What is claimed is:

1. An implantable prosthetic device (100) for helping to seal native heart valves and prevent or reduce regurgitation therethrough, the prosthetic device (100) comprising:

a coaption element (110);

a plurality of paddles (120, 122) moveable from an open position to a closed position such as to capture native mitral or tricuspid valve leaflets (42, 44) between the paddles (120, 122) and the coaption element (110); and

a double-ended barb clasp (3000) having a base (3010) with hinge portions (3020) disposed proximate the coaption element (110) and moveable arms (3030) extending from both ends of the base (3010);

wherein each of the moveable arms (3030) is moveable from an open position to a closed position to pinch the native mitral or tricuspid valve tissue (42, 44) against a respective one of the plurality of paddles (120, 122).

2. The device of claim 1, wherein the coaption element (110) has an upper end configured to be positioned in or adjacent to the atrium, a lower end configured to be positioned in or adjacent the ventricle, and a side surface that extends between the native leaflets.

3. The device of any one of claims 1-2, wherein the coaption element (110) is configured to be positioned within the native heart valve orifice to help form a more effective seal between the native leaflets.

4. The device of any one of claims 1-3, wherein the coaption element (110) has a non-cylindrical shape.

5. The device of any one of claims 1-4, wherein the coaption element (110) has an oval cross-sectional shape or a crescent cross-sectional shape.

6. The device of any one of claims 1-5, wherein the coaption element (110) is configured to self-expand from a radially compressed stated to a radially expanded state.

7. The device of claim 6, wherein the coaption element (110) is formed from a flexible material that may be a mesh, woven or braided, preferably wherein the flexible material is a shape-memory alloy wire such as Nitinol.

8. An implantable prosthetic device (100) for helping to seal native heart valves and prevent or reduce regurgitation therethrough, the prosthetic device (100) comprising:

a coaption element (110) having a non-cylindrical shape;

a plurality of paddles (120, 122) moveable from an open position to a closed position such as to capture native mitral or tricuspid valve leaflets (42, 44) between the paddles (120, 122) and the coaption element (110);

a plurality of clasps (130) moveable from an open position to a closed position.

9. The device of claim 8, wherein the coaption element (110) is configured to be positioned within the native heart valve orifice to help form a more effective seal between the native leaflets.

10. The device of any one of claims 8 and 9, wherein the coaption element (110) is configured to self-expand from a radially compressed stated to a radially expanded state.

11. The device of claim 10, wherein the coaption element (110) is formed from a flexible material that may be a mesh, woven or braided, preferably wherein the flexible material is a shape-memory alloy wire such as Nitinol.

12. An implantable prosthetic device (100) for helping to seal native heart valves and prevent or reduce regurgitation therethrough, the prosthetic device (100) comprising:

a coaption element (110);

a plurality of paddles (120, 122) moveable from an open position to a closed position such as to capture native mitral or tricuspid valve leaflets (42, 44) between the paddles (120, 122) and the coaption element (110);

a plurality of clasps (130) moveable from an open position to a closed position; and

a covering over the coaption element (110) and paddles (120, 122).

13. The device of claim 12, wherein the covering is formed from a flexible material that may be a mesh, woven or braided, preferably wherein the flexible material is a cloth.

14. The device of any one of claims 12 or 13 wherein, the plurality of clasps (130) is provided by a double-ended barb clasp (3000) having a base (3010) with hinge portions (3020) disposed proximate the coaption element (110) and moveable arms (3030) extending from both ends of the base (3010);

wherein each of the moveable arms (3030) is moveable from an open position to a closed position to pinch the native mitral or tricuspid valve tissue (42, 44) against a respective one of the plurality of paddles (120, 122).

15. The device of any one of claims 12-14, wherein the coaption element (110) has an upper end configured to be positioned in or adjacent to the atrium, a lower end configured to be positioned in or adjacent the ventricle, and a side surface that extends between the native leaflets.

16. The device of any one of claims 12-15, wherein the coaption element (110) is configured to be positioned within the native heart valve orifice to help form a more effective seal between the native leaflets.

17. The device of any one of claims 12-16, wherein the coaption element (110) has a structure that is impervious to blood and that allows the native leaflets to close together on each side of the coaption element (110) during ventricular systole to block blood from flowing from the ventricle back into the atrium.

18. The device of any one of claims 12-17, wherein the coaption element (110) has a non-cylindrical shape.

19. The device of any one of claims 12-18, wherein the coaption element (110) has an oval cross-sectional shape or a crescent cross-sectional shape.

20. The device of any one of claims 12-19, configured to seal against two or three native valve leaflets.

21. The device of any one of claims 12-20, wherein the coaption element (110) is configured to self-expand from a radially compressed stated to a radially expanded state.

22. The device of any one of claims 14 to 21, further comprising actuating means (116) attached to ends of each of the moveable arms (3030).

23. The device of claim 22, wherein applying tension to the actuating means (116) causes the moveable arms (3030) to pivot on the hinge portions (3020).

24. The device of any one of claims 22 or 23, wherein the actuating means (116) can be actuated independently so that each barb clasp (3000) can be opened and closed independently.

25. The device of claim 24, wherein the barb clasp (3000) can be opened and closed independently of the position of the paddles (120, 122).

26. The device of any one claims 14 to 25, wherein the barb clasp (3000) is spring loaded so that in the closed position the barb clasp (3000) is configured to continue to provide a pinching force on the captured native leaflets.