

[54] FASTENING DEVICE FOR USE ON A WALL OR CEILING SURFACE

[75] Inventor: Konrad Bratschi, Muri near Bern, Switzerland

[73] Assignee: Firm K. Bratschi, Silent Gliss, Muri, Switzerland

[22] Filed: June 15, 1973

[21] Appl. No.: 370,536

[30] Foreign Application Priority Data

June 16, 1972 Switzerland.....9090/72

[52] U.S. Cl. 248/223

[51] Int. Cl. F16m 13/00

[58] Field of Search 248/73, 223, 224, 225

[56] References Cited

UNITED STATES PATENTS

459,844	9/1891	Thomas	248/223 X
2,059,858	11/1936	Ernst.....	248/223
2,144,602	1/1939	Balmer.....	248/223

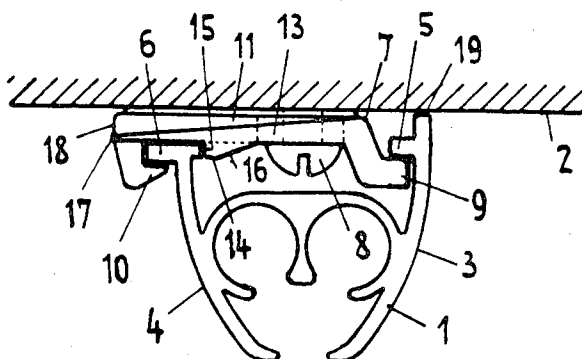
2,258,264	10/1941	Schultz	248/223
3,129,751	4/1964	Weber	248/224 X

Primary Examiner—William H. Schultz
Attorney, Agent, or Firm—Michael S. Striker

[57] ABSTRACT

A fastening device for fixing a body on a wall or ceiling surface, comprising at least one fastening member mountable on said holding surface and the body to be detachably fixed having two elongated mounting flanges which are parallelly disposed and project in the same direction transversely to their length for being engaged in fastened position of the body by the member, in which position one flange is lengthwise in contact with the holding surface, whereby the fastening member is substantially covered by the body and comprises at least one lock pawl resiliently arranged for locking the body in fastened position, between the fastened body and the holding surface being provided free space for the pawl to allow its resilient withdrawal from locking position.

6 Claims, 5 Drawing Figures



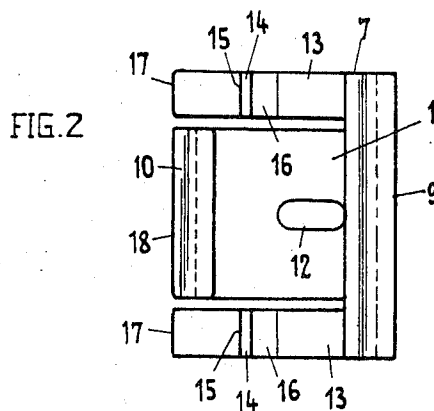
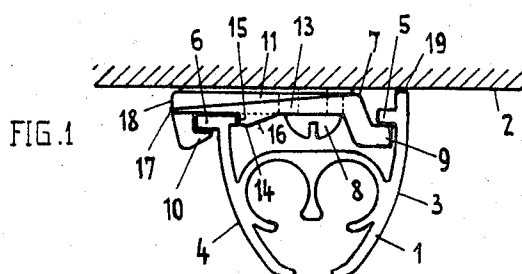
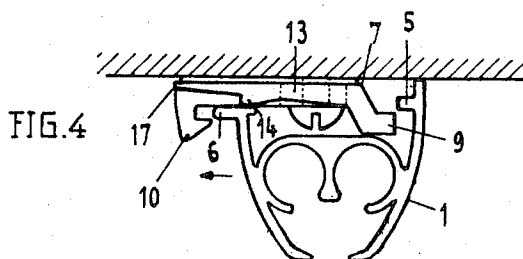
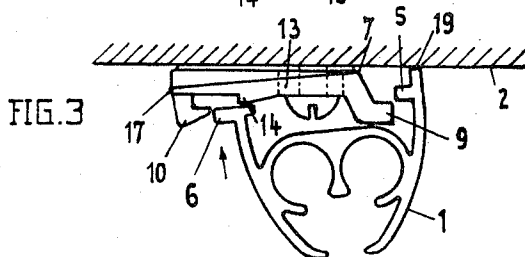
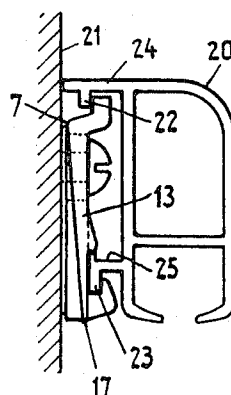


FIG. 5



FASTENING DEVICE FOR USE ON A WALL OR CEILING SURFACE

BACKGROUND OF THE INVENTION

Hitherto known fastening members for detachably fixing a body with its elongated flanges on a wall or ceiling surface are not adapted to be almost fully covered by the body and comprise mostly a multitude of separate elements cooperating in fastening the body. If such members are used for mounting a curtain rail or a similarly elongated body its mounting is rather difficult and cannot be achieved by a single person. Besides, certain of the separate elements must be accessible outside of the curtain rail and are considered as contrary to aesthetical wishes.

