CLAIMS

1. An anastomat for circumcision, characterized in that, it comprises:

an inner cutting ring (I) comprising an upper casing pipe (1), a lower casing pipe (2) and a connecting plate (3) for connecting said upper casing pipe (1) and said lower casing pipe (2);

an outer cutting ring (III) comprising an upper sleeve (5), an upper circular blocking piece (6) arranged at the upper end of said upper sleeve (5), a lower sleeve (7), and a connecting rod (8) for connecting said upper sleeve (5) and said lower sleeve (7);

a connecting ring (IV) comprising a casing pipe (9) and a lower annular blocking piece (10) arranged at the lower end of said casing pipe (9);

a detachable anti-erection plate (V) arranged at the inner side of said connecting plate (3) of the inner cutting ring (I), wherein several projecting spots are evenly distributed on the surface of said anti-erection plate (V);

said inner cutting ring (I) is sleeved into said outer cutting ring (III), said upper casing pipe (1) of the inner cutting ring (I) has an upper end connecting to the inner side of said upper circular blocking piece (6) of the outer cutting ring (III) in a crimped mode, and said lower casing pipe (2) of the inner cutting ring (I) has a lower end connecting to the inner side of said lower annular blocking piece (10) of the connecting ring (IV) in a crimped mode; said lower sleeve (7) of the outer cutting ring (III) is detachably connected with said casing pipe (9) of the connecting ring (IV);

clearance (23) is provided between said inner cutting ring (I) and said outer cutting ring (III) for accommodating the foreskin.

2. An anastomat for circumcision of claim 1, characterized in that, it further comprises:

an elevating tubular cutting knife (II) for cutting the foreskin comprising a cutting casing pipe (24), a helix groove (14) arranged on the pipe wall of said cutting casing pipe (24), a pipe foot (25) arranged at the lower end of said cutting casing pipe (24), and a rotary buckle (26) connected with said pipe foot (25);

said elevating tubular cutting knife (II) is sleeved between said inner cutting ring (I) and said outer cutting ring (III), and said pipe foot (25) of said elevating tubular cutting knife (II) is inserted through an arc groove (16) on said lower circular blocking piece (10) in the connecting ring (IV) so as to be connected to said rotary buckle (26) on the tubular cutting knife (II).

3. An anastomat for circumcision of claim 2, characterized in that, said connecting plate (3) of the inner cutting ring (I) is provided with a projecting snap (13) on its external surface which is fitted with said helix groove (14) on the pipe wall of the cutting casing pipe (24) of said elevating tubular cutting knife (II).

4. An anastomat for circumcision of claim 2, characterized in that, said cutting casing pipe (24) of the elevating cutting knife (II) has an end provided with an acute-angled cutting edge (21) or a zigzag cutting edge (21a) which is fitted with the inner side of said upper annular blocking piece (6) of the outer cutting ring (III), or with a rubber washer (4) arranged in said upper annular blocking piece (6) of the outer cutting ring (III), in a pressing mode.

5. An anastomat for circumcision of claim 4, characterized in that, said cutting casing pipe (24) of the elevating tubular cutting knife (II) has

an inner diameter equal to the outer diameters of said upper casing pipe (1) and said lower casing pipe (2) in the inner cutting ring (I).

6. An anastomat for circumcision of claim 1 or 2, characterized in that, said connecting rod (8) is provided with a graduated ruler (17), a digital ruler (17-1) and an alarm (17-2).

7. An anastomat for circumcision of claim 6, characterized in that, said lower sleeve (7) of the outer cutting ring (III) and said casing pipe (9) of the connecting ring (IV) are also provided with graduated rulers (15) on the external surfaces, respectively.

8. An anastomat for circumcision of claim 6, characterized in that, said digital ruler includes a raster digital ruler (17-1), an electromagnetic induced digital ruler, and an infrared digital ruler.

9. An anastomat for circumcision of claim 6, characterized in that, said alarm comprises a circuit board, on which a alarming or reminding memory chip, a speech chip are provided; said speech chip is provided for warning the situation that said lower sleeve (7) of the outer cutting ring (III) is connected with said casing pipe (9) of the connecting ring (IV) overly tightly, and/or reminding the information of wound healing.

