

A History of the Queen Victoria Hospital, East Grinstead

J. P. BENNETT

The thirteenth of a series of histories of Plastic Surgery Centres adapted, when necessary, (by A. F. Wallace) from records forming part of the Archives of the British Association of Plastic Surgeons

“What is history” said Napoleon, “but a fiction agreed upon?” Certainly the passage of time mellow and modifies the memory of past events so that opinions as to their exact course and nature are often disparate and contradictory. Much of this history derives from well documented sources and from the verbal accounts of those who were part of the story. A number of books and papers have been written about McIndoe, the Guinea Pigs and the Queen Victoria Hospital. All tell the story as seen from a different angle. The historian Froude wrote that “People believe or disbelieve, repeat or suppress, according to their own inclinations; and death which ends the feuds of unimportant persons, lets loose the tongues over the characters of the great”. This account is an attempt to paint a picture which, it is hoped, will be recognisable to others.

The cottage hospital

The development of the Queen Victoria Hospital began in the nineteenth century as a cottage hospital and continued in the twentieth century by the engrafting on to it, as a necessity of war, the specialist units which now form the main part.

One of the features of mid-nineteenth century England was the foundation of cottage hospitals: first in 1859 in the village of Cranleigh in Surrey, and a little later in 1863, at East Grinstead (the fourth in the country). The large metropolitan areas had their infirmaries and hospitals, but urban communities had no place for the sick and injured to be treated. These people were cared for in their homes and, in the case of servants, at the homes of their masters and entirely dependent upon their charity.

It was the Reverend Payne Crawford, formerly curate of Bourton on the Water where he had founded a cottage hospital, who encouraged Mr Rogers, assistant warden of Sackville College (a local almshouse) to set up a hospital in the town.

The first patient was admitted on October 14th, 1863, suffering with an “encysted tumour of the scalp”.

Roger’s casebook of patients is extant and provides an insight into the type of patient treated in the hospital at that time. The serving class patients were treated for a wide range of conditions such as retention of urine, fractured jaw, chronic abscess of the thigh, and inflammation of the eye with purulent infiltration of the cornea. Some accounts are arresting because of their honesty, as witness this description of a minor operation performed, for phymosis, under a “general anaesthetic”:

“Chloroform was administered to the extent of about 10 drachms before the operation was completed, about two thirds of the amount before it was commenced, with the effect of producing merely a muddled state. At no part of the time was he insensible, said he knew what was being done. He suffered considerable pain though much less than I imagine he would have done had no chloroform been given.”

Regrettably after eleven years Dr Rogers, “having experienced for some years the meanness of the wealthy, and too often the ingratitude of the poor”, closed the hospital.

Victorian philanthropy was not always to be relied upon. Fourteen years were to elapse before the advent of the second cottage hospital which Mr and Mrs Oswald-Smith opened at their own expense on January 7th, 1888. This flourished and a larger hospital, which required public financial support to replace it, was opened on October 15th, 1902. An appeal for building funds had been launched in January, 1901, the month in which Queen Victoria had died. In the after-glow of her long reign and in her memory the East Grinstead Cottage Hospital became the Queen Victoria Cottage Hospital.

In 1935 a report had been made to the Army Advisory Standing Committee on Maxillo-facial

Injuries, under the chairmanship of Mr J. P. Helliwell whose members included Mr W. Kelsey Fry, Sir Harold Gillies, and Mr Warwick James. The Committee had first met as early as 1932 and among its recommendations was the concept of a hospital reserved solely for the treatment of maxillo-facial injuries. It stated that cases accommodated in the special hospital should be those requiring active treatment by surgeons and dental surgeons, and their own auxiliary hospital annexe should be attached to each special hospital for the accommodation of patients during the intervals of treatment (HMSO, 1935). The Queen Victoria Hospital largely fitted these criteria which may or may not give the lie to the oft repeated story that the place was chosen because of its convenience to Gillies on his way to Rye Golf Course and to Kelsey Fry so as to visit his son at the local prep school, although Sir William Kelsey Fry, as he later became, alluded to this fact in his opening address to the first clinical meeting of the British Association of Oral Surgeons held at East Grinstead, 5–6th October, 1962.

