Claims:

1. An air filter rod, comprising a cylindrical tipping-paper outer layer formed of a first tipping paper and a hollow portion defined by the tipping-paper outer layer,

   wherein the hollow portion has a plurality of resistance-increasing shape-fixing pieces, and the resistance-increasing shape-fixing pieces are arranged orderly in parallel to one another in the hollow portion;

   the resistance-increasing shape-fixing pieces are each in a columnar structure formed of a second tipping paper, and a cavity is formed between every two adjacent resistance-increasing shape-fixing pieces in an axial direction of the tipping-paper outer layer;

   each resistance-increasing shape-fixing piece is provided with gas flow channels in the axial direction of the tipping-paper outer layer;

   each resistance-increasing shape-fixing piece has a thickness of 1 to 10 mm; and the first tipping paper and the second tipping paper are regenerated cellulose cellophane; and

   one end of the air filter rod close to tobacco shreds is provided with a fiber tow segment for tobaccos, and the fiber tow segment for tobaccos is cellulose acetate tow made of acetate fibers,

   characterized in that a section of the cellulose acetate tow is Y-shaped, the plurality of resistance-increasing shape-fixing pieces are disposed at equal intervals in the hollow portion, and radial outer circumferential surfaces of the resistance-increasing shape-fixing pieces are closely attached to an inner wall of the tipping-paper outer layer, so that each cavity forms a sealed space.

2. The air filter rod according to claim 1, wherein the plurality of resistance-increasing shape-fixing pieces are arranged in an axial direction of the cylindrical tipping-paper outer layer, and the plurality of resistance-increasing shape-fixing pieces are all located in a same linear direction.

3. The air filter rod according to any one of claims 1 to 2, wherein each gas flow channel has an inner diameter of 0.2 to 1.0 mm, and number of the gas flow channels in each resistance-increasing shape-fixing piece is 2 to 20.

4. The air filter rod according to any one of claims 1 to 2, wherein the cavity between the adjacent resistance-increasing shape-fixing pieces has a length of 1 to 20 mm.

5. The air filter rod according to any one of claims 1 to 2, wherein the cavity between the adjacent resistance-increasing shape-fixing pieces have a length of 4 to 12 mm.

6. The air filter rod according to any one of claims 1 to 2, wherein a cross-sectional shape of each gas flow channel is a circle, an ellipse, a polygon, or an irregular shape.

8. The air filter rod according to claim 1, wherein each resistance-increasing shape-fixing piece has a color pattern.

9. A cigarette, characterized by comprising a tobacco shred end and the air filter rod according to any one of claims 1 to 8, wherein the air filter rod is connected to the tobacco shred end.

10. A method of manufacturing an air filter rod, comprising:

rolling tipping paper into a cylindrical shape to form a tipping-paper outer layer and a hollow portion;

rolling another tipping paper to form a rod-shaped structure and then cutting the rod-shaped structure to form a plurality of resistance-increasing shape-fixing pieces; and

arranging the plurality of resistance-increasing shape-fixing pieces in the hollow portion, to form an air filter rod precursor, wherein one end of the air filter rod close to tobacco shreds is provided with a fiber tow segment for tobaccos, and the fiber tow segment for tobaccos is cellulose acetate tow made of acetate fibers,

characterized in that a section of the cellulose acetate tow is Y-shaped, the plurality of resistance-increasing shape-fixing pieces are disposed at equal intervals in the hollow portion, and radial outer circumferential surfaces of the resistance-increasing shape-fixing pieces are closely attached to an inner wall of the tipping-paper outer layer, so that each cavity forms a sealed space.

11. The method of manufacturing an air filter rod according to claim 10, further comprising:

rolling tipping paper into a cylindrical shape at a preset speed to obtain a rod-shaped structure having gas flow channels with an inner diameter of 0.2 to 1.0 mm; and

cutting the rod-shaped structure into pieces to obtain resistance-increasing shape-fixing pieces having a thickness of 1 to 10 mm.