10. An anastomat for circumcision of claim 1 or 2, characterized in that, face teeth (12) are evenly distributed on the end surface of said upper casing pipe (1) of the inner cutting ring (I), said face teeth (12) are formed into patterns (11) and fitted with the inner side of said upper circular blocking piece (6) of the outer cutting ring (III) or a rubber washer (4) arranged in said upper circular blocking piece (6), in a pressing mode.

11. An anastomat for circumcision of claim 1 or 2, characterized in that, said upper casing pipe (1) of the inner cutting ring (I) has an upper

end whose section is formed into Λ-type tooth (12a) or M-type tooth (12b) which is fitted with the inner side of said upper circular blocking piece (6) of the outer cutting ring (III) or a rubber washer (4) arranged in said upper circular blocking piece (6), in a pressing mode.

12. An anastomat for circumcision of claim 1 or 2, characterized in that, each of said upper casing pipe (1) and lower casing pipe (2) of the inner cutting ring (I) is a splicing casing pipe (18) formed into a circular spliced casing pipe (18) consisted of several segments of arc plates (19) spliced together by a snap fastener (20) in a snap-fit way; a lacerable strip (27) which is liable to be torn longitudinally is arranged on the pipe wall of each of said upper casing pipe (1) and lower casing pipe (2) of the inner cutting ring (I), respectively.

13. An anastomat for circumcision of claim 1 or 2, characterized in that, said outer cutting ring (III) and said connecting ring (IV) are connected with each other by a thread (22), or by clamping a snap arranged on the external wall of said outer cutting ring (III) into a slot arranged on said connecting ring (IV), or by engaging a ratchet with a screw thread arranged on said outer cutting ring (III) and said connecting ring (IV), respectively, wherein the ratchet arranged on said connecting ring (IV) is liable to be torn.

14. An anastomat for circumcision of claim 1 or 2, characterized in that, said upper circular blocking piece (6) is provided with several projecting spots (6-1) on its internal surface, a washer is arranged below said projecting spots (6-1), while a rubber pad is arranged below said washer.

15. An anastomat for circumcision of claim 1 or 2, characterized in that, there are frosted patterns arranged on the surfaces of said inner

cutting ring (I), outer cutting ring (III) and connecting ring (IV).

16. An anastomat for circumcision, comprising: a tubular inner ring (28), a tubular outer ring (29) sleeved onto the outer side of said tubular inner ring, and an empty cavity (30) for accommodating the foreskin arranged between said tubular inner ring and said tubular outer ring; said anastomat for circumcision is characterized in that, said outer ring is consisted of an outer ring A (29-1) and an outer ring B (29-2) connected with each other, and the end of each of the outer ring A and the outer ring B is provided with a stop collar (31) having a washer (32) arranged at its inner side, respectively; one end of said tubular inner ring is formed as a circumcision end (33) whose external side is provided with a projecting edge (34); the lower end of said projecting edge (34) is equipped with a binding strip (35) for fastening the foreskin; said circumcision end is fitted with said washer arranged at the inner side of the stop collar at the end of the outer ring A so as to extrude the foreskin; while the other end of said tubular inner ring is fitted with the inner side of said stop collar arranged at the end of the outer ring B (29-2) so as to axially compress against the tubular inner ring.17. An anastomat for circumcision of claim 16, characterized in that, there are through holes (36) for injecting medicine or cleaner fluid arranged on the side wall of said tubular outer ring or the end surface of said stop collar; several dismounting holes (37) for dismounting the connection between said outer ring A and said outer ring B are arranged on the side wall of the tubular outer ring.

18. An anastomat for circumcision of claim 17, characterized in that, the external wall of said tubular outer ring is provided with bumps (38) or grooves or patterns used for slip-resistance.

19. An anastomat for circumcision of claim 16, characterized in that, said circumcision end is provided with several projecting spots (39) at its end.

20. An anastomat for circumcision of claim 16, characterized in that, said circumcision end is provided with several saw teeth (40) at its end.

21. An anastomat for circumcision of claim 19 or 20, characterized in that, the other end of said tubular inner ring is connected with said stop collar arranged on the outer ring B to form a whole.

