Claims

1. A fastener, comprising:

a cylindrical body having a top, a bottom and a central vertical axis;

a vertical axial bore adapted to hold an article and extending from a mouth at the top of the body downward to an end wall of the bore at the bottom of the body transverse to the vertical axis;

a radial flange at the top of the body surrounding the mouth of the bore;

a deformable peripheral lip extending upwardly from the bore mouth; and

at least one upwardly-projecting deformable knob means located on the end wall of the body for holding-an article within the bore rigidly held between the lip and said knob after they are simultaneously deformed against opposite ends of the article.

2. The fastener of claim 1 in its free state further including attachment means located on the outside sidewalls of the body directly below the flange.

3. The fastener of claim 1 wherein an outside surface of the lip is inwardly tapered in the upward direction.

4. The fastener of claim 2 wherein the attachment means is a circular peripheral undercut in the sidewalls for receiving the cold flow of material from a host object.

5. The fastener of claim 4 further including alignment means for radially aligning the body with a host object on the outer surface of the bottom portion of the body side walls.

6. An assembly, comprising:

a retainer comprising;

a cylindrical body having a top, a bottom and a central vertical axis;

an axial bore extending from a mouth at the top of the body downward to a transverse end wall of the bore at the bottom of the body;

a radial flange at the top of the body surrounding the mouth of the bore;

a deformable peripheral lip extending inwardly from the bore mouth;

at least one upwardly projecting deformable knob located on the bore end wall of the body; and,

an article rigidly held between the lip and said knob.

7. The assembly of claim 6 wherein the lip and the knob are adapted to be simultaneously deformed against opposite top and bottom sides of the article as opposite ends of the retainer are pressed against it.

8. The assembly of claim 7 wherein the article has a peripheral chamfer that receives the deformed lip of approximately volume equal to the chamfer such that an operative surface of the article lies flush

with the flange and the lip after the lip is deformed against the article.

9. The assembly of claim 8 wherein the article is a magnet.

10. The assembly of claim 7 wherein the article is rigidly held within the retainer only by capture between the lip and the knob.

11. The assembly of claim 10 wherein the article lies entirely flush with the top of the cylindrical body without any gaps between them.

12. The assembly of claim 11 further including attachment means located on the outside of the body.

13. The assembly of claim 12 wherein the attachment means is located directly below the flange.

14. The assembly of claim 13 further including a host object with a hole into which the retainer is mounted.

15. The assembly of claim 14 wherein the attachment means is a circular peripheral undercut in the outer sidewalls of the body for receiving the cold flow of material from the host object which mechanically interlocks the retainer to the host object.

16. The assembly of claim 15 wherein the host object is composed of metal.

17. The assembly of claim 16 wherein the host object is a sheet of aluminum.

18. The fastener of claim 5 wherein the alignment means comprises at least one void at the bottom of the retainer body.

19. The fastener of claim 18 wherein the alignment means comprises at least one outward facing planar surface of the retainer body side wall.

20. The fastener of claim 19 wherein the alignment means comprises two outward facing parallel planar surfaces located on opposite sides of the retainer at the bottom most end of the retainer.