CLAIMS

[CLAIM 1] A gate valve comprising:

a hand wheel, a stem, a gate, a body, and two connection pipes, the gate valve being configured to control a flow of a fluid, wherein

the body has a first opening and a second opening for accommodating each of the two connection pipes, and a third opening for accommodating the gate, each of the two connection pipes passes through the first opening and the second opening, the two connection pipes being disposed opposed from both sides of the gate,

each of the two connection pipes is jointed to the body by welding at the first opening and the second opening.

each weld portion has a circular-ring shape and

at least a circumferential portion of the first opening and the second opening of the body has part of a sphere in shape.

[CLAIM 2] The gate valve according to claim 1, wherein protrusions each having a circular-ring shape are provided on outer circumference of each of the two connection pipes near the first opening and the second opening, the circular-ring shape is configured such that an outer circumference of the protrusion matches to corresponding opening, and a boundary between the outer circumference of the protrusion and the opening is the weld portion.

[CLAIM 3] A method for producing a gate valve including: a hand wheel, a stem, a gate, a body, and two connection pipes, the gate valve being configured to control a flow of a fluid,

the method comprising:

producing a plurality of divided body portions of the body by forging;

welding the plurality of divided body portions to form the body;

forming first and second openings each having a circular-ring shape on a side face of the body to allow disposition of the two connection pipes opposed from both sides of the gate; and

joining each of the two connection pipes to the first opening and to the second opening by welding.

[CLAIM 4] The method for producing the gate valve according to claim 3, wherein the forming the openings on the side face of the body is performed by machining.