

TITLE: AN IMPROVEMENT IN THE STRUCTURE OF A SEALER FOR A
ROLLING DOOR

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 This invention is related to an improvement in the structure of a sealer for a rolling door and in particular to one which can be rapidly engaged with a slat of the rolling door.

2. Description of the Prior Art

10 The conventional rolling door will produce an annoying noise when opened or closed and so there is a need to improve the structure of the rolling door. Hence, a plastic sealer has been proposed to fasten on each end of each slat of the rolling door by screws so as to reduce
15 the friction between the rolling door and the tracks. However, such a sealer is complicated in structure and must be made by a number of molds thereby causing much inconvenience in assembly and therefore increasing the cost. Accordingly, such a sealer is unsatisfactory in use
20 and has to be further improved.

Therefore, it is an object of the present invention to provide an improvement in the structure of a sealer for a rolling door which can obviate and mitigate the above-mentioned drawbacks.

SUMMARY OF THE INVENTION

This invention is related to an improvement in the structure of a sealer for a rolling door.

According to the present invention, a sealer for a
5 rolling door includes an elongated body portion and a
tongue perpendicularly extending from one side of the
elongated body portion, the tongue having a bottom formed
with a plurality of tubular pins each having an axial
passage and a plurality of longitudinal slots thereby
10 forming a plurality of resilient jaws, each of the jaws
having a flange at an outer end thereof, whereby the
sealer can be rapidly and firmly engaged with the end of a
slat of the rolling door to effectively reduce the
annoying noise produced when the rolling door is opened or
15 closed.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded view of the present invention;

FIG. 2 is a partly broken perspective view of the present invention;

5 FIG. 3 is a perspective view of the present invention; and

FIG. 4 is a partly broken perspective view of another preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the drawings and in particular to FIGS. 1, 2 and 3 thereof, the sealer 100 according to the present invention is adapted to engage with a slat 20 of a rolling door (not shown). The sealer 100 is a T-shaped member integrally formed by injection molding. The sealer 100 includes an elongated body portion 10 and a tongue 11 perpendicularly extending from one side of the elongated body portion 10. The tongue 11 may be $1/2$ to $1/3$ of the elongated body portion in thickness, thereby forming a tread surface of a step. The bottom of the tongue 11 is formed with a plurality (three, in this preferred embodiment) of tubular pins 12 each having an axial passage 121 and a plurality (four, in this preferred embodiment) of longitudinal slots 122 thereby forming a collet-like member with a plurality of resilient jaws 12. Each of the jaws 12 has a flange 13 at the outer end thereof. The slat 20 is formed with a plurality of circular holes 21 dimensioned to receive the tubular pins 12 of the tongue 11. As the tubular pins 12 are provided with resilient jaws 12 at the lower ends, the sealer 100 will be firmly engaged with the slat 20 once the tubular pins 12 are forced into the circular holes 21 of the slat 20.

FIG. 4 is a partly broken perspective view of another preferred embodiment of the present invention. As illustrated, screws 14 are turned into the axial passages 121 of the tubular members 12 to expand the tubular members 12 thereby strengthening the engagement between the sealer 100 and the slat 20.

As the sealer 100 is an integral member, it is unnecessary to use a number of molds to manufacture the sealer thus largely decreasing the manufacturing cost thereof.



I CLAIM:

1. In a rolling door having a plurality of slats each engaged with a sealer at two ends thereof, said sealer being a T-shaped member integrally formed by
5 injection molding and including an elongated body portion and a tongue perpendicularly extending from one side of said elongated body portion, said tongue having a bottom formed with a plurality of tubular pins each having an axial passage and a plurality of longitudinal slots
10 thereby forming a plurality of resilient jaws, each of said jaws having a flange at an outer end thereof, said slat being formed with a plurality of circular holes dimensioned to receive said tubular pins of said tongue.
2. The sealer as claimed in claim 1, further
15 comprising a plurality of screws turned through said axial passage of said tubular pins.
3. The sealer as claimed in claim 1, wherein said tongue is $1/2$ of said elongated body portion in thickness.
4. The sealer as claimed in claim 1, wherein said
20 tongue is $1/3$ of said elongated body portion in thickness.