impact force of water flows is improved. However, in such a structure, instantaneous bubble burst between ultrasonic waves and the high-pressure bubbles needs to be kept in the water. When the water flows are pumped by a water pump and sprayed out circularly, high-pressure bubbles are difficult to reach the surfaces of dishes before burst, the structure is not suitable for a structure of a water-jet dishwasher or a household dishwasher, but merely large-sized ones.

[0004] In order to solve the problem above, as disclosed in a prior application, a Chinese Patent CN208243529U (patent No.: CN201721042431.X) of the applicant, a washing effect is improved by adding air to a spray arm to entrain bubbles in water flows. An air pump is required for blowing air into the spray arm, resulting in a complicated structure and high production cost.

Summary of the Invention

[0005] It is a first object of the present invention to provide a spray arm which can automatically suck air and entrain bubbles in a jet water flow, thereby improving the washing effect and achieving low production cost.

[0006] It is a second object of the present invention to provide a spray arm that can stably aerate the jet water flow.

[0007] It is a third object of the present invention to provide a water pumping mechanism with the spray arm above.

[0008] It is a fourth object of the present invention to provide a cleaning machine with the water pumping mechanism above.

[0009] For achieving the first object, the spray arm comprises a body having a top surface, a bottom surface and a side wall between the top surface and the bottom surface, a top plate disposed above the body; wherein, the body has a flow channel extending along a length of the body; the body has a water inlet in communication with the flow channel arranged on the bottom surface of the body; the body has a plurality of water spray holes arranged on the top surface and / or the sidewall of the body; an air collection chamber for storing air is defined between the top plate and the top surface of the body, the positions of the water spray holes are distributed corresponding to the air collection chamber; the top plate has a plurality of spray openings each corresponding to one water spray hole, and a gap where negative pressure is generated during water flow spraying is formed between a top end of each water spray hole and a bottom end of the