As we enter the year 2000, look at anything that we call ‘modern’ in our lives – power, lighting, communication, entertainment by audio, or cinema, or their descendants. Trace the story back and somewhere along the way, you encounter the name of Thomas Alva Edison. The tale of his genius – in his own words, one per cent inspiration and ninety nine per cent perspiration – has often been told. But the full technical and human details (e.g., four hours of sleep a day!) make absorbing reading. They also make us rethink the relation between science and technology. The inventions that flowed from Edison’s mind and lab were of course consistent with scientific principles. But it is not at all clear that his methods were those of conventional research. Times are very different now, but there still are hardy ‘inventors’ working on new ideas, each dreaming of being the next Edison. The world would be very different, and certainly duller, without them.

Elsewhere in the issue, we learn about the search for the final theory of matter. This started with the ancient thought experiment of dividing a drop of water (for example) ever more finely, and has now reached ‘superstring theory’, which is only in its teens. Scientists in other areas may be chilled by the prospect of a ‘final solution’ to this problem. But they have perhaps not acquired a taste for the heady brew which drives the enthusiasts in this field. This is a mix of physical consistency, mathematical uniqueness and elegance, and inclusion of most earlier ideas as limiting cases, including Einstein’s theory of gravity. Till about fifteen years ago, particle physics was driven by experiments. But the energy needed to test the new ideas directly is fifteen orders of magnitude higher than what today’s particle accelerators can produce!

Experiments are alive and well in chemistry, if this year’s Nobel Prize is any indication. And in the battle against cancer, while knowledge accumulates and treatments improve, perhaps we also learn how strong and subtle the enemy really is, and how far we may be from a final solution.