

ABSTRACT

FLOATING FLAP GATE

One object is to structurally simplify a frame that is a component of a gate leaf and to reduce required levels of manufacturing precision and assembly precision of the gate leaf, thereby reducing a manufacturing man-hour. Provided is a floating flap gate 1 installed on a road surface “rs” at an entrance portion of a building or an underground space. An upward swinging support portion provided on a proximal end side of a gate leaf 4 is composed of a bottom fitting 5 mounted to a proximal end portion 4a of the gate leaf 4, a resin plate 6 configured to support the gate leaf 4 when the gate leaf 4 is raised, a waterproof membrane 13 covering the bottom fitting 5 and the resin plate 6, a first seal clamp 14 mounted to a portion of the waterproof membrane 13, the portion covering the bottom fitting 5, and a second seal clamp 16 mounted to another portion of the waterproof membrane 13, the another portion covering the resin plate 6. The bottom fitting 5 has a length equal to a width of the gate leaf 4 and has a convex circular arc-shaped surface 5a formed at a protruding portion 5b thereof at a proximal end side corner portion of a surface 4a of the gate leaf 4. The resin plate 6 is equal in length to the bottom fitting 5 and has a concave circular arc-shaped surface 6a to be mated with the convex circular arc-shaped surface 5a of the bottom fitting 5.

FIG. 2