In 1994 Jonathan Miller made his Covent Garden debut as an opera director, having also designed the sets. In the programme he wrote that 'the formal artificiality of the work is part of its essential mechanism, for it demonstrates reality without slavishly representing it. It is an argument as opposed to a report - an epigram rather than a memo'. His production of Così fan tutte was set in modern times and relied upon costumes exclusively designed by Giorgio Armani. The public is well used to Armani's own restricted palette of plain-coloured fabrics in soft textures and colours largely restricted to fawns, beiges and browns. This simple idea was carried through into the colours and textures of the set, itself very simply arranged using a large backdrop wall with an opening surrounded by a suggestion of a classical architrave. With all the technical and financial power of the Royal Opera behind him, Miller chose this simple and consistent message which effectively conveyed his interpretation of 'demonstrates reality without slavishly representing it'. It was surely the determination with which he resisted any temptation to depart from this one simple single idea which made this production so memorable visually.

The industrial designer James Dyson is famous for a number of innovative domestic products and is perhaps most well known for his revolutionary 'Ballbarrow'. Dyson had experience of using a traditional barrow and found it frequently got stuck in the muddy ground of a garden (Fig. 11.4). He transferred the idea of using a spherical wheel from some previous experience and adapted the shape of the body of the barrow to make it more suitable for mixing cement and for tipping. As Roy (1993) says, throughout the design process was 'an essential generating idea ... a ball-shaped wheel'. Roy documents this and other cases where the whole design process is driven by one single, relatively simple, but revolutionary idea.

Another dramatic example of this is reported by Nigel and Anita Cross in a fascinating study of the successful racing-car designer Gordon Murray. It was Murray, when working for the Brabham formula one team, who first introduced the idea of refuelling pit stops since adopted by all his competitors. Murray describes how he was thinking logically how to make the car lighter in order to make it faster. The idea of running with a half empty fuel tank became the central driving force behind a huge development programme. At that time pit stops were only used in emergencies and to change tyres. Murray worked out the gains in time from the lighter load and calculated the maximum time he could allow for refuelling whilst still gaining an advantage. From this came the need to design a way of



Figure 11.4

According to Robin Roy, James Dyson created his revolutionary 'Ballbarrow' by working throughout the design process with an 'essential generating idea'

> injecting the fuel much faster and a way of heating up the new tyres to racing temperature before fitting them. Both have become common and accepted practice.

> These examples from very different design fields all offer very good examples of the creative process studied in Chapter 9. A moment of inspiration leading to a central or big idea combined with dogged determination and single-mindedness. Gordon Murray's own description of the pleasure he gets from his job reveals this process:

That's what is great about race car design, because even though you've had the big idea – the 'light bulb' thing, which is fun – the real fun is actually taking these individual things, that nobody's ever done before, and in no time at all try and think of a way of designing them. And not only think of a way of doing them, but drawing the bits, having them made and testing them.

(Cross 1996b)

This central generative idea may become very important to the designer for whom it sometimes becomes like a 'holy grail'. Characteristically designers become committed to, and work for,