22. An anastomat for circumcision of claim 19 or 20, characterized in that, the projecting edge on the external side of said circumcision end has a surface formed into a taper face (41) whose lower end forms a right angle (42) with the external wall of said tubular inner ring, through which the foreskin can be fastened on the external wall of the tubular inner ring by a binding strip; wherein said taper face is fitted with positioning bumps (43) on a taper face or arc face between the internal surface of the outer ring A and the internal surface of the stop collar.

23. An anastomat for circumcision of claim 22, characterized in that, said projecting edge is formed into several bumps segments.

24. An anastomat for circumcision of claim 23, characterized in that, said tubular inner ring is a splicing ring consisted of at least two semicircles which are spliced together.

25. An anastomat for circumcision of claim 18, characterized in that, said tubular outer ring (29) is consisted of two semicircles whose ends are connected with each other through a snap fastener or a screw thread.

26. An anastomat for circumcision, comprising an outer ring (44) for cutting and clamping, and an inner ring (45) for casing the foreskin; said anastomat for circumcision is characterized in that, said inner ring

consists of a whole ring, two semicircles, or more than two arc segments, and the external surface of the inner ring (45) is provided with at least one circle of recess (46) having an elastic washer (47) arranged at its surface; the inner side of said outer ring is provided with at least one circle of knife edge (78) having several saw teeth or projecting spots (48) evenly distributed at its fringe; said knife edge is fitted with said recesses, so as to extrude and/or cut off the foreskin; there are channels (52) arranged on the side wall of said outer ring (44) for injecting medicine solution which are communicated with the empty cavity between said outer ring (44) and said inner ring (45).27. An anastomat for circumcision of claim 26, characterized in that, said outer ring (44) is formed into two semicircular split rings or a integrated flexible split ring (77) having at least one opening with two ends provided with a upper knife edge (72A) junction and a corresponding lower knife edge (72B) junction respectively; each of said upper knife edge (72A) and lower knife edge (72B) is a single-layered knife edge or a double-layered knife edge coated with anti-infection coating; there are several cutting blades (79) vertical to said double-layered knife edge (78) sandwiched therebetween;

the end of said opening, where the upper knife edge (72A) junction is arranged, is provided with a first ladder snap-fitted block (73), while the other end of said opening, where the lower knife edge (72B) junction is arranged, is provided with a second ladder snap-fitted block (74), and said first ladder snap-fitted block (73) and said second ladder snap-fitted block (74) are fitted with each other; each of said first ladder snap-fitted block (73) and said second ladder snap-fitted block (74) is formed as single-layered or double-layered (78);

said first ladder snap-fitted block (73) is arranged below the upper

knife edge (72A) junction, and said second ladder snap-fitted block (74) is arranged above the lower knife edge (72B) junction;the fringe of each of said upper knife edge (72A) junction and said lower knife edge (72B) junction is provided with a round corner.

28. An anastomat for circumcision of claim 27, characterized in that, said upper knife edge (72A) and/or said lower knife edge (72B) is provided with patterns.

29. An anastomat for circumcision of claim 26, characterized in that, said outer ring (44) is consisted of two semicircular split rings providing two openings, one of which may be connected by a connecting snap (53); while the integrated flexible split ring provides a opening and a un-split connected part;

one of the openings of said two semicircular split rings, or the opening of said integrated flexible split ring has two ends provided with a upper knife edge (72A) junction and a corresponding lower knife edge (72B) junction respectively; the fringe of each of said upper knife edge (72A) junction and said lower knife edge (72B) junction is provided with a round corner.

30. An anastomat for circumcision of claim 29, characterized in that, the un-split connected part of said integrated flexible split ring, or the other opening of said two semicircular split rings is locked and fixed through a screw stem (82).

