

The invention relates to a device for covering angular recesses in tiled walls, comprising a frame for inserting into the recess and receiving a cover tile, the frame comprising retaining members disposed in the corner regions, and fastenings associated with the retaining members being provided at the back of the cover tile.

Cover devices of this kind are designed for easy manipulation and to provide an inconspicuous closure of inspection openings or other openings in walls. To this end, the retaining members in the known cover devices are usually equipped with magnets whereas the cover-tile fasteners consist of ferromagnetic retaining plates associated with the magnets. Optionally the retaining members are corner parts of a closed retaining frame (AT-PS 325 283) or detached parts of an open frame (AT-PS 355 281, German utility model 77 33 601, EP-A 0 130 172). This magnetic retaining means can in principle secure the cover inconspicuously, but the cover is not automatically centred inside the frame. Also, particularly in the case of large, heavy cover tiles, there is no reliable prevention of the cover slipping out of its seat due to vibration or to its weight, and an eccentric position automatically results in joints which vary in thickness and are therefore conspicuous. Another disadvantage of magnetic retention is that when the cover is opened, practically all the retaining means simultaneously go out of action and the operator suddenly has the cover in his hands unsupported, and risks dropping the cover if taken by surprise.

Admittedly some devices comprise a cover with an upper catch and downward hooked abutting tongues in the lower edge region, the tongues being insertable into slots in a border or frame (FR-A 2 030 683), but this requires a double frame to give space for the supporting tongues, and takes up considerable space, is not adaptable to different sizes of wall recesses, and has to be inserted to a depth such that the cover is flush with the wall surface, with the result that the fitting process is difficult and complicated in spite of the expense of the frame.

The aim of the invention therefore is to obviate these drawbacks and provide a cover device of the initially-described kind which is easy to fit, holds the cover reliably in position, and is particularly easy to operate.

To this end, according to the invention, the lower or the upper retaining members each form an abutting edge and the lower or upper fastenings associated with these retaining members each form a downwardly projecting abutting tongue and the tongues on the fasteners of the cover tile for closing the recess are adapted to abut the edges of the associated retaining members and the tongues slide down along the edges until the tongue extension region can be pressed into the frame, and the fasteners comprise a baseplate which bears the tongues and co-operates with two side flaps and an imaginary angle following the angular shape of the cover tile to define an opening having a shape and size which match the part of the retaining members which projects into the corner region of the recess. As a result of the

co-operation between the abutting edge and the abutting tongues, the cover tile is held positively at top and bottom in the frame and needs only slight force for securing at the other side, i.e. the top or bottom of the recess, to ensure a proper fit. The cover tile is secured centrally without risk of the cover sliding, and when opened, one side of the cover remains supported in the frame, so that even large or heavy covers are not at risk of being dropped. The abutting tongues and edges together form, as it were, an open hinge which on the one hand enables the cover to pivot or move relative to the frame whereas on the other hand the cover can be taken off or suspended in the frame by a single manipulation. The cover tile can be actuated from the exterior by any known aids such as suction devices or cords, and the tongues and edges co-operate irrespective of whether the retaining members are separate or part of a frame in the recess. The frame is of simple construction and easily fitted and, owing to the special shape of the baseplate, the retaining members on the one hand and the fastenings on the other hand fit side by side without overlapping when the cover tile is closed, resulting in an excellent fit with the surface of the cover flush with the wall.

Advantageously also, the tongues are convex and/or have an inward end bend, since the convexity facilitates movement of the tongue relative to the edge and the bend provides an abutment for the cover tile when folded out of the closed position into a position for removal.

If the abutting edges have a bent rim, this can also be used to influence the sliding properties for relative movement of the tongue and edge, and also in particular, by deliberately bending the rim on the one hand and/or the tongue on the other hand, the vertical position of the cover tile in the frame can be adjusted and exactly adapted to the building.

The cover can be fixed in the closure position by any known retaining means, and retaining magnets have also also given good results. Particularly advantageously, however, all the retaining members form abutting edges, and the fasteners are without abutting tongues and have spring catches or the like which co-operate with the abutting edges, so that the retaining members can be uniformly shaped without the need for expensive retaining magnets. The fastenings can be manufactured with spring tongues, which are usable not only as abutting tongues but also as spring catches, resulting in a specially economic cover device.

The invention is illustrated by way of example in the drawings, in which:

Fig. 1 is a plan view of a recess in a tiled wall and an inverted frame of a cover device according to the invention;

Fig. 2 is a rear view of a cover tile for the recess;

Fig. 3 is a vertical section through a corner region of a cover device according to the invention, the section being along line III-III in Fig. 1, and

Fig. 4 is a plan view and Fig. 5 is a vertical section along line V-V of Fig. 4, of a retaining member and an associated fastening for another embodiment of a cover device according to the invention.

A tiled wall 1 has a recess 2 for covering with a cover tile 3. The tile is held by retaining members 4, 5 inserted in the corner regions of the recess 2 and cooperating with corresponding fastenings 6, 7 on the back of the cover tile 3.

In the embodiment in Figs. 1 - 3, the lower retaining members 4 each form an abutting edge 8 and the lower fastenings 6 form abutting tongues 9 corresponding to the edges 8, whereas the upper retaining members 5 are equipped with magnets 10 and the associated upper fastenings 7 are ordinary ferromagnetic retaining plates.

The fastenings 6 have a baseplate 11 from which the abutting tongues 9 project downwards, the tongues having a convex curvature. The baseplate 11 has two side flaps 11a extending as far as the side edges 12 of the cover tile 3, leaving a recess 13 which in shape and size matches the parts 4a of the retaining members 4 projecting into the corner region of the recess 2. By this means, as shown in chain lines in Fig. 1, the fasteners and the retaining members lie side by side without overlapping when the cover tile 3 is closed, ensuring that the cover fits properly.

The side flaps 11a on the baseplate also facilitate positioning of the fastenings during assembly, since

the fastenings only have to be aligned with the side flaps 11a on the edges 12 of the cover and then fixed by sticking.

To improve co-operation between the abutting tongues 9 and the abutting edges 8, the tongues 9 are formed with an end bend and the edges 8 have a bent rim, so that the two bends can hook in one another and also the cover tile 3 can be vertically adjusted by bending the rim 8a or the curved abutting tongue.

In order to close the recess 2, the bottom fastenings 6 of the cover tile 3 are braced against the bottom retaining members 4, so that the tongues 9 extend over the edges 8, after which the cover tile 3 only needs to be folded upwards or pressed inwards until the fastenings 7 stick to the magnets 10 of the upper retaining members 5 and the cover closes. In the reverse opening sequence, the upper magnetic closure means is first undone, by known means such as suction devices, cords or similar aids, after which the cover tile 3 is swung out until the interlocking end bends 8, 14 prevent further pivoting, after which the required activity can be performed in the recess 2 or the cover can be taken off and completely removed.

As a result of the co-operation between the tongues 9 and edges 8, the cover is reliably guided and supported relative to the retaining members, and is easy to manipulate, fits centrally when closed, and cannot unexpectedly come loose when opened.

As indicated in the embodiment in Figs. 4 and 5, upper retaining members 15 for the recess 2 can also be provided, forming supporting edges 18, the retaining members being associated with upper fastenings 17 of the cover tile 3, which in turn have abutting tongues 19 co-operating with abutting edges 18. As before, the fastenings 17 comprise a baseplate 111 bearing a tongue 19 and having side flaps 111a which extend as far as the edge region of the cover tile 3 and, in the corner region, leave a recess 113 matching the projecting part 15a of the retaining member 15, so that the retaining members 15 and the fastenings 17 fit together when closed. If the upper fastenings 15 are provided with abutting tongues 19, the bottom fastenings (not shown) will of course comprise retaining magnets or similar fixing means and, for the purpose of closing or opening the cover tile 3, the upper fastenings 17 have to be suspended in or detached from the retaining members 15, the advantages being basically the same as for a lower cover support. The cover is held suspended from the upper retaining members and is closed by being pressed obliquely downwards and opened by being raised and pushed obliquely upwards, the spring properties of the supporting tongues giving the cover the required freedom of movement relative to the frame.



C L A I M S

1. A device for covering angular recesses (2) in tiled walls (1), comprising a frame for inserting into the recess (2) and receiving a cover tile (3), the frame comprising retaining members (4; 15) disposed in the corner regions, and fastenings (6; 17) associated with the retaining members (4; 15) being provided at the back of the cover tile (3), characterised in that the lower or the upper retaining members (4; 15) each form an abutting edge (8; 18) and the lower or upper fastenings (6; 17) associated with these retaining members each form a downwardly projecting abutting tongue (9; 19) and the tongues (9; 19) on the fasteners (6; 17) of the cover tile (3) for closing the recess (2) are adapted to abut the edges (8, 18) of the associated retaining members (4, 15) and the tongues (9, 19) slide down along the edges (8, 18) until the tongue extension region can be pressed into the frame, and the fasteners (6, 17) comprise a baseplate (11, 111) which bears the tongues (9, 19) and co-operates with two side flaps (11a; 111a) and an imaginary angle following the angular shape of the cover tile (3) to define an opening having a shape and size which match the part (4a, 15a) of the retaining members (4, 15) which projects into the corner region of the recess (2).

2. A device according to claim 1, characterised in that the tongues (9, 19) are convex and/or have an inward end bend (14).



3. A device according to claim 1 or 2, characterised in that the edges (8) have a bent rim (8a).

4. A device according to any of claims 1 to 3, characterised in that all the retaining members form abutting edges, and the fasteners are without abutting tongues and have spring catches or the like which co-operate with the abutting edges.