the circular portion 120 and the minor length L_2 extends from the linear edge 124, through the center X to the circumference 122 of the circular portion 120. The first and second plates 102, 104 are shaped as a circular segment to allow the charge/melt to be viewed. In other embodiments, the cover member 100 is fully circular.

[0053] In some embodiments, the diameter of the cover member 100 is at least 0.75 times the diameter of the central passage 26 at the bottom 58 of the heat shield 24 or, as in other embodiments, at least 0.8 times, at least 0.9 times, at least 0.95 times, or at least 0.99 times the diameter of the central passage 26 at the bottom 58 of the heat shield 24.

[0054] In some embodiments, the first plate 102 and second plates 104 are made of graphite. The graphite may be coated with silicon carbide (SiC). The first and second plate 102, 104 may be composed of other suitable materials. The first and second plates 102, 104 have any suitable thickness T_{102}, T_{104} (Figs. 8 and 11) that prevents thermal stresses which result in cracking or damage of the first and second plates 102, 104 (e.g., thickness between 3 mm and 50 mm).

[0055] With reference to Figs. 13-14, the cover member 100 includes a shaft 150 that supports the cover member 100. The shaft 150 may be connected to the first and/or second plates 102, 104 in any suitable coupling arrangement. In the illustrated embodiment, the shaft 150 includes an elongated rectangular portion 154 and a collar 156. The collar 156 has a diameter D_{156} less than a diameter of the hub chamber 126 (Fig. 8) and greater than