31. An anastomat for circumcision of claim 29, characterized in that, any opening of said two semicircular split rings, or the opening of said integrated flexible split ring has two ends provided with L-shaped parts (55) respectively which are fitted with each other; each of said L-shaped parts (55) is provided with a connecting rod at its top end and a

connecting hole (57) on a platform at its bottom end; wherein the connecting rod of one L-shaped part (55) is fitted with the connecting hole (57) of the other L-shaped part (55); each of said L-shaped parts has a vertical end whose internal side is provided with a dentoid protuberance (58) or dentoid groove (59), wherein the dentoid protuberance (58) or dentoid groove (59) of one L-shaped part (55) is fitted with the dentoid groove (59) or dentoid protuberance (58) of the other L-shaped part (55).

32. An anastomat for circumcision of claim 29, characterized in that, any opening of said two semicircular split rings, or the opening of said integrated flexible split ring has two ends provided with a hook-like protuberance (61) or a slotted hole (62) respectively, wherein the hook-like protuberance (61) or slotted hole (62) arranged on one end is fitted with the slotted hole (62) or hook-like protuberance (61) arranged on the other end; each of said hook-like protuberances (61) is consisted of a connecting plate and an inverted-V-type clamping piece (64), wherein said connecting plate has one end connecting to the middle part of the clamping piece (64).

33. An anastomat for circumcision of claim 29, characterized in that, any opening of said two semicircular split rings, or the opening of said integrated flexible split ring has two ends provided with concave slotted holes (66) respectively; said concave slotted holes (66) receives a bow tie-like block (67).

34. An anastomat for circumcision of claim 29, characterized in that, any opening of said two semicircular split rings, or the opening of said integrated flexible split ring has two ends provided with bar-type denticles (69) or bar-type sprocket holes (70) respectively, wherein the bar-type denticle (69) or bar-type sprocket hole (70) arranged at one end

is fitted with the bar-type sprocket hole (70) or bar-type denticle (69) arranged on the other end.

35. An anastomat for circumcision of claim 29, characterized in that, said outer ring (44) formed into said two semicircular split rings or said integrated flexible split ring is provided with two circles of snap rings (49, 50) thereon; while said inner ring (45) is provided with recesses (46) thereon which are fitted with said snap rings (49, 50); said recesses (46) are provided with a convex ring (51) therebetween; said inner ring (45) is consisted of a left ferrule and a right ferrule which are configured to be spaced apart from each other with a junction provided with a round corner.

36. An anastomat for circumcision of claim 29, characterized in that, one opening of said two semicircular split rings, or the opening of said integrated flexible split ring has one end provided with a graduated ruler (83) or a digital ruler (68) for displaying dates indicating the tightness degree of the snap-fit, and the other end provided with an alarm (85) for reminding an overly tight snap-fitted situation and/or information of wound healing.

37. An anastomat for circumcision of claim 29, characterized in that, either end of one opening of said two semicircular split rings or the opening of said integrated flexible split ring said opening is provided with an unlocking stem (80) and an unlocking hole (81).

38. An anastomat for circumcision of claim 26, characterized in that, there is a rubber pad arranged between said outer ring (44) and said inner ring (45).

39. An anastomat for circumcision of claim 26, characterized in that, there are frosted patterns arranged on the surfaces of said outer ring (44)

and said inner ring (45).

40. An anastomat for circumcision of claim 26, characterized in that, said channels (52) for injecting medicine solution formed on the outer ring (44) are configured to be two or more.

CLAIMS

1. An anastomat for circumcision comprising an outer ring (44) for cutting and clamping, and an inner ring (45) for casing the foreskin, characterized in that, said inner ring (45) is formed into a whole ring, two semicircles, or more than two arc segments; the external surface of said inner ring (45) is provided with at least one circle of recess (46), and the inner side of said outer ring (44) is provided with at least one circle of knife edge (78) which is fitted with said recesses (46) so as to extrude and/or cut the foreskin; said outer ring (44) is formed into two semicircles or a integrated flexible split ring (77) having openings; said opening has two ends provided with a upper knife edge (72A) junction and a corresponding lower knife edge (72B) junction, respectively; each of said upper knife edge (72A) and lower knife edge (72B) is a single-layered knife edge or a double-layered knife edge (78); there are several cutting blades (79) vertical to said double-layered knife edge (78) sandwiched there-between.

2. An anastomat for circumcision of claim 1, characterized in that, said single-layered knife edge or double-layered knife edge (78) is coated with anti-infection coating.

