

ABSTRACT

[Title of Invention] ENDOSCOPE OPERATING APPARATUS

[Problem]

To provide an endoscope operating apparatus where an operator who is a user can recognize a locked state and a free state clearly with his/her fingers grasping an operating part under an examining environment, and the number of constituent parts can be decreased to reduce a manufacturing cost and achieve weight reduction.

[Solving Means]

An operating apparatus of an endoscope which is provided with a flexible tube inserted into a body to be examined and having a bending part at a distal end thereof and which performs work by bending the bending part according to a manual operation, comprising: a drive part which can pull a wire which is disposed in the flexible tube, a distal end of the wire being fixed to the bending part and the wire bending the bending part; and an operating part which operates the drive part; wherein the drive part has a rack connected to the wire and a pinion gear meshing with the rack, the operating part is provided with a rotation operating mechanism which can rotationally drive the pinion gear according to manual operation of an operator, the rotation operating mechanism has a lock mechanism which can impart braking force to a rotating operation part of the rotation operating mechanism, wherein the wire is provided with two horizontal-direction control wires for performing attitude control leftward and rightward, and two vertical-direction control wires for performing attitude control upward and downward, racks joined to the four wires, respectively, are provided, a first pinion gear meshing with the horizontal-direction wires and a second pinion gear meshing with the vertical-direction wires are provided, a horizontal-direction rotation operating part which can operate the first pinion gear manually and a vertical-direction

rotation operating part which can operate the second pinion gear manually are provided, and wherein the lock mechanism is provided to correspond to each of the horizontal-direction rotation operating part and the vertical-direction rotation operating part.

[Elected Figure] FIG. 3