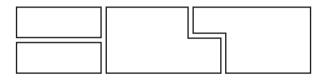
return to question the idea of deck access or cross-wall construction. Housing problems often provide ample opportunity for this second puzzle trap. It is all too easy to design rather good house types and then try to fit them on to the site regardless of the problems caused. Regrettably speculative developers frequently go so far as to build such designs so attached are they to their standard house types!

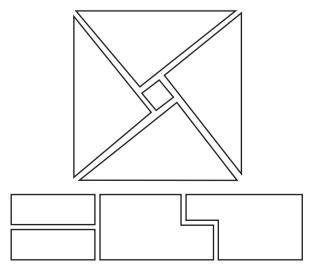
Figure 13.5
The nearest solution to the first

## The number trap

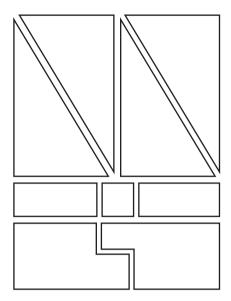
In truth we have already rather extensively discussed this trap by devoting the whole of Chapter 5 to 'measurement, criteria and judgement in design'. If a problem or any aspect of a problem can be expressed numerically then all the power of mathematics can be brought to bear on it. Any powerful tool is dangerous, and mathematics is no exception. The incorrect use of mathematical techniques on the wrong sort of numerical systems was thoroughly



**Figure 13.6**The neatest solution to the second jigsaw



**Figure 13.7** The two puzzles fitted together



**Figure 13.8**A better overall solution may depend on breaking up the original solutions

discussed in Chapter 5. However, even if all the rules have been obeyed, one even more tricky aspect of the number trap still remains. The assumption that larger numbers represent things which are bigger, better or more desirable!

I am grateful to Geoff Jones of Building and Urban Design Associates in Birmingham for a very dramatic example of this trap. He was converting some existing houses to flats so the buildings became multi-occupancy (Fig. 13.9). Due to fire regulations this necessitated a partitioning of the staircase to allow for protected escape from the upper floor flat. His drawing shows a small part of this upper floor flat conversion with a block wall surrounding the staircase on the line of the old landing balustrade with the main bedroom occupying space which had been the rear bedroom in the old house. The living space of the new flat was to be at the front of the house. Geoff Jones had cleverly used existing openings and minimised the extent of the alterations. However, the local authority refused planning permission on the grounds that the design did not meet their criterion of a minimum of 12.5 square metre floor area for main double bedrooms. The designers were therefore forced to enlarge the room which could only be done by making rather more extensive structural alterations including new lintels and folded walls.

The planning authority passed the new scheme since the floor area was increased by 0.12 square metres and now just exceeded