To all whom it may concern:

Be it known that I, JOSEPH BOLEWICZ, a subject of the Emperor of Russia, and resident of Union City, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Devices for Operating Blinds, of which the following is a specification.

My invention relates to stationary means for operating blinds on buildings from the inside without opening the window and likewise for holding and locking such blinds in a partially opened or partially closed position.

It is the purpose of the device to construct a blind opener which may be entirely inclosed within the window sill and casing, except the handle and extended pintles for the blinds, thereby better protecting the mechanism from the elements of the weather and insuring a rigid and durable connection and guide way for the engagement and operation of the parts.

It is a further object of the invention to connect both blinds in a manner to be operated simultaneously and conveniently.

Further objects of the invention will hereinafter appear; and to these ends the invention consists of a device for carrying out the above objects, embodying the features of construction, combination of elements, and arrangement of parts having the general mode of operation, substantially as hereinafter fully described and claimed in the specification and as shown in the accompanying drawings in which,

Figure 1, shows a sectional plan view through a window casing fitted with my improved blind operating device, which together with the blinds are indicated in an intermediate position. Fig. 2, is an enlarged detail elevation of a part of a blind, window casing, etc. showing the detachable hinge connection of the blind with one of the pintles of my operating device. Fig. 3, is a central vertical sectional view taken on line 3—3 of Fig. 1. Fig. 4, is an enlarged detail front elevation of the operating handle and a notched engaging plate therefor, and Fig. 5, is a detail sectional view of the operating handle detached.

Referring in detail to the characters of reference marked upon the drawings 10 represents the base or sill portion of a window frame and 11 the apron therefor which is disposed down upon the inside of the frame.

The sill is suitably recessed as at 12 (see Figs. 1 and 3) to receive and guide the slides 13 and 14 both of which are provided with a rack 15 upon their outer end portions to engage gears 16 upon vertically disposed pintle shafts 17 mounted within the sill and having their upper shoulder end portions 18 projecting through a bearing bracket 19 upon the top of the sill for the engagement of a corresponding shouldered socket in hinge 20 secured to blinds 21. The inner end portions of the slides 13 and 14 are also provided with a rack 22 for the engagement of an idler pinion 23 mounted upon a vertically disposed bearing 24 secured within the window sill before mentioned. The slide 14 is further provided with a rack 25 upon its top side to be engaged by a pinion 26 secured to the cross shaft 27 having its end portion projecting out on the inside of the casing through the apron before mentioned and likewise through a central portion of a notched circular plate 28 secured to the face of the said apron. An operating arm 29 is secured to the outer end of the said shaft 27 whereby the same together with its gear 26 is rotated thus transmitting movement to the slide 14 which in turn through its rack 22 imparts movement to the idler 23 and thence to the rack 13. This line of connections obviously insures a simultaneous movement of the two racks in either an inner or outer direction according to the way the handle and shaft is turned and said slides through their rack and gear connections 15 and 16 will in a like manner swing the blinds in or out according to the movement of the slides thereby enabling an attendant to completely open or close the blinds by the manipulation of the handle, or if desired to adjust them to an intermediate position. The blinds may be locked in such intermediate position through the medium of a spring actuated pin 30 mounted within the operating handle 31 and designed to engage the several notches in the plate 28, it being apparent that the pin is withdrawn by an outward thrust of the handle, whereupon the arm and its shaft are free to turn to any position desired and the pin released in a way to engage a different notch on the disk to hold the parts in position.

A covering plate 32 is attached to the notched disk 28 to shield the end of the arm 20 and its shaft, as shown in the drawings.

From the foregoing it will be seen that all
pinions, racks, shaft and operative parts are entirely inclosed within the sill of the frame and are therefore protected from the weather in a way to insure their ready operation at all times.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

A device for operating window blinds from the inside, comprising a pair of slidable racks located in the window sill, an idler gear connecting the racks, a separate gear connected with each of the racks and having an outwardly disposed shouldered pintle for the attachment of a blind, a fourth gear connected with a separate rack on one of the slidable racks, an operating shaft for said gear, an operating arm mounted upon the shaft, a notched disk secured to the window frame for the engagement of the arm whereby the parts may be secured in any desired position.

Signed at Naugatuck in the county of New Haven and State of Connecticut this fifth day of October A. D., 1909.

JOSEPH BOLEWICZ.

Witnesses:
MATHEW KARDAN,
THOMAS BOWEN.