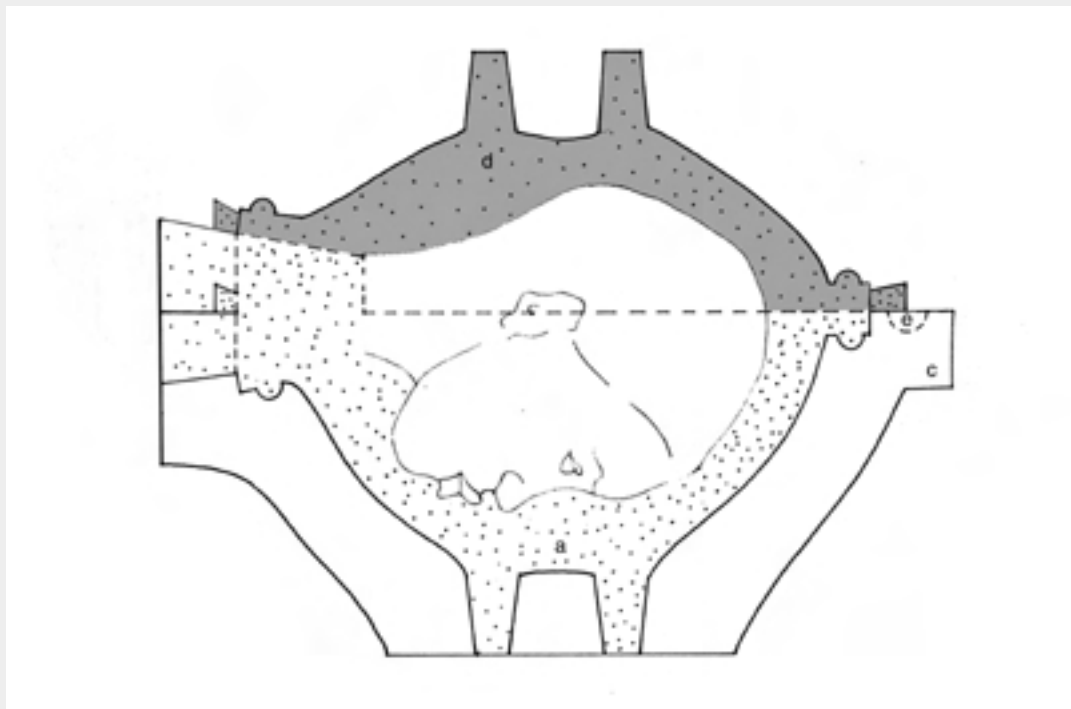


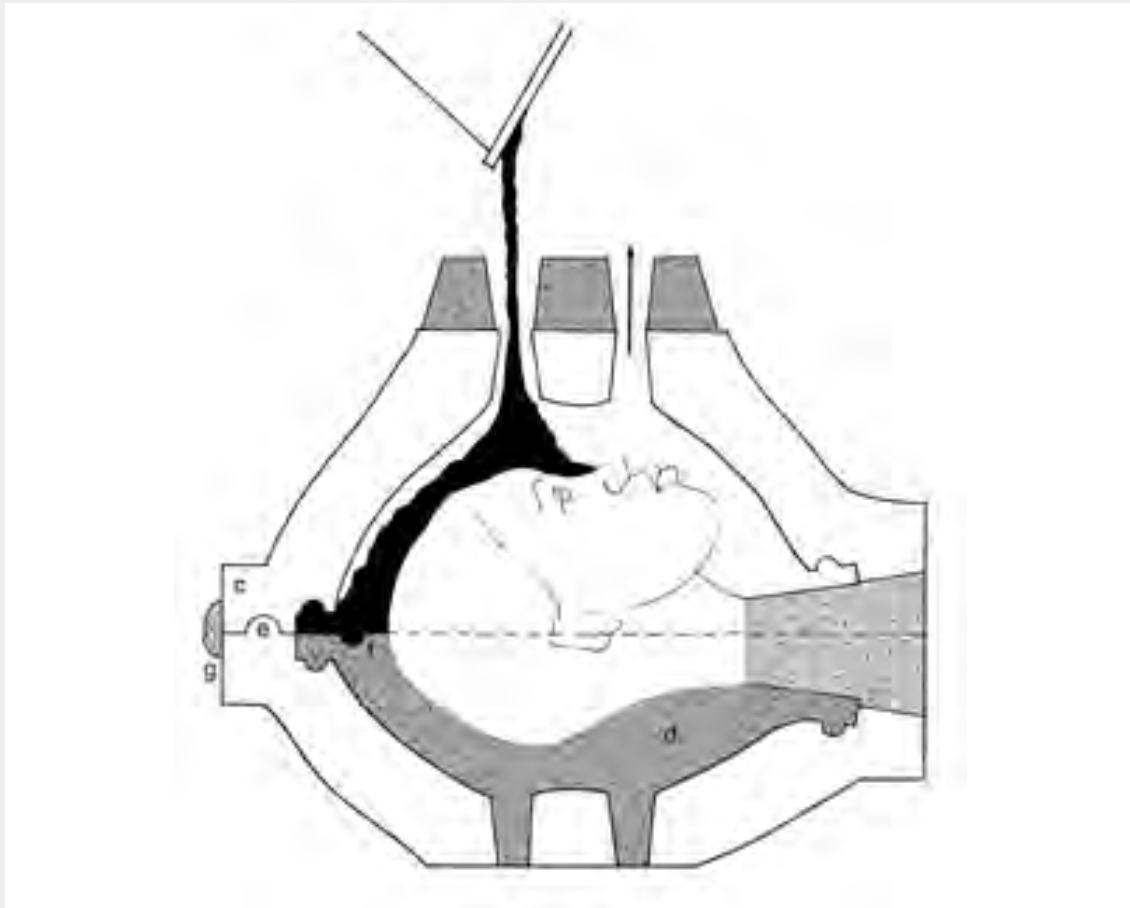
### **Stages of Construction for a Restrained Case Reproduction Mould (1)**