Plans had been laid in March, 1939, when the Board of Management had been informed by the Ministry of Health that the hospital was to be included in the emergency plans; that it might be necessary for them to evacuate a number of patients; and to make accommodation for 48 additional beds. In May, the Minister of War gave permission to erect huts to accommodate 100 extra beds. The Board had purchased additional land at the rear of the hospital in order for these huts to be built. In July plans had been approved and work began.

The criteria for an auxiliary hospital had been met thanks to the generous offer of Mr J. A. Dewar to open his nearby home, Dutton Homestall, as an auxiliary hospital with 50 beds in the event of war. He further undertook to finance it to the extent of £4,500 per annum.

The advent of war

On the day after Mr Neville Chamberlain broadcast the declaration of war with Germany, it was recorded in the Minute Book of the Hospital on September 4th, 1939, that "Mr McIndoe had arrived to take over the hospital, on behalf of the Ministry of Health as a Maxillo-Facial Hospital although he had no written instructions."

Naturally, there were the usual apprehensions, uncertainties and anxiety at such a change. One only has to think back to the upheavals following

the reorganisations of the National Health Service in the last decade or so, and add to these the prospect of war, to realise something of the atmosphere that must have prevailed. Mr McIndoe tried to reassure the Board of Management at that historic meeting that "he was sure that the Ministry would accept full financial responsibility for the financing and future running of the Hospital for the duration of the War and that as from 9 am September 3rd, 1939, he (Mr McIndoe) would assume full responsibility for the Hospital" (Queen Victoria Cottage Hospital, 1939a).

It is clear from the Minutes of the Committee and of the Sub-committee that met throughout the first week of the war that the Board were not fully reassured by McIndoe's remarks. The generous offer of Dutton Homestall was soured by administrative confusion, for on September 18th the Ministry declared that they would not recognise the use of Dutton Homestall but that they intended to increase the beds in the main hospital to 210. The



Fig. 1

Figure 1—Sir Archibald McIndoe, KT, CBE, MD, MSc(Path), FACS, FRCS. 1900–1960.

question of evacuation of Dutton Homestall, they said, had to be considered. Then on October 12th, Mr Dewar withdrew his offer and asked for the patients to be evacuated, then after discussion Mr Dewar was persuaded to allow the patients to remain at Dutton Homestall temporarily, then the Ministry, which had originally said that the private wards, the children's ward and the operating theatre were to remain in the sole charge of the Board, said they wanted the children's ward as an operating theatre which after some opposition it became, then it was discovered that the Ministry wished to send civilian plastic surgery cases to the Hospital from other areas, which led to fears that local patients would not be admitted to their hospital, then it was . . . and so on and so forth.

At last, some degree of clarity and calm was restored at a special meeting of the Board on October 30th, attended by Mr John Hunter, FRCS, who was in charge of Sector 9 of the emergency scheme, Sir Harold Gillies and Mr Kelsey Fry as Advisors to the Ministry of Health, and Mr McIndoe who had been designated Medical Superintendent.

"Mr Hunter explained that the Ministry of Health were advised that they were to expect some 30 000 casualties a week from air raids and explained at length the preparations the Ministry have made to deal with this situation." (Queen Victoria Cottage Hospital, 1939b). This was the period of what became known as the phoney war: The London Hospitals were empty, Sector 9 had some 8000 beds for casualties, or cases to be evacuated from the hospital and in the event all was quiet, for only 74 Emergency Medical Scheme patients were admitted by the end of the year. But the anxiety of who should pay for the beds used for local cases and casualties, of who would pay for travelling expenses, the question as to whether private beds would be taken over and Public Assistance Institution beds be offered, the name of which, as one member is recorded as saying "stinks, and that he thought people would prefer to go home", all this and more had ruffled the calm. It was into this atmosphere and environment that "Mr McIndoe, FRCS, the well known Harley Street Plastic Surgeon, had been appointed by the Ministry of Health as Medical Officer in charge of the Emergency Medical Scheme Section and had under him a Resident Medical Officer and a number of qualified Medical Officers and Dental Surgeons" (Queen Victoria Cottage Hospital, 1939c).

