

Editorial

*America thou half-brother of the World
With something of the good and bad of every land.*

Festus V

PHILIP JAMES BAILEY (1816–1902)

December 1973 saw the 200th anniversary of the Boston Tea Party, which was one of the more colourful events which preceded the Declaration of Independence in 1776 and the political separation of the United Kingdom and the United States of America. It was, therefore, an historically significant time for an Englishman to visit colleagues in the U.S.A. and to have the honour and pleasure of, once again, sampling their legendary hospitality and of taking part in the work of several American Departments. This was just 17 years after a happy and fruitful year spent as an instructor in one of them.

It is, regrettably, true that the political bond of special relationship between the two nations, which reached its greatest strength during the Second World War, has been weakened in the last few years but linguistically, culturally and medically the United States remains our closest relation apart, perhaps, from our Commonwealth partners; there is also no doubt that in the narrower field of anaesthesia, the two countries are drawing closer together.

A contemporary,* who returned from the tenure of a Travelling Fellowship in the U.S.A. in 1956, the same year that the writer first arrived there, wrote at that time: 'The anaesthetist in America is still fighting an uphill battle for recognition. . . . The general standard of clinical anaesthesia is probably lower than in this country but the theoretical teaching in the best centres is of a distinctly high standard. . . . Such enthusiasm . . . can lead to great strides being made in the future. Until anaesthesia follows the lead of other branches of medicine and develops methods of measurement of comparable accuracy it will not reach full maturity. It is in the attempt to produce such methods that America is ahead of us.'

These words were both discerning and prophetic. Anaesthesia in the States as a specialty has certainly matured in the last two decades. An anaesthesiology department whose director was a mere associate professor of surgery in the mid-1950s now boasts a chairman of an independent service aided by two or three full professors, several associate and assistant professors and numerous instructors and residents. This expansion in quality and quantity is not confined to the teaching centres; a mid-western state anaesthesiology society meeting or post-graduate course will now fill a sizeable

* SYKES, M.K. (1956) The American approach to anaesthesia. *British Medical Journal*, 1, 1148.

auditorium; 20 years ago the company would have consisted of a handful of enthusiasts, many of them self-taught general practitioners, meeting in the back room of a hotel.

Development, training and organisation in anaesthesia in the U.S.A. owe a great deal to the long-standing and almost universal concept of multiple operating suites with their contiguous anaesthesiology offices and laboratories. It is probably true that this sort of design was the outcome of economy in the first place, but the facility of administration provided is in marked contrast to the decimation and waste of effort that goes into organising anaesthetic cover and training in the more traditional British hospitals, in which every surgical specialty lays claim to being a 'special case' with the need to have its operating theatre close to its beds. A single staff anaesthesiologist in a multiple suite can easily supervise and train two or more residents, nurses or students and encourage them in the independent monitoring of their patients during maintenance of anaesthesia. He is aided in this by the more leisurely change-over between cases which is expected in the U.S.A. and the fact that the next case can be started in another room while the first is still on the table.

The almost universal absence of anaesthetic rooms is strange to British anaesthetists and it is noticeable that, even in those few suites which were originally built with them, they have usually been adapted for other purposes. Patients, even children, seem to tolerate with equanimity being wheeled into the room where surgery will take place, and it is noteworthy that central sterile supply and special laying-up rooms enable the surgical instruments to be arranged and discreetly covered before the patient arrives. Induction *in situ* certainly enables apparatus and monitoring equipment to be arranged round the patient to the best advantage; the subsequent danger of disconnection of infusions and cables which can result when a patient is triumphantly wheeled in from an anaesthetic room is also avoided. It also obviates dangerous movement of the anaesthetised patient and the break in supervision of vital signs which the transfer can imply. There are, however, many advantages in the anaesthetist having his own territory.

Preparation for the induction of anaesthesia in America can seem to be a tedious business to a British observer. The checking and re-checking of the patients identity, vital signs and laboratory tests, the fixing of monitoring transducers and the insertion of the intravenous cannula can take a long time. Patients sometimes become anxious and distressed during the ritual, particularly the children while the infusion is being set up. We should, however, pause to consider whether we in the United Kingdom are perhaps a little cavalier towards the science of patient monitoring; the conduct of anaesthesia has often been compared to piloting an aircraft; should not our patients expect all the safety checks which modern technology provides, as does the airline passenger?

Modern technology and gadgetry really works effortlessly in the United States whether applied in the home, in the automobile or in the hospital. It works, first because it is well designed and robust, secondly because Americans are prepared to pay for gadgetry which will make for economy of effort, and thirdly because they are prepared to train themselves in the proper use of equipment. The writer listened with amused awe to an American mother instructing her daughter aged 9 in the use of a quite complicated projector with the aid of which the young lady was to give a lecture to her class; by contrast a relatively simple piece of equipment arrived in a British hospital recently with a label bearing a *cri de cœur* from the manufacturers which read: 'Please

use it our way'. How often is a piece of equipment discarded as 'useless' by someone who has tried to use it without even taking the trouble to find out how it works?

The techniques used in the U.K. and the U.S.A. have become much more uniform than they were in the 1950s. The Britisher can look with some satisfaction at the American use of what were once called '*massive*' doses of muscle relaxants and their reversal with neostigmine in '*dangerously high*' dosage and the American can be pleased with the increasing use of local analgesia in obstetrics in Great Britain. There are, of course, still many contrasts; one was amazed at the high dosage of morphia (up to 3 mg/kg) used in the so-called 'balanced' technique for major surgery and the need for a search for new hydrocarbons which are compatible with sodalime, whilst 'crash' induction for the full stomach was still looked upon with suspicion.

Blood and blood product transfusion is conducted more flexibly than in the United Kingdom. More blood products are readily available in the U.S.A. (platelets, human albumen, etc.) and a great deal of thought is given to the indications for each. Auto-transfusion apparatus—a spin-off of cardio-pulmonary perfusion technology—is also becoming more widely used and effects a considerable economy in the use of whole-blood.

The length of training required in the two countries appears, at first sight, to be very different, but analysis shows that there is not really as great a difference as might be thought. Two to three years of residency compares with the time taken to the FFARCS, and 3 or 4 years of practice before Board Certification with a Senior Registrarship in which the individual is in fact given a great deal of clinical independence. The system of taking an individual into a department for a 3-year spell of training subject to satisfactory progress is surely better than our patchwork of Senior House Officer and Registrar appointments; one notes with interest that several British teaching hospitals have in fact adopted such a system unofficially.

The American business acumen has its advantages and disadvantages when applied to medicine. It encourages the individual to provide adequate voluntary insurance for his family but it sometimes leads to a rather hard-hearted attitude to the indigent, although Medicare has done something to help the elderly. It also encourages the purchase of expensive equipment which is economically desirable but it discourages waste. Departmental budgeting leads to the benefits of economy in one field to be passed on in another to the direct benefit of those who made the initial saving.

The apparent rapport between the American clinician and his patient often seems to the outsider to be in marked contrast to the abandon with which malpractice suits are instituted; be this as it may the fear of litigation is a much greater factor than it is in Britain. The consent form used at one hospital would be enough to make the average British patient take up his bed and walk, so calamitous are the possible consequences listed. It is food for thought that, in a situation which is so litigation-conscious, arterial puncture is regarded almost as routine a procedure as venepuncture.

The attitude to nurse-anaesthesia in the United States has matured in the last two decades. The American Society of Anesthesiologists officially discouraged physicians from training or supervising nurses in the administration of anaesthesia up until 1967, but, in that year, they adopted a more liberal and realistic policy.* Nurses are now employed more on the Scandinavian pattern under the supervision of anaesthesiologists. This change is not dissimilar to the alteration of the role of midwives since the increase

* AMERICAN SOCIETY OF ANESTHESIOLOGISTS (1967) *Guidelines to the Ethical Practice of Anaesthesiology*.

in institutional obstetrics in the United Kingdom. It cannot be denied that there are advantages in the employment of trained supervised nurse-anaesthetists but their proper use presupposes a multiple operating room situation.

American anaesthesia has its problems, some of which are familiar to us; Dr David M. Little, President of the American Society of Anesthesiologists in a recent editorial (*Anesthesiology*, 1973, **39**, 467) looks with some concern at the 'almost evangelical' fervour with which some anaesthesiologists are taking up critical care medicine almost to the exclusion of actual anaesthesia in the operating room; time alone will judge the wisdom of this trend on both sides of the Atlantic, but it is certain that the specialty in the United States is enthusiastic and adaptable and has a humane and progressive future ahead of it.

Editorial notices. *Copy dates.* Contributors to the *News and notices*, *Correspondence*, *Forum* and *Book review* sections are reminded that their copy must reach the Editor by 6 June 1974 for inclusion in the September 1974 issue.

The Editor would be greatly obliged if contributors to these sections would double-space their copy and use the established format for these items.

Binding Anaesthesia. Kemp Hall Bindery will undertake the binding of the 1973 (28th) volume of *Anaesthesia* and subsequent volumes. Details will be found in the *Association news and notices* section of this issue.

The index to the 1973 (28th) volume appeared as an integral part of the November 1973 issue and a loose title page was supplied with the January 1974 issue.