, a polygonal key member movable with the ratchet disk and adapted to unlock a sash fastener having a corresponding recess, and a spring controlled locking pawl engaging the toothed
15 ratchet disk to hold the same against movement in one direction.

2. A pole of the class described compris-

ing a stick, a shank fitted in one end of said stick, a hub journaled in said shank, a toothed ratchet disk fixed to said hub, guide
20 disks on opposite sides of said ratchet disk and of greater diameter than the latter, a squared projection formed centrally on one of said disks, and a spring controlled pawl
25 mounted upon the stick and engaging the ratchet disk to hold the same against movement in one direction.

In testimony whereof, I affix my signature, in presence of two witnesses.

HUGH MORRIS

Witnesses:

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