3. An anastomat for circumcision of claim 2, characterized in that, one end of said opening, where the upper knife edge (72A) junction is arranged, is provided with a first ladder snap-fitted block (73); while the other end of said opening, where the lower knife edge (72B) junction is arranged, is provided with a second ladder snap-fitted block (74); said first ladder snap-fitted block (73) and said second ladder snap-fitted block (74) are fitted with each other; each of said first ladder snap-fitted block (73) and said second ladder snap-fitted block (74) is formed to be

single-layered or double-layered (78);

said first ladder snap-fitted block (73) is arranged below the upper knife edge (72A) junction, and said second ladder snap-fitted block (74) is arranged above the lower knife edge (72B) junction.

4. An anastomat for circumcision of claim 3, characterized in that, said upper knife edge (72A) junction and said lower knife edge (72B) junction are locked and fixed through a screw stem (82).

5. An anastomat for circumcision of any one of claims 1 to 4, characterized in that, said outer ring (44) is consisted of two semicircular split rings which provide two openings; one of said openings is closed by a connecting snap (53).

6. An anastomat for circumcision of claim 1, characterized in that, said upper knife edge (72A) junction and said lower knife edge (72B) junction are provided with L-shaped parts (55) respectively which are fitted with each other; each of said L-shaped parts (55) is provided with a connecting rod at its top end and a connecting hole (57) on a platform at its bottom end; wherein the connecting rod of one L-shaped part (55) is fitted with the connecting hole (57) of the other L-shaped part (55); each of said L-shaped parts has a vertical end whose internal side is provided with a dentoid protuberance (58) or dentoid groove (59), wherein the dentoid protuberance (58) or dentoid groove (59) of one L-shaped part (55) is fitted with the dentoid groove (59) or dentoid protuberance (58) of the other L-shaped part (55).

7. An anastomat for circumcision of claim 1, characterized in that, said upper knife edge (72A) junction and said lower knife edge (72B) junction are provided with a hook-like protuberance (61) or a slotted hole (62) respectively, wherein the hook-like protuberance (61) or slotted hole

(62) arranged on one junction is fitted with the slotted hole (62) or hook-like protuberance (61) arranged on the other junction; each of said hook-like protuberances (61) is consisted of a connecting plate and an inverted-V-type clamping piece (64), wherein said connecting plate has one end connecting to the middle part of the clamping piece (64).

8. An anastomat for circumcision of claim 1, characterized in that, said upper knife edge (72A) junction and said lower knife edge (72B) junction are provided with concave slotted holes (66) respectively; said concave slotted hole (66) receives a bow tie-like block (67).

9. An anastomat for circumcision of claim 1, characterized in that, said upper knife edge (72A) junction and said lower knife edge (72B) junction are provided with bar-type denticles (69) or bar-type sprocket holes (70) respectively, wherein the bar-type denticle (69) or bar-type sprocket hole (70) arranged on one junction is fitted with the bar-type sprocket hole (70) or bar-type denticle (69) arranged on the other junction.

10. An anastomat for circumcision of claim 1, characterized in that, said outer ring (44) is provided with two circles of snap rings (49, 50) thereon; while said inner ring (45) is provided with recesses (46) thereon which are fitted with said snap rings (49, 50); said recesses (46) are provided with a convex ring (51) there-between; said inner ring (45) is consisted of a left ferrule and a right ferrule which are configured to be spaced apart from each other by a junction provided with a round corner.

11. An anastomat for circumcision of claim 1, characterized in that, said opening has one end provided with a graduated ruler (83) or a digital ruler (68) for displaying dates indicating the tightness degree of the snap-fit, and the other end provided with an alarm (85) for reminding an

overly tight snap-fitted situation and/or information of wound healing.

12. An anastomat for circumcision of claim 1, characterized in that, either end of said opening is provided with an unlocking stem (80) and an unlocking hole (81).

13. An anastomat for circumcision of claim 1, characterized in that, there is a rubber pad arranged between said outer ring (44) and said inner ring (45).

14. An anastomat for circumcision of claim 1, characterized in that, there are frosted patterns arranged on the surfaces of said outer ring (44) and said inner ring (45).