

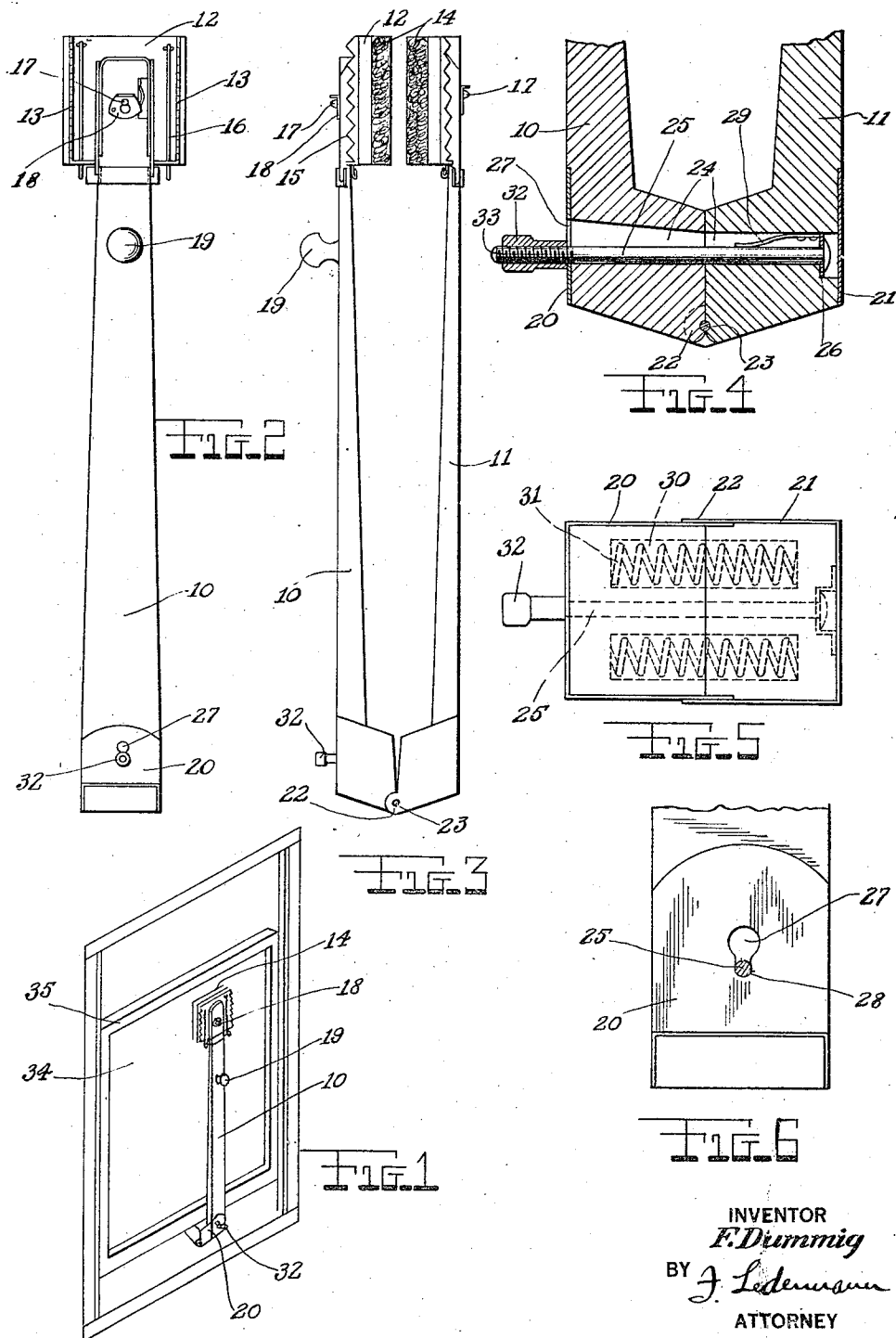
Nov. 9, 1926.

1,606,211

F. DUMMIG

WINDOW CLEANING DEVICE

Filed April 24, 1926



INVENTOR
F. Dummig
BY *J. Lidenmann*
ATTORNEY

UNITED STATES PATENT OFFICE.

FELIX DUMMIG, OF NEW YORK, N. Y.

WINDOW-CLEANING DEVICE.

Application filed April 24, 1926. Serial No. 104,429.

This invention relates to window cleaning apparatus and the main object of the invention is to provide a device which is bifurcated in design and straddles both surfaces of the window pane which is to be cleaned and thereby eliminates the necessity of one having to sit upon the window sill, project the body outside of the window pane when cleaning the outer surface, which makes one liable to injury by falling. The device illustrated in the drawing precludes any possibility of injury in this manner, as the device is moved from one portion of the window to another from within the room.

