

LOAD-TYPE DOOR OPENING AND CLOSING DEVICE

ABSTRACT

Provide is a sliding door opening and closing device that horizontally opens and closes the sliding door with application of light weight. The advent of a metal automatic door that is not electrically driven and always uses stepping force of a user even during power failures or disasters has been anticipated. A load-type door opening and closing device comprises: a sliding support rail 2 slidably supporting the door 1 to open and close the door; a door opening rail 3 provided in the door 1 and inclined upward in an opening direction of the door 1; a sliding member 4 sliding on the door opening rail 3; a footboard 5; and a coupling member 6 that couples the sliding member 4 with the footboard 5. The sliding member 4 is located at an upper end side of the door opening rail 3 when the door 1 is closed, and the sliding member 4 is depressed against the door opening rail 3 by stepping force acting on the footboard 5 during opening operation, to displace the door 1 in the opening direction.

FIG. 1A

FIG. 1B