

ABSTRACT

Disclosed is an shape-forming shutter apparatus including a plurality of shutter pieces 15, each having an shaping surface 17 and a sliding surface 19, which are arranged in a circle with the shaping surface 17 of each shutter piece 15 being slidably in sliding contact with the sliding surface 19 of the neighboring separate shutter piece 15, and the shape-forming shutter apparatus being capable of dilating and contracting an opening part 9 surrounded by the shaping surfaces 17 respectively of the plurality of shutter pieces 15. The shape-forming shutter apparatus includes pressure contact biasing means 21 for always keeping the shaping surface 17 of each shutter piece 15 and the sliding surface 19 of the neighboring shutter piece 15 slidably in pressure contact with each other. The pressure contact biasing means 21 is a ring-shaped elastic member for biasing the shutter pieces 15 equally in such a direction to close the opening part 9. The elastic member is stretchingly wound around the shutter pieces 15 in an end of each shutter piece 15, which end is separate away from the other end thereof where the shaping surface 17 of the shutter piece 15 and the sliding surface 19 of the neighboring shutter piece 15 intersect each other.