SUMMARY

It is an object of the present invention to avoid the above mentioned disadvantages and to solve the problem of providing a favorably looking fastening device which facilitates the mounting of bodies, such as pictures, mirrors, illuminators or curtain rails on a wall or ceiling surface, in that the fastening device comprises at least one fastening member being mountable on the surface and a body to be detachably fixed having two elongated mounting flanges which are parallelly disposed and project in the same direction transversely to their length for being engaged in fastened position of the body by the fastening member, in which position one of the flanges is lengthwise in contact with the holding surface, whereby the fastening member is almost fully covered by the body and comprises at least one lock pawl arranged for locking the body in fastened position by touching it between the two flanges, free space being provided between the fastened body and the holding surface for the pawl to allow its resilient withdrawal from locking position, if the body is to be detached.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an end view of a curtain rail fixed on a ceiling surface by means of a fastening device;

FIG. 2 is a plan view of the fastening member of the device from below;

FIGS. 3 and 4 are end views as in FIG. 1 illustrating two intermediate stages of the mounting procedure, and

FIG. 5 is an end view of the device in connection with a curtain rail fixed on a wall surface.

DESCRIPTION OF A PREFERRED EMBODIMENT

The illustrated curtain rail 1 has a hollow profile showing that the two longitudinal side walls 3 and 4 of the rail have each a longitudinal flange 5 and 6, respectively, which flanges project therefrom in the same direction transversely to their length. The mounted rail 1 is carried by two or more fastening members 7 distributed in intervals over the whole length of the rail and each fixed by means of a screw 8 on the ceiling 2.

Each member 7 consists of one piece only, preferably synthetic resin, and has two ledges 9 and 10 being interconnected by a traverse portion 11 and destined for engaging the rail flanges 5 and 6, respectively, from below. Along both lateral edges of the traverse portion 11

which is provided with an oblong hole 12 for the screw 8, two locking pawls 13 extend from the ledge 9 towards the ends of the ledge 10 and thereby form each a resilient tongue the spring tension of which is downwardly directed. Each pawl 13 forms on its lower side a locking nose 14 the front side 15 of which faces the ledge 10 and is destined to engage the rail 1 on the inner side of its longitudinal wall 4. The free end 17 of the pawl 13 extends beyond the nose 14 at least as far as the outer edge 18 of the ledge 10 the lower face of which is inclined towards the nose 14 in FIG. 1.

The rail 1 can be attached, without any tool, to the described fastening member 7 fixed on the ceiling 2, by transverse engaging movements in that the upper edge 19 of the longitudinal wall 3 of the rail is brought in contact with the surface of the ceiling 2 whereby the internally projecting flange 5 is opposite to the ledge 9 and the flange 6 is brought from below into contact with the inclined back 16 of the pawl noses 14 (FIG. 3). Then the rail 1 is further moved to urge the pawls 13 upwards (FIG. 4) and to reach the engagement of its flanges 5 and 6 with the ledges 9 and 10, respectively (FIG. 1). As soon as this definite fixing position is reached the pawls 13 return into their normal position and lock thereby the rail by means of the nose 14 the front side 15 of which engages now the inner side of the upper end of the wall 4.

For unlocking the rail 1 the pawls 13 must be lifted at their free end 17 which projects laterally beyond the rail, whereupon the latter can be moved transversely out of engagement from the ledges 9 and 10 of the fastening member 7.

It is evident from the drawing that the fastening member 7 projects only on one side beyond the rail 1 and there even very insignificantly with the small ledge 10 and the two pawl ends 17. Also the space needed by the fastening member is small and makes it useful where the mounting space is narrow. These facts are advantages in many respects.

As shown in FIG. 5, the fastening member 7 can also be used for fixing a body such as a curtain rail 20 on the surface of a wall 21, whereby it is suitable to direct the locking pawls 13 with their free end 17 downwardly. The hollow profile rail 20 has formed the two longitudinal flanges 22 and 23 each on a rail web 24 and 25, respectively, projecting from a lateral rail wall towards the wall surface 21. In the fixed position of the rail 20 its flanges 22 and 23 are equally engaged by the ledges of the fastening member 7 and the rail is locked by the two pawls 13 as has been described in connection with FIG. 1. Instead of the rail another body may be provided with the necessary flanges and be formed for carrying an object such as a picture, mirror or illuminator.

I claim:

1. A fastening device for fixing a body on a wall or ceiling surface, comprising at least one fastening member mountable on said holding surface, said member having two spaced engaging means which are interconnected and transversely project in the same direction, and at least one pawl extending from the one engaging mean transversely thereto towards the other engaging mean in substantially opposite direction to said direction of the projection of said engaging means, said pawl being resiliently movable transversely to its extending direction and having a nose projecting in the direction of the spring tension, and on the body to be fixed by

3

means of said member two spaced elongated flanges transversely projecting in the extending direction of said pawl, whereby in fixed position of said body said flanges being engaged by said engaging means and said body being locked by said nose of said pawl.

2. A fastening device as claimed in claim 1, wherein said engaging means of said fastening member are parallel ledges adapted to engage said flanges being parallelly formed on said body, and said pawl is a resilient tongue said locking nose of which projects in locking position between said flanges.

3. A fastening device as claimed in claim 1, wherein the free end of said pawl projects beyond said locking nose and at least as far as the outer edge of said other engaging mean.

4. A fastening device as claimed in claim 1, wherein

4

said fastening member has two parallel ledges and two resilient pawl tongues between which said ledges are connected by a traverse portion by which said member is mountable on said holding surface.

5 5. A fastening device as claimed in claim 1, wherein said fastening member consists of one piece only made of synthetic resin.

6. A fastening device as claimed in claim 1, wherein said body is a rail having two parallel flanges and adjacent to one of said flanges a longitudinal edge destined, in fixed condition of said body, to be in contact with said holding surface and adjacent to the other of said flanges a longitudinal edge destined in said condition to be in contact with a traverse portion connecting said
15 engaging means of said fastening member.

* * * * *

20

25

30

35

40

45

50

55

60

65