McIndoe was as old as the century, having been

born in Dunedin, New Zealand, on May 4th, 1900. He had had a brilliant early career as a medallist in medicine and surgery at the Otago Medical School and had been awarded a Foundation Fellowship at the Mayo Clinic where he worked from 1925-27 as first assistant in pathological anatomy. Here he published a number of important papers on portal cirrhosis and the structure of the bile canaliculi.

In 1929 he was first assistant in surgery, but in 1931, encouraged by his cousin, Sir Harold Gillies, came to England and took up an appointment of clinical assistant in plastic surgery at St Bartholomew's Hospital. In 1932, he was appointed surgeon and lecturer in tropical surgery to the Hospital for Tropical Diseases and to the London School of Hygiene and Tropical Medicine.

Until 1939 when he became consulting plastic surgeon, his other appointments included plastic surgeon to St Bartholomew's Hospital, London, Chelsea Hospital for Women, St Andrew's Hospital and the Hampstead Children's Hospital as well as consulting plastic surgeon to the Royal North Stafford Infirmary and to Croydon General Hospital. These then are the bare facts of the career of the man who enters the stage at East Grinstead in September, 1939: they are bald, terse, and do not foreshadow the dramatic changes which were to take place in the succeeding years.

Much has been written about McIndoe's career in two popular biographies by McLeave and Mosly, together with numerous references to him in Guinea Pig memoirs and books about the hospital. It is not appropriate here to try to separate the myth from the reality of this remarkable man but we may be sure, for the testimony is widespread and unanimous, that he was a strong active man, quick in judgement and decision; the embodiment of capability and the repository of trust and confidence.

He had that gift of all great men, that whoever he was talking to felt that nobody else in the world existed for him at that moment: that the whole of his being was enwrapped in finding the solution to their problems. He realised early that to get what he wanted meant cutting through red tape and pushing aside petty administrators who might obstruct his important objectives. Such men excite the enmity of the weak, the envy of the mediocre and the encomiums of the strong. They are revered by their patients: they do not suffer fools gladly.

Certainly the Royal Air Force learned this as McIndoe steadfastly remained a civilian to avoid being hamstrung by their regulations. The Board of Management, too, felt the breeze of his person-

ality, for at their meeting on August 12th 1940, they unanimously agreed to the resolution that "the Board will not in future accept any financial responsibility resulting from action taken by the Med/Supt. (sic) without the previous sanctions of the Board or the appropriate Committee."

By the end of 1940 the Dental Department, which had been housed in the nurses' recreation room, occupied a spacious wooden hut. A further hut for the accommodation of the resident medical officer was erected which still bears the name of Percy Lodge after its first occupant, Percy Jayes, who was to become a consultant plastic surgeon to the hospital and a future President of the British Association of Plastic Surgeons. Other changes in accommodation were accomplished during this year and the staff of the Unit recorded at that time is noteworthy:

A. H. McIndoe, Esq., MSc, MS, FRCS, FACS (Surgeon in charge)
N. L. Eckhoff, Esq., MS, FRCS.

D. N. Matthews, Esq., MCh, FRCS (Serving in RAF)
RAF Registrar: Sqdr/Ldr G. Morley, FRCS.
Resident Surgeon: P. H. Jayes, Esq., MB, BS.
Dental Surgeons: W. Kelsey Fry, Esq., MC, MRCS, LRCP, PLDS, Consultant to the Ministry of Health; D. G. Walker, Esq., MA, MB, BCh, MDS; A. C. McLeod, Esq., DDS (Pen), BSc (Toronto), LDS, RCS (England); A. H. Clarkson, Esq.
Anaesthetists: J. Truscott Hunter, Esq., MRCS, LRCP, DA.
Russell M. Davies, Esq., MRCP, LRCP, DA.
Consultant Ophthalmologist: Frederick Ridley, Esq., MB, BS, FRCS.
Photographer: Miss Lehmann.

