

A Student at Barts Seventy years ago

The late Richard Harrison who qualified from Barts in 1944, described his medical training during the disjointed and heady days of the Second World War

At the age of 13, never having much wanted to be anything else, I decided I would be a doctor. What prompted that decision was reading *The Elephant Man and Other Reminiscences* by Sir Frederick Treves. That a young schoolboy could understand the book, and be so impressed by it, says a great deal about how simply and dramatically it is written. In my view it remains the best volume of surgical memoirs ever published, and I renew my acquaintance with it every few years.

There was no medical tradition in my family. My grandfather had been a Sanitary Inspector in Liverpool, a respected but not, perhaps, universally popular figure who patrolled the city's markets, sprinkling green dye on foodstuffs he deemed unfit for consumption. With nobody to advise us, in the summer of 1939, when I was 17, my father and I pored over the brochures issued by London's teaching hospitals. We decided Barts would be entrusted with my training, mainly because my mother had been treated there. Of all the specialists she consulted about a laryngeal carcinoma, none had been kinder or more effective than those from St Bartholomew's. It was also readily accessible from my home in Mill Hill, north-west of the city. In due course I went up to be interviewed by Charles Harris, Dean of the Medical College. It was a brief exchange, of which I can recall nothing. What I do remember is the huge poster, covering the wall of the building nearest to the Old Bailey, which proclaimed Barts was the "Mother Hospital of the



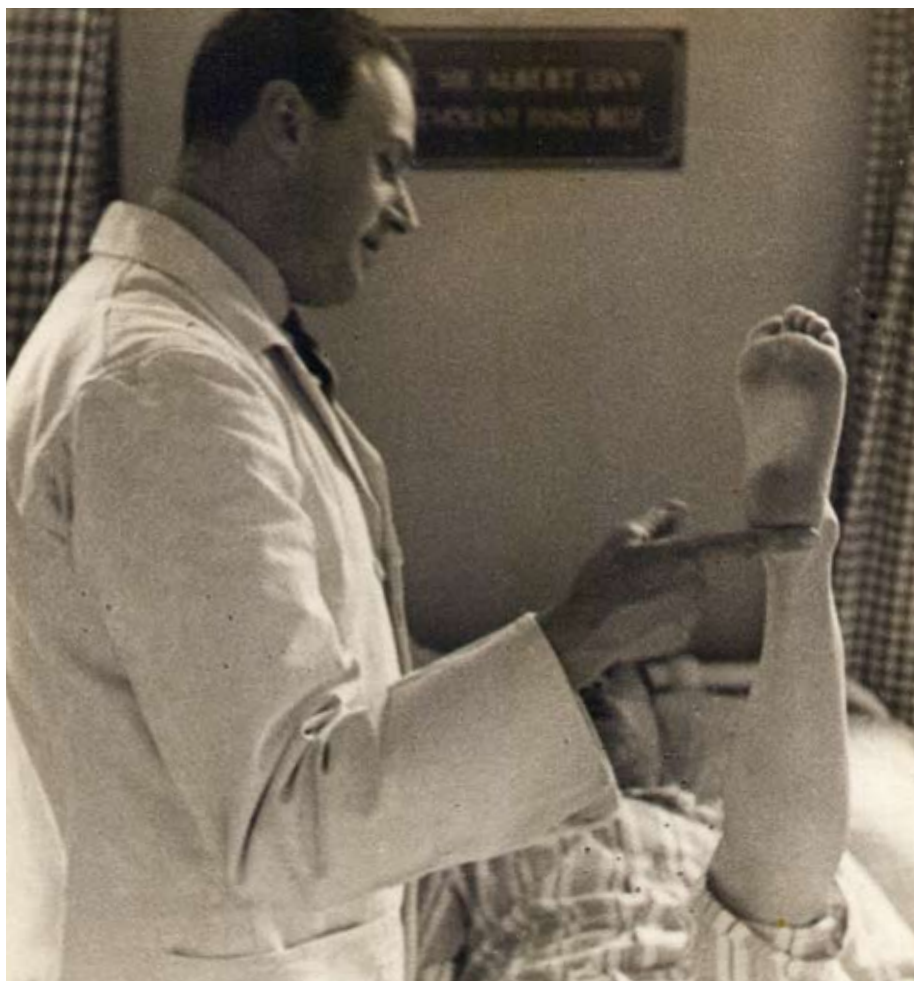
Bomb damage to the Medical Lecture Theatre, 1940

Empire". It convinced me that I had made a sensible choice. I was not, of course, to know that the war, and the evacuation of both the hospital and its medical school, would mean four years would pass before I was taught in the actual "Mother Hospital" itself.

Anticipating the later bombing of Charterhouse Square, the pre-clinical departments at Barts moved to Cambridge. Anatomy, biochemistry and physiology shared the university's facilities, while the biology, chemistry and physics departments were accommodated in The Leys School. So it was there, one morning in October 1939, that I listened to an inaugural address from Professor Hopwood, the Sub-Dean. He was a large avuncular man, with silver hair and a very authoritative manner. That lecture, like all he delivered, was prefaced by his placing his watch on the desk in front of him. Each was slow, lucid and precise, lasting, very exactly, an hour. I noticed how red, raw and eczematous his hands looked; a legacy, I later discovered, of his pioneer work in radio-activity.

The London Hospital Medical School was also evacuated to Cambridge, but the only teachers we shared were the professors of anatomy, Messrs. Hamilton and Boyd. The former, from Barts, was sometimes difficult to follow, having a dense, voluble Scots accent. Boyd, on the other hand, often evinced a gift for style and rhetoric his counterpart never matched. I am thinking especially of his lecture on the breast. After dealing with the structure and physiology of that organ, he concluded by explaining how it had evolved, with reference to its various forms in different mammals. "Finally," he said, "Nature arrived at the twin pectoral breast and all the sons of Adam cried aloud with joy." So did we.

Cambridge in wartime was a sombre, not very sociable, place. Barts was *at* the university, but not truly of it. We did not live in a college, or ever dine together. We did not even have a common room in which to forgather. Our military service was deferred for only as long as we continued to satisfy our examiners, so there was a purposeful air about us, and most of us studied hard. Of the 15 per cent of those who started with me at The Leys, but subsequently dropped out, the majority fell at the first hurdle, after 12 months. Certainly for me that "First Examination for Medical and Veterinary Degrees" was more daunting than any other I ever sat, more so even than the Final Fellowship (in which at least three out of every four candidates were rejected).



Professor AM Boyd with a male bed-patient on a ward round, 1936-39

In part this was because, though I found biology and chemistry relatively easy, I had no aptitude for the mathematics which physics entailed. During the summer months of 1940 I apprehended that I was likely to fail in that subject. Having read that an hour's study before breakfast was worth more than two afterwards, I began rising at 6.30am. Never one whose foot was "brisk to greet the morning dew," I went so

was that I fell asleep over my books, missed breakfast and was late for the morning lecture. Thus ended my only such attempt at this kind of self-improvement.

What also made the first year's study less congenial than any which followed was that the syllabus had only a tangential bearing on medicine and surgery. I could no longer enthuse, as I had done at school, about the alimentary system of the earthworm,

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far as to write, before retiring, exhortations to myself which I left on the bedside table, reminding me how important it was that I should not simply turn over when the alarm went off. For a week I felt my brain really was more receptive at day break. Perhaps I could improve my prospects still further by rising even earlier, at 5.30? What happened then

or Newton's Laws of Motion. So from the week I arrived in Cambridge, I began to haunt, however prematurely, the Pathology Museum in Tennis Court Road and even during my first term succeeded in gaining entry to Addenbrooke's Hospital. There I ran errands, was allowed to hold bowls or instrument trays and, occasionally,

even recalcitrant patients. Looking back what surprises me was the unfailing toleration of all the staff. Nobody was ever too busy to explain what he or she was doing, or to impart some useful information. Throughout my two and a half years at Cambridge I spent some part of each weekend in the Casualty Department. There were not many air raid victims (I saw those later) but patients in plenty were provided by the live-ammunition exercises going on all over the area. When the Home Guard were firing inert trench mortar rounds one of those went scudding along the ground. A soldier tried to stop it, as if it was a cricket ball, by putting out

to know at least a little physics. The town was ringed by the airfields of Bomber Command. Names such as Waterbeach, Oakington, etc became familiar because our most gravely injured cases, still wearing Sidcot jackets and flying boots, arrived in RAF ambulances. In years to come I was destined to pass a great deal of my life in A&E departments, and was often very tired but I was never bored. I never knew what emergency might present even five minutes hence, and always felt a lively sense of expectation which, in turn, owed a lot to Treves' unforgettable chapter on "The Old Receiving Room."

What made the long apprenticeship

body. From time to time I had wondered, in desultory fashion, whether that might prove an emotional, even a fearful, experience. I need not have worried. Our subjects were unclaimed corpses from the workhouse, which had been steeped in preservatives for so many weeks before reaching us that they would have been quite unrecognisable to anyone who might have known them in life. They were, indeed so shrunk and wizened, with such tough and leathery skins, as not to be instantly identifiable as human at all. As we teased them apart we gave little thought to the existence each had led. We were too pre-occupied with trying to reconcile what we found with the pictures in the stained and greasy copies of Cunningham's *Manual of Practical Anatomy*, which were propped open against them, and sold on from one generation of students to the next. I suppose we had become conditioned to the fact that we would have to dissect a human body. Others might have felt differently. Visitors to the dissecting room were not encouraged, but one weekend, when it was deserted, I took my father. He was not a squeamish man, and had seen much service on the Western Front but I heard long after that, for 24 hours subsequently, he felt unwell and could eat nothing.

Though we each dissected the whole body, it was not a single particular body. Six teams, each of three students, were assigned to every cadaver – one team to each limb, and two others to the torso and the head. This caused arguments at the start of each term, since those working on the arm began by approaching the shoulder from behind, whilst the "leg" men commenced at the front of the hip. So a notice hung from the subject's toes during the first fortnight, saying eg "Body will be turned at 2pm." Gradual disintegration thereafter resolved the problem. Each corpse was weighed when it came to the department. It had to weigh, when eventually buried in consecrated ground, about the same as it had done originally. So at the end of each day Arthur, the attendant, transferred the fragments from each cadaver back to its specific coffin. At least he did in theory. In practice he moved down the long, brightly lit, and spotlessly clean room, sweeping the pieces of tissue from each glass-topped table into one bucket. He divided its contents between all the coffins, tipping into each as much as he calculated would satisfy HM Inspectors. If that seems an arbitrary or irreverent procedure, I should add that I always

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his foot. He did not appreciate that the mass of a metal shell filled with sand is considerably greater than that of a cricket ball so its momentum (equal to half its mass multiplied by the square of its velocity) is enormously greater, even when it is indeed moving no faster. I can still remember how puzzled he was that his foot had been carried away. Perhaps, after all, it was as well

tolerable was that as it went on it became steadily more interesting. Just when I felt I could not face another dogfish, or cope with any more Volumetric Analysis, success at the 1st MB promoted me to an altogether different realm – that of physiology, biochemistry, pharmacology and human anatomy. We were required to dissect, and in considerable detail, the whole of the



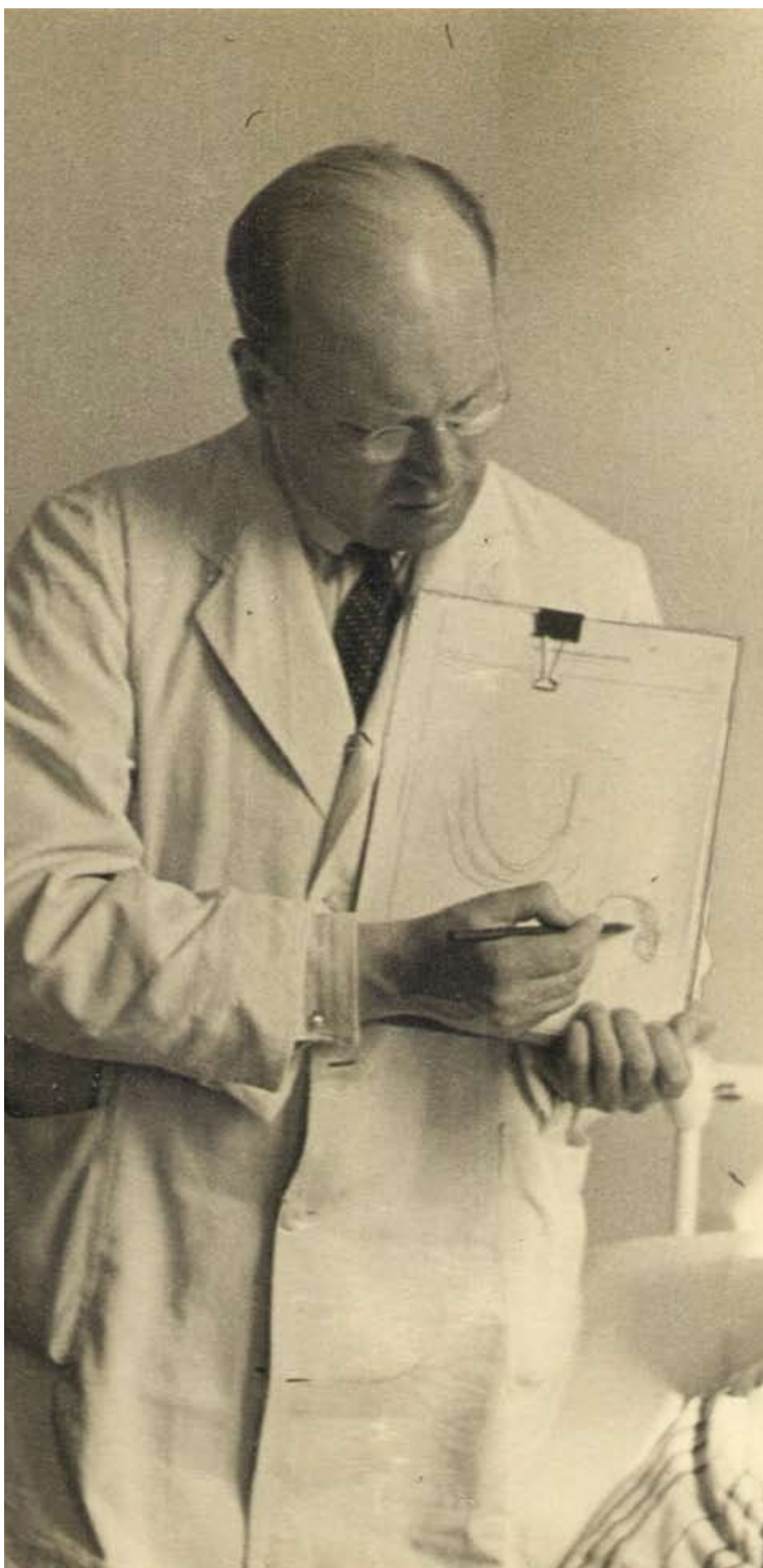
Dr George Graham and Dr Geoffrey Evans with others, 1936–39

understood Arthur had arranged that, when the time came, he too would be dissected.

Medical students today pass almost seamlessly from learning about normal function and structure to being taught what happens when those are deranged. In my day once the “2nd MB” was over we suddenly switched from an academic environment, that of the laboratory and lecture theatre, to the intensely practical world of the ward and operating theatre. During the war that change was the more intense because it was accompanied by a topographical one. We moved from Cambridge to the sector hospitals. First to Hill End, outside St Albans, then to Friern Barnet in the London suburbs and finally to Barts itself.

During this time we were trained by the last of the great clinicians, the men who worked, as the word means, at the bedside. They depended on punctilious history taking, meticulous examination and their personal experience. The x-rays which assisted them were rudimentary by modern standards. Computer enhancement, ultrasonic scanning and MNR imaging had not even been envisaged. They could not ask for a complete biochemical or haematological profile of a patient, because each and every laboratory investigation demanded much time and expertise. These were such physicians as Geoffrey Evans and Geoffrey Bourne, such surgeons as John Hosford and Professor (later Sir) John Paterson Ross. The latter’s teaching owed much to simple memorable epigrams (“You can tell a breast carcinoma because it is so hard. All breast tumours feel hard or very hard – but a carcinoma is *damn* hard”). He performed a lumbar sympathectomy on the King and became President of the RCS, but some of his operative techniques would seem strange today. At the conclusion of a radical mastectomy, just before closure, he always flooded the whole field (and his assistants) with a large bowl of very hot water (“stops the bleeding, revives the patient and perhaps washes away the odd malignant cell”). Professor Paterson Ross was fond of telling us that *Punch* divided all doctors into “Wind-uppers” and “Pooh-poohers.” I have since been able to validate that classification for myself, without, however, being quite sure as to which category I personally belong!

Nobody else impressed me as much as the neurosurgeon JEA O’Connell. It was he who, on our very first morning at Hill End, introduced us to case taking. He had chosen his patient with the care that



Professor Sir James Paterson Ross at a bedside, 1936–39



JEA O'Connell and Harold Wilson in theatre clothing, 1936–39

characterised everything he said or did. She was a schoolgirl, an air raid casualty, with an incomplete spinal transaction. The methodical and thorough way in which he elicited her story and symptoms, before demonstrating her physical sign, was something I shall never forget. I realised instinctively that I was being shown the procedure by a master, and had been provided with an example I should always try to match. Thirty years later, long after Mr O'Connell had retired, I operated on one of his close relatives who had broken her hip, and was able to repay, in some small measure, the debt I owed him.

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rugger team sustained a large peri-orbital haematoma. Mine must have been the last generation who were taught how to write a prescription in Latin. Though we were never asked to exercise very much competence in the language, the hospital pharmacopeia, of which we each received a copy, was still in Latin. From time to time I did revert to the great classical tradition, but only as a kind of party trick. I stopped doing so when pharmacists began to return my prescriptions for being incomprehensible.

In our fifth year, after a few short lectures and practicing on each other, we were given certificates as Public Vaccinators. The only time I ever performed vaccinations in earnest was three years later, after encountering a case of smallpox – myself first, and then a thousand civilians and service personnel. We also went, whilst at Barts, once a week for a month, to the London Fever Hospital. There I saw

children moribund with diphtheria, though most who contracted the disease were saved by antitoxin. As we walked down a ward filled with those convalescing from it, each child shouted "Plum pudding," to prove he or she had no palatal paralysis. German measles was a topic reserved for our fourth and final day, for the very good reason that any of us who had not already had the disease would develop it three weeks later.

I am sure that for the majority of us the most memorable part of our training was that spent "on the district." Women from the surrounding area coming to the Barts ante-natal clinic, and pregnant for the first time, were booked for delivery in the City of London Maternity Hospital at the Angel. Students lived there for as long as it took them to assist at half a dozen confinements. I was so fortunate as to be allowed to deliver what were thought to be twins. After the second had been born I said "I think there's another baby." The reaction of all around was much like that portrayed in HM Bateman's cartoon *The Guardsman who Dropped his Rifle*, and a midwife immediately took my place. But I was right, and next day it was I who signed the petition to Buckingham Palace, asking for the royal bounty.

If she already had one or more children she was given a card bearing her name and address. Someone brought this, when she went into labour, to the Porter's Lodge. He in turn contacted one of the students who had moved into Barts from lodgings at the Angel. The student took one of the obstetric bicycles, and tied on its carrier a steriliser drum containing surgical gowns and the layette. Then (this was very important) he collected an old tobacco tin containing six or seven pennies. Thus equipped he set off (very often in the middle of the night) for a destination which might be a mile away. It seemed to me that whenever I was called an air raid was in progress. But that was the worst danger one faced. Nobody would have dreamed of molesting a man riding one of those bicycles, distinguished by the steriliser drum. It is a melancholy thought that today the mere possibility that he might be carrying drugs could result in his being mugged before he had gone more than a few hundred yards.

Finding the patient was easy since there would be a little group of women gathered where she lived (it was usually in a tenement block). But a cautious approach was advisable. The porter would simultaneously have notified a District

Nurse, and with luck she would be there first. As a novice accoucheur the last thing you wanted was to find yourself conducting a delivery alone. If you could not see her bicycle, there was a strong temptation to look straight ahead, ignore all attempts to attract your attention, and pedal steadfastly on. With luck when you returned, after a leisurely circuit of the block, the nurse would have arrived.

What followed was a heady experience, because this was the first time anyone had called you “Doctor.” The lady who used the term knew you were not really a doctor. You knew she knew that; and she knew you knew she knew. But the permissible fiction helped sustain you both through a testing time. The nurse played along with the convention, assuming a subservient and deferential role – unless things began to go wrong. Then she would take command, saying “Get on to the hospital.” This was the signal for you to go off with the coppers from the tobacco tin, in search of a public telephone. In response to the call out would come, in a taxi, the obstetric registrar, a staff nurse and the duty anaesthetist, bringing with them a bottle of Group O blood. They were properly called the Obstetric Flying Squad – but, because they also carried the forceps, and a formidable collection of instruments, were sometimes unkindly dubbed the Wrecking Crew. When the baby had been safely delivered the student had, under supervision, to bath it and instill into its eyes silver nitrate drops (supposed to prevent ophthalmia). During the next few days he visited the mother three times, to take her temperature and check she was not developing any puerperal infection. Since she had, by definition, at least one other child, it was not at all uncommon (as happened to me) for her to pay her “Doctor” the compliment of giving his name to the latest addition to her family.

It must have been in 1944 that I first saw penicillin – tiny bright yellow hypodermic tablets, most of them reserved for the D-day casualties. There was another, less welcome, innovation that year. When flying bombs attacked London I climbed on to the roof of the George V Memorial building. The missiles could be seen and heard from afar and there was something so uncanny about the manner in which, from straight and level flight, they suddenly dived into the city, that it all seemed like a sequence from a science-fiction film. I was too awe-struck to be frightened but later the same day, in a crowded street, I heard

one which sounded very close indeed.

The panic was contagious and I found myself running frantically in a futile search for cover. It exploded behind the Inns of Court.

By the autumn of the same year I had completed the minimum period of study required before one could sit the Final MBBS exam. I decided to attempt all three parts (Medicine, Surgery, Obstetrics and Gynaecology) together. My friends thought this over-ambitious and foolhardy. None of my contemporaries were going to try more than one or, at the most two parts, but I nevertheless embarked on an intensive revision programme. As regards medicine and surgery it was along conventional lines but to ready myself for obstetrics, I bought a little paper-backed book of specimen questions and answers in the popular ‘Catechism’ series. I took this with me on the two nights each week when I slept at a First Aid Post. There, whilst I was leafing through it, a young Red Cross nurse asked whether

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it would help if she read out the questions to me. Accepting her offer meant I had to explain my answers, and the terminology. Since she knew nothing at all about the subject, she could not even pronounce some words. As soon, however, as she had become au fait with hydramnios, eclampsia, tubal gestation and the like, we progressed to such esoteric exercises as suggesting “Four possible diagnoses to fit the case of a woman at the end of her second trimester, whose uterus is too large to match her given dates.” My inquisitrix was not in the slightest interested in any of my other books, but this one fascinated her. I had to produce it whenever we were waiting for something to happen during an air raid alert. After six weeks we had it by heart. If either of us began to quote from it, the other could complete the passage. We were amused at the mystification of the rest of the staff when, one morning over coffee, I casually asked her, “What would make you suspect a placenta praevia?” and she promptly told me. By the time my actual viva was due she would have been able to acquit herself at it quite creditably. Confronted by two real examiners, my principal difficulty was not thinking what to say, but remembering I was not saying it to Patricia. They asked what I would do about a prolapsed umbilical cord.

I had never seen one, but recited what it said in the book. One of them beamed approvingly, but the other frowned and said my treatment was old-fashioned. “It’s what I always do!” exclaimed his colleague. They fell to disputing the issue and 10 minutes later, when the bell went and I left, were still arguing.

Not all the Finals were quite so easy. Once they were over, feeling I deserved a rest, I went with my fiancée, Joyce, to her parents’ home. A friend who reported the results from the Examination Office at South Kensington told me I had a Special Distinction. It was the only one that had been awarded to anyone, and it was in Obstetrics and Gynaecology. But my number did not appear in the Pass List for either Medicine or Surgery. He was not surprised. Nor, truth to tell, was I. I thought I might have missed a carcinoma in clinical surgery, an unforgivable mistake. My “long case” in medicine had been a lady with

mitral stenosis, and cardiology had never been my strong suit. What he had not realised was that the numbers of the two candidates who had been awarded an Honours degree were posted separately, on a different notice-board. I was a qualified doctor for a week before I knew it. By then the house appointments at Barts had been allocated, so my first job was not there, but at the Royal Cancer Hospital. Which is the beginning of another story. ●

Richard Harrison did not practise obstetrics, or ever deliver another baby. Patricia Hadwin was at his wedding. He went on to become a squadron medical officer in the RAF and, having been admitted a Fellow of the Royal College of Surgeons, a Senior Registrar at the Royal Free Hospital. For 13 years, from 1952 to 1965, he commanded a Parachute Surgical Team in the Territorial Army and, in 1963, was appointed a Consultant in Orthopaedic and Accident Surgery to the SW Cumbria Health Authority, a post he held for 25 years. During retirement he was engaged in medico-legal work.

Sadly Richard passed away on 6 December 2009. He leaves his wife Joyce and their two sons.