



*'This line shows the changes in temperature.'*

## Chapter 1 The Time Traveller

The Time Traveller (it will be convenient to call him this) was talking to us about geometry. His grey eyes shone and his usually pale face was red and excited. The fire burned brightly and there was that relaxed after-dinner feeling when thoughts run freely.

'You must listen carefully. I shall have to destroy one or two ideas that almost everyone accepts – for example, the geometry that they taught you at school. You know, of course, that a mathematical line, a line with no thickness, doesn't really exist. They taught you that? A mathematical model, which only has length, width and thickness, doesn't really exist either. It's just an idea.'

'That's all right,' said the Psychologist.

'But if you make that model out of a material,' said Filby, a red-haired man who liked an argument, 'it exists. All real things exist.'

'Most people think so. But wait a moment. Imagine a thing that doesn't last for any time. Can it have a real existence?' Filby looked thoughtful. 'Clearly,' the Time Traveller said, 'a real body must have length, width, thickness (the dimensions of space) – and also exist in time. But through a natural human weakness, we usually forget the fourth of these.'

'That,' said a very young man, 'is very clear.'

'Well, I don't mind telling you that I have been at work on this geometry of four dimensions for some time. Some of my results are interesting. Here is a record of the weather. This line shows the changes in temperature. Yesterday it was quite high, last night it fell, then this morning it rose again. Surely that line is not in any of the dimensions of space that we generally understand? It is along the time-dimension.'

'But,' said the Medical Man, looking hard at the fire, 'if time is