The Guinea Pigs

Much had happened during the first year of the war. After the uneasy tranquility of the so-called phoney war there followed the abortive invasion of Norway, Chamberlain's replacement by Winston

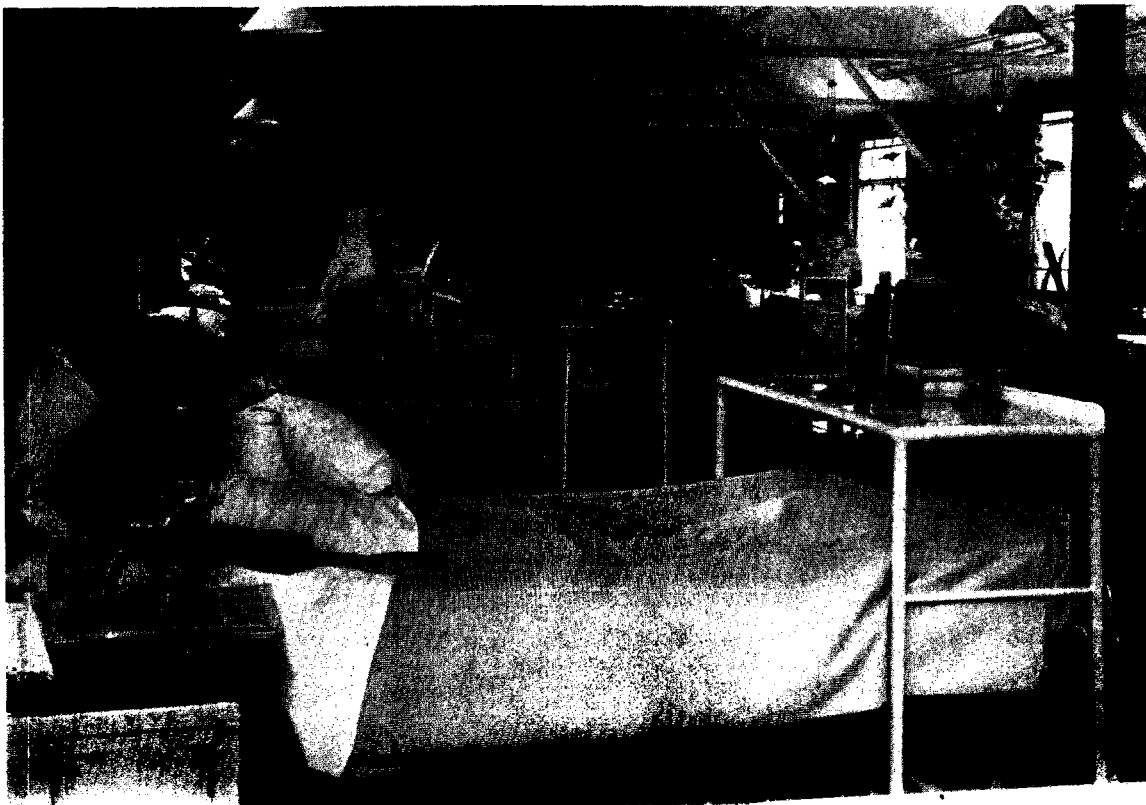


Fig. 2

Figure 2—Ward 3, "a long low hut, with a door at one end and twenty beds down each side." (Richard Hillary. *The Last Enemy*).

Churchill as Prime Minister, the evacuation of Dunkirk and, in the Indian summer of 1940, the Battle of Britain.

