

Abstract

DOOR CURTAIN ANTI-DROPPING DEVICE HAVING LATCHING PIN LOCKING MECHANISM

A door curtain anti-dropping falling device for a rolling door is provided. The device comprises a worm connected to the output shaft of the door operator, a drive shaft driving the winding shaft, a worm wheel having plural oblique elongated grooves and fixedly mounted on the drive shaft and meshes with the worm, a driven wheel having plural oblique elongated holes and is driven by the worm to move synchronously with the worm wheel, a limiting disk for restricting the driven wheel from moving axially, and plural latching pins extending through the elongated holes and received in the elongated slots. Under the normal operation of the door operator, the latching pins are retained in the center positions of the elongated holes and grooves. When the worm wheel are excessively worn and dislocated from the driven wheel, the latching pins lock the worm wheel and stop the winding shaft from rotating.

(FIG. 2)