Another object is to provide a window cleaning device which straddles the window and simultaneously cleans both surfaces of the window with continuous movement of the device across the window.

Still another object is to provide a window cleaning device which has a pair of hinged arms on which cleaning pads may be mounted, and means for adjusting the distance between the pads.

The above and other objects will become apparent in the description below, in which characters of reference refer to like-named parts in the drawing.

Referring briefly to the drawing, Figure 1 is a front elevational view of a window and casing and shows the application of the window cleaner.

Figure 2 is a side elevational view of the window cleaner.

Figure 3 is a front elevational view of the window cleaner.

Figure 4 is an enlarged sectional elevational view of the lower end of the arms, detailing the means for locking said arms in adjusted position.

Figure 5 is a bottom plan view of Figure 4.

Figure 6 is an elevational view of the lower end of one of the arms.

Referring in detail to the drawing, the numerals 10 and 11 indicate vertical arms, rectangular in cross section. The arms are wider at their lower ends and gradually taper to a lesser width at their upper ends. The upper ends of these arms are free to be mutually spread apart by a mechanism located in the lower ends. The arm 10 is provided with a square block 12 on whose sides plates 13 are mounted, and its bottom surface is covered with felt 14. These blocks are made detachable from the ends of the arms so that similar blocks having sponges instead of felt coverings such as 14, may replace the blocks removed. The plate 13 is provided with saw teeth 15 and these saw teeth are provided to secure a cloth covering over the felt by means of wire stays 16 which are mounted pivotally on each of the blocks used in the device. The arm 11 is provided with a similar or dissimilar block, accordingly as is desired. The felt coverings 14 of these blocks face each other so that they may come in contact with opposite surfaces of a window pane. Each of the blocks has a pin thereon with an enlarged head 17 which inserts thru an opening in the arm and projects from the opposite side. This projecting end of the pin is engaged by a pivoted locking plate 18 which secures the blocks or cleaning pads to the arm. The arm 10 has a knob 19 thereon near its upper free end which is adapted to be grasped and manipulated when the device straddles a window pane so that the latter lies between the surfaces of the felt pads 14. These arms are made rotatable about a point at their lower ends. The lower ends of said arms are covered by straps 20 and 21 which bound the same on three sides. Overlapping ears 22 are formed on the mutually adjacent corners of these straps and a pin 23 passes thru these ears. Communicating and aligned tapering channels 24 extend thru both arms at the lower end. These channels form a hollow substantially cylindrical guide way thru which a bolt 25 passes. One end of said bolt is connected to a plate 26 in such manner that it is capable of lateral movement upwardly in the channels. The opposite end of the bolt projects thru a slot having an outline of a large opening 27 which communicates with a smaller opening 28. The bolt is normally urged into the position in the slot 28 by a resilient tongue 29 whose free end engages the upper periphery of the bolt. Said tongue is connected and rigidly mounted in that portion of the channel 24 formed in the arm 11. At each side of the channel 24 in both of the arms 10 and 11, chambers 30 are formed. In said chambers, springs 31 are housed which tend to expand the free ends of the arms 10 and 11 when the head 32 mounted on the threaded end 33 of the bolt 25 enters into the large portion 27 of the slot formed in the strap 21.

The device is designed to simultaneously clean both sides of a window pane 34 from a position within the room. The sash 35 of the window pane is lifted to partly open position when mounting the device in place. In mounting the device, the head 32, which engages the threaded end 33 of the bolt is moved upwardly so that its reduced shank slides into the enlarged portion 27 of the slot. As the slot registers with the reduced portion of the head 32, the springs urge the free ends of the arms 10 and 11 away from each other and spread the same. In this position, the one arm 11 will be positioned exterior of the room on the reverse side of the window pane, while the arm 10 positions itself in front of the inner surface of the window pane. By grasping the arm 11 and drawing the same toward the arm 10 until the reduced portion of the head 32 slips out of the slot 27, the spring 29 urges the bolt 25 downwardly and locks both arms in position where they will lie in contact with the opposite surfaces of the window pane. To

permit adjustment for various thicknesses of window pane and various types of pads upon the arms, the head 32 on the threaded end 33 of the bolt is provided. This head when rotated spreads the free ends of the arms or vice versa, accordingly as desired.

I claim:—

A device of the class described comprising a pair of arms hinged together at one end, pads removably mounted on the free ends of said arms, said arms being capable of being spread, means for locking said arms in various positions comprising a bolt movably mounted in one of the arms near its hinged end, the free end of said bolt extending beyond the side of the other of the arms, said free end being threaded, a head engaging said threaded end, straps covering the joined ends of said arms, a key hole slot formed in the strap on the last-named arm, the ends of the slot closely fitting the bolt and head, respectively.

In testimony whereof I affix my signature.

FELIX DUMMIG.