CLAIMS

1. A built-in interdental brush, wherein the built-in interdental brush comprises an interdental brush (1), a camera system (25-2), and a delivery component (2), and the interdental brush (1) may be movably built in a bended tube (21-1) of a front end of the delivery component (2), wherein

A: the delivery component (2) comprises a guide head (21), a sliding mechanism (22), and a housing (23), wherein the guide head (21) is disposed on the front end (2-1) of the delivery component (2), and the guide head (21) comprises the bended tube (21-1), and an outlet (21-2) of the bended tube (21-1) is disposed at an end (21-3) of the guide head (21);

B: the interdental brush (1) comprises a working part (11) with fiber or a protrusion (11-1) and a connector (12), wherein the working part (11) is disposed at a front end of the connector (12);

C: the camera system (25-2) is configured to enable observation of a working state of the interdental brush and oral cavities of a user during cleaning, and includes a camera (25-2-1) connected to the guide head (21) at the front end of the delivery component (2-1), and a data processing and outputting system (25-2-2) and an electrical system (26) disposed within the delivery component (2); and

D: the interdental brush (1) is installed in the bended tube (21-1), the working part (11) of the interdental brush (1) can slide in the bended tube (21-1), and the connector (12) of the interdental brush (1) is installed on the sliding mechanism (22) of the delivery component (2); a movement of the sliding mechanism (22) can drive the working part (11) of the interdental brush (1) slide in the bended tube (21-1); and the sliding mechanism (22) is driven to make the working part (11) of the interdental brush (1) extend from the outlet (21-2) of the bended tube at the end of the guide head.

2. The built-in interdental brush according to claim 1, wherein the interdental brush is a linear type and is made of elastic material; after elastic deformation of the linear type interdental brush (1), the linear type interdental brush (1) can be installed in the bended tube (21-1), and after the working part (11) of the linear type interdental brush (1) extends from the bended tube (21-1), the working part (11) of the interdental brush (1) can be returned or basically returned to the linear type.

3. The built-in interdental brush according to claim 2, wherein the elastic material is selected from: elastic polymer material or elastic metallic material.

4. The built-in interdental brush according to claim 1, wherein the interdental brush (1) further comprises a smooth guide head (11-2), and the smooth guide head (11-2) is disposed at an front end of the working part (11) of the interdental brush.

5. The built-in interdental brush according to claim 4, wherein the smooth guide head (11-2) is cone-shaped or bullet shaped.

6. The built-in interdental brush according to claim 1, wherein a structure of the fiber or the protrusion (11-1) of the working part (11) of the interdental brush (1) is selected from: a protrusion formed by a thread structure, or a vane-type protrusion, or a fibrous protrusion.

7. The built-in interdental brush according to claim 1, wherein the sliding mechanism (22) comprises an interdental brush connecting mechanism (22-1) and a sliding block (22-2), wherein the interdental brush connecting mechanism (22-1) is disposed on the sliding block (22-2); and the connector (12) of the interdental brush is detachably connected to the interdental brush connecting mechanism (22-1), the sliding block (22-2) can be pushed and pulled to drive the interdental brush (1) to perform a reciprocating movement in the bended tube (21-1), so as to make the working part (11) of the interdental brush (1) extend from or withdraw to the outlet (21-2) of the bended tube at the end of the guide head.

8. The built-in interdental brush according to claim 7, wherein a mode of the connection between the connector (12) of the interdental brush (1) and the interdental brush connecting mechanism (22-1) of the sliding mechanism (22) is a concave-convex-fit connection mode, or a threaded connection mode, or an interference-fit connection mode.

9. The built-in interdental brush according to claim 1, wherein the sliding mechanism (22) further comprises a driving spring (22-3) that can push the sliding mechanism (22) to move forward, wherein one end of the driving spring (22-3) is connected to the sliding mechanism (22) and the other end is connected to the housing (23).

10. The built-in interdental brush according to claim 1, wherein a push force applied by a driving spring (22-3) to the interdental brush (1) is smaller than 100g.

11. The built-in interdental brush according to claim 1, wherein the delivery component (2) further comprises a lighting system (24).

12. The built-in interdental brush according to claim 1, wherein the guide head (21) is made of optical transmission material.

13. The built-in interdental brush according to claim 12, wherein the optical transmission material used by the guide head (21) is selected from: polystyrene, or polycarbonate, or polymethylmethacrylate.

14. The built-in interdental brush according to claim 11, wherein the lighting system (24) includes an LED light source.

15. The built-in interdental brush according to claim 1, wherein the camera system (25-2) comprises the camera (25-2-1), the data processing and outputting system (25-2-2), the electrical system (26) and a power system (27).

16. The built-in interdental brush according to claim 15, wherein video data output by the data processing and outputting system (25-2-2) of the camera system (25-2) can be displayed on a display (25-2-3) by means of a wired connection or a wireless connection, wherein the display (25-2-3) comprises: a smart phone (25-2-31), or a computer (25-2-32), or a liquid crystal display (25-2-33), or a television (25-2-34).

17. The built-in interdental brush according to claim 15, wherein the camera (25-2-1) is disposed on the guide head (21) at the front end of the delivery component (2).

18. The built-in interdental brush according to claim 17, wherein the camera (25-2-1) is installed on the guide head (21) at an adjustable angle.

19. The built-in interdental brush according to claim 18, wherein the camera (25-2-1) is connected to the guide head (21) at an adjustable angle by means of a shaft connection or a ball joint connection.

20. The built-in interdental brush according to claim 1, further comprising a light source system (24-1) for providing lighting disposed surround the camera (25-2-1).

21. The built-in interdental brush according to claim 1, wherein a storage compartment (28) that can store the interdental brush (1), or a toothbrush (3), or a tooth paste (4) is disposed on a tail (2-3) of the delivery component (2).

22. The built-in interdental brush according to claim 21, wherein the toothbrush (3) stored in the storage compartment (28) can be detachably connected to the front end (2-1) of the delivery component (2).

23. The built-in interdental brush according to claim 1, wherein the toothbrush (3) is disposed on a tail (2-3) of the delivery component (2).