The practice of surgery combines craft, science and art. It uniquely depends on manual dexterity and therefore instruments have the potential to multiply the effectiveness of bare hands or brute force. The forerunner of this book was written by J Scultetus (he of the binding) who in 1655 wrote a text entitled Armamentarium Chirurgicum which listed, illustrated and explained the use of various surgical instruments.

For centuries surgical practice consisted of taking a history, doing a physical examination and performing the relatively simple operations that could be performed without anaesthesia. About 100 years ago surgery, along with its sister specialties, gradually developed into a science, and for the next 75 years the introduction of scientific methods fascinated and dominated surgical writings and thoughts.

In the last 50 years our lives have become increasingly influenced by technology, whether in the form of transportation, communication, recreation or in household conveniences. so it has also been in surgery. The technologies that influenced every other aspect of our lives during the present century became applicable in modified form in the diagnostic and operative phases of surgery. Properly designed instruments multiplied the efficiency of the surgeon in diagnosis, detecting physiologic changes in his patients and in the various manipulative and operative methods of treatment. Along with most other professions, and essentially all crafts, the practice of surgery has been heavily influenced and dependent upon technology.

The influence of this state of mind was illustrated by the insecurity of some young surgeons deployed to the Gulf during the 1991 War, who felt it threatening to consider practising surgery in forward hospitals in the desert without the availability of high technology devices such as respirators, blood gas measuring machines and CT scanners. The cultural shock soon wore off, when they realised that the marginal benefit of such devices was not as important as they thought if they used their abilities as sound clinicians and careful surgeons.

The focus of the papers in this volume is at the important interface that lies between clinical surgery and the biomedical industry that produces the high technology instruments that have become so much a part of clinical surgery in recent years. It is a complex field lying as it does between two fast-moving disciplines. As an advance is made in one discipline, it sponsors investigation in the other. Progress proceeds at an ever increasing pace. An example is the combination of fibre optics and miniaturised television which has spawned the current explosive growth in endoscopic surgery, creating an entirely new industry. Biomedical technology typifies the surgical revolution that characterises the closing decade of this century.

There are two forces working at this interface: surgeons and the industries that produce the instruments that are used by surgeons. This book is written by surgeons and presumably largely financed by those who produce and sell the instruments upon which modern surgical technology depends. There need be no reason to be ashamed of this liaison: for progress in technology depends on such partnership which often is financed by the research and development funds of the industries which plans to develop and sell these new devices. It is not by chance alone that the major advances in biomedical technology have arisen in countries where there is an open, profit-driven economy. The nations that ignored this stimulus to inventiveness did so to their everlasting detriment, and now find themselves almost hopelessly behind. A stern chase is a slow one however.

As I read the papers in this book, I am reminded of one of those extensive Sunday noon country club brunches where the table groans under an enormous variety of dishes. There is something for everyone. A few sticks and small raw tomatoes. At the other extreme lies the elaborate highly seasoned and exotic dishes that are gorgeous to behold and appeal to the more sophisticated. So too are the chapters in this book. Some are aimed at students. Others appeal to surgical specialists. Not many readers will want even to taste everything on the table, much less consume them all. In places the focus upon instrumentation spills over into operative technology as though the Maître de slipped in a non-consumable item such as a small entrenching tool behind the strawberry mousse.

This book represents a publishing experiment, and like most first tries, I predict that it will evolve in a different form in its subsequent editions, perhaps with more uniformity of editorial style and structural focus. But being innovative, it is interesting, and dealing with an important and emerging aspect of surgery at the fin de siecle it will serve as a helpful beacon for surgeons documenting the current status of surgical technology.