The pilots who fought in that crucial battle for supremacy in the air, and who by their success aborted Hitler's projected invasion of Britain, have been immortalised in Churchill's oft quoted words as "the few".

In the main they were drawn from University Flying Clubs and similar associations and were known as "the long-haired ones", not only from the length of their hair but also from their idiosyncratic dress. They captured the popular imagination—knights performing feats of valour and derring-do in the air, many of whom suffered severe burns particularly to the hands and face: injuries which were very damaging to young men in their prime and in the vigour of their early manhood.

The fighter pilots flew in Spitfires and Hurricanes. The Spitfire had two fuel tanks, one above the other in front of the pilot: the top tank held 48 gallons and the bottom one 37 gallons. If a Spitfire caught fire the pilot had little chance of survival unless he could get clear in a matter of seconds.

The Hurricane had 33 gallon tanks in the wings, one on each side of the centre section, and a reserve tank behind the instrument board holding 28 gallons. When a wing tank in the Hurricane caught fire the flames swept into the cockpit and the reserve tank eventually blew up.

This happened to Tom Gleave, now chief Guinea Pig, to whom I am indebted for this information together with the sardonic observation that "it is worth noting the the Me 110 (German fighter plane) had its tank behind the pilot so that the chance of being burnt front or back depended on which side you fought!"

McIndoe described the "airman's burns" common in aircrew as being due to (a) short-term exposure to a very high temperature such as occurs with the "slow torch" effect of blazing petrol at high speed. These commonly occurred in Hurricane pilots, the disposition of the fuel tanks in the Spitfire meant that very few survived; (b) flame burns on exposed areas of skin; (c) contact burns from hot metals usually portions of the plane (McIndoe, 1983).

The distribution of the burns depended upon the disposition of protective clothing: less severe if goggles, oxygen mask and helmet remained in place, but a total head burn if these items were torn off.

Perhaps the best description of the experiences

of these men was written by Richard Hillary. His book *The Last Enemy* has recently been re-published. Eric Linklater wrote of it: "*The Last Enemy* is clearly a writer's book. It is not the book of a man who happened to have a story to tell, and simply told it, but the book of a man who had a writer's mind as well as a story, and so was able to give his story a very deliberate shape" (Linklater, 1947).

Hillary had been shot down a year after the war started. He had bailed out into the sea and had been picked up eventually by the Margate lifeboat. His description of his experiences are tellingly told in his book. After treatment he resumed flying, but in a night flying exercise his plane crashed killing both himself and his navigator.

As his friend, the famous author Arthur Koestler, wrote, "Richard Hillary was burnt thrice. After the first time they brought him back and patched him up and made him a new face. It was wasted, for the second time his body was charred to coal, but to make quite sure that the pattern be fulfilled it was his wish to be cremated, so they burnt him a third time. On 12th January, 1943, in Golder's Green, and the coal became ashes and the ashes were scattered into the sea" (Koestler, 1945).

These words give some of the style and flavour of the aura of the Lost Generation—"crusaders, Knights of effete Veneer, sick with nostalgia of something to fight for, which as yet is not. It is the myth of the crusade without a cross, and of desperate crusaders in search of a cross" (Koestler, 1945).

The facts of Hillary's story were not of themselves unique. Many others could, and did, tell similar stories, for example William Simpson's *I burned my fingers* (Simpson, 1955); *I had a row with a German* by RAF Casualty (Gleave, 1943); Jo Kapka's *Red Sky at Night* and Geoffrey Page's *Tale of a Guinea Pig*.

These accounts form the basis of mystique of the men who were to become known as the "Guinea Pigs".