The pattern is wrapped in a layer of protective clingfilm and a clay bed is built up to the 'parting' (dashed) line. A clay blanket (a) is built up over the surface of the pattern, this is later replaced by the moulding medium. The blanket includes an entrance and vent for the moulding compound and displaced air, as well as an entrance for a filler medium. A number of small diameter subsidiary vents (not shown) may be placed at strategic points on the blanket. Registration keys and grooves (b) are also added/cut into the clay blanket.



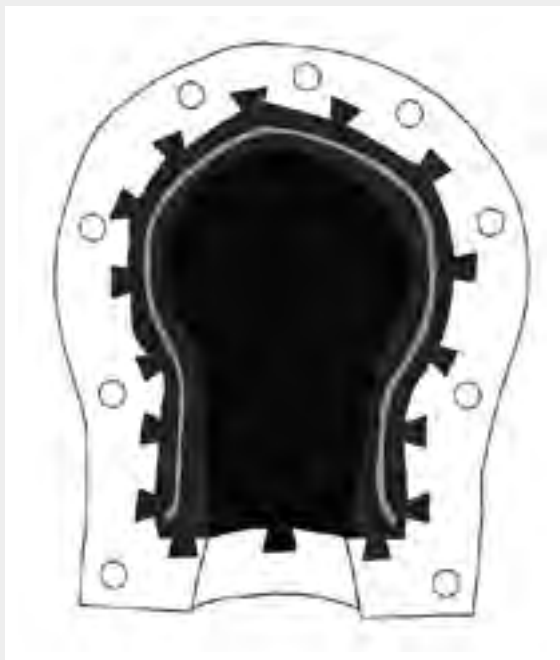
### **Stages of Construction for a Restrained Case Reproduction Mould (2)**

A plaster and scrim case (c) is formed over the clay blanket and allowed to harden. A flange (c) is built into the case, this later allows the completed mould to be secured with 'dogs'. Once the case has hardened, the mould is inverted and a clay blanket is built up on the other side of the parting line (d). Before a second plaster case is built up over this side, a series of concave registration points are cut into the inner face of first plaster case (e). The inner surface of the first case is also treated liberally with a parting agent, thus preventing plaster to plaster adhesion.



**Stages of Construction for a Restrained Case Reproduction Mould (3)**

Once the second case has hardened, the mould is inverted back to it's original position, and the first case is removed. The first clay blanket and clingfilm is stripped from the surface of the pattern, and the exposed surface of clay in the parting line is smoothed off. This dividing clay wall then has a registration groove cut in (f). The first case is replaced and fixed to the second case with dog. Soft clay is pressed into the seam between the two cases to prevent leakage (g). Once secure, a moulding compound is prepared and poured into the case. Once the poured rubber has cured, the mould is inverted and the process repeated for the second half of the mould after treating any exposed areas of first poured rubber with a release agent (NB. keys omitted for clarity).



**Fig 8**

Schematic open half of a bivalve mould showing registration points in the plaster case, along with the keys and cut groove for locating the rubber impression. Mould keys are moulded with an edge taper, this locks into the plaster and helps retain the rubber correctly within it's case.