

ABSTRACT

DOOR CURTAIN ANTI-DROPPING DEVICE HAVING LATCHING PIN LOCKING MECHANISM

A door curtain anti-dropping device for a rolling door is provided. The device comprises a worm shaft connected to the output shaft of the door operator, and a drive shaft comprising a limiting disc with through holes. The worm wheel having receiving slots is fixed on the drive shaft to mesh with the worm. The driven wheel is disposed adjacent to the limiting disc. Baffle plates designed to cover the through holes and receiving slots extend from the driven wheel. Plural latching pins stored with spring potential energy are compressed by the baffle plates and retained in the through holes and receiving slots. When the worm wheel is excessively worn and dislocated from the driven wheel, the baffle plates are moved to allow the latching pins to spring out and insert into the notches of the front cover, thereby lock the worm wheel and prevent the winding shaft from rotating.

FIG. 1