In his Bradshaw lecture in 1958, McIndoe opined that more than 20 000 men in the RAF had been incinerated with or without injuries, that 4500 burned aircrew were recovered from crashed planes or parachuted in flames to safety and that a considerable number of ground staff suffered from burns as a result of explosions and fires; 3600 sustained burns of the face and hands and that practically all of these were treated in RAF Burns Units under centralised control; 600 of these men were selected by McIndoe from the Units in



Fig. 5

Figures 3 to 5—The stages of reconstruction of a total facial burn.
Figure 3(A) 8 days (B) 14 days (C) 4 weeks (D) 9 weeks. Figure 4(A) 9 months—eyelid grafts (B) (D) 18 months—nose. Figure 5(A)
At end of reconstruction 1942-43 (B) picture taken 1986.



Fig. 6

Figure 6—A typical East Grinstead Group during wartime. "Non-commissioned ranks were supposed to wear a hospital uniform . . . white shirt, red tie, coarse bright blue suit. McIndoe ordered that the stock of this uniform should be burnt and standard Service uniform indented for and issued". (Russell Davies, McIndoe Lecture 1976).

England and later from the Middle East and transferred to East Grinstead; 200 of these were regarded as of major severity or as total facial burns.

The common, early treatment of burns at that time was to anoint the burned areas with tannic acid so as to encourage the formation of a protective eschar. This leathery lorication produced a splinting effect so that the interphalangeal and metacarpophalangeal joints of the hands, for example, became fixed in a non-functional position and furthermore, the sepsis which occurred beneath the eschar was destructive and severe resulting in immobile digits with their phalanges and joints set in grotesque and incongruous positions.

McIndoe, very early on, recognised the futility of this method of treatment. He pursued a vigorous regime of local treatment consisting of alternate 2 hourly saline and half-strength eusol dressings

applied over a single layer of tulle-gras combined with daily saline baths in which free irrigation of the whole head together with cleaning of all orifices and cavities was performed. Appropriate antibiotics were used and the removal of all slough as a preparation for grafting was considered of paramount importance and was a great advancement in the surgery and management of such burns.

The subsequent treatment plan, once primary healing had been achieved, is fully stated in the 1958 Bradshaw lecture. Multiple surgical procedures were required, 10–15 per patient, and the average duration of treatment was three years. Such a protracted programme involving multiple anaesthetics, surgical procedures and endless dressings would drain the spirits of the most ardent hero.

It is interesting to note that acute suppurative chondritis was cited by McIndoe as being the most

painful and morale-breaking complication during the early phase of a facial burn—"The continuous intolerable boring pain from this cause and loss of sleep which results, induces a state of nerves in which strong men are reduced to weeping broken wrecks."

The maintenance of morale, then, was of prime importance and McIndoe's handling of this aspect of affairs was, characteristically, masterly. The many tributes paid to him over the years together with the reverence with which he is still remembered by the Guinea Pig Club bear witness to this.

McIndoe was ably assisted by his anaesthetist, John Hunter, and his theatre sister, Jill Mullins. Hunter was a Falstaffian character: a sound anaesthetist, memorable raconteur and bon viveur. He too was supported by Dr Russell Davies who, apart from his work as an anaesthetist, was to become a founder 'scientist' member of the Guinea Pig Club and its Medical Liaison Officer dealing with rehabilitation and pensions. This task he was to carry out quietly and efficiently in addition to his duties as consultant to the hospital for some forty years. His contributions to the role of the anaesthetist in the treatment of the burned patient have been noteworthy and of lasting effect.

The Guinea Pig Club was born, so it is said, out of the Sunday morning hangover after a "grogging party" which most of the occupants of Ward III had earned on the night of July 9th, 1941. It was decided to form a "grogging club" the minutes of which were headed "The Maxillonian Club whose members call themselves Guinea Pigs." There were three classes of membership, Guinea Pigs (patients), Scientists (medical staff) and the Royal Society for the Prevention of Cruelty to Guinea Pigs (friends and benefactors).

Mr A. H. McIndoe was elected President, Squadron Leader Gleave, Vice-President, and a number of medical members were elected to the committee, *viz.* Russell Davies, John Hunter, Nils Eckhoