C L A I M S

1. A post-installed anchor to be inserted and fixed in an anchor insertion hole formed in a structure, characterized by comprising:

a cylindrical anchor body;

expandable pieces obtained by dividing the tip side of the anchor body into a plurality of pieces by a plurality of slits 16 which are formed on the tip side, leaving equal intervals in a circumferential direction and extending in the axial direction of the anchor body, the expandable pieces each having a plate-like part whose surface is formed into a flat surface and which has spring force, a fixing part formed at the tip of the expandable piece, the fixing part protruding outwardly and having a larger thickness than that of the plate-like part, and an inclined part whose inner surface is gradually inclined inward toward the tip of the expandable piece;

a female screw formed in an inner surface of an unexpandable part side of the anchor body; and

a male screw body formed into a substantially columnar shape that can be inserted into the anchor body, having a wedge part with a truncated conical shape at its tip, having a male screw screwed with a female screw formed in the anchor body at its rear end side, and having a rotary tool engagement part at its rear end surface, wherein

the male screw body is advanced with the male screw of the male screw body screwed with the female screw of the anchor body to make the truncated conical shaped wedge part at the tip of the male screw body abut against the inclined part formed so that the

inner surface thereof is gradually inclined inward toward the tip side of the expandable piece to expand the expandable piece by wedge action, pressing the outer surface of the fixing part against the hole wall of the anchor insertion hole, which thereby fixes the post-installed anchor in the anchor insertion hole, and the male screw body is retracted to close the expanded expandable piece by spring force of the plate-like part of the expandable piece for recovery and reuse.

2. The post-installed anchor according to claim 1 or 2, characterized in that:

in a state where the male screw of the male screw body is screwed with the female screw to expand the fixing part of the expandable piece to thereby fix the post-installed anchor to the anchor insertion hole, a screwable part of the female screw formed in the inner surface of the anchor body remains by a predetermined length from the upper end of the male screw body.

3. The post-installed anchor according to any one of claims 1 to 3, characterized in that:

the plate-like part of the expandable piece is formed as a plate spring.

4. The post-installed anchor according to any one of claims 1 to 4, characterized in that:

the number of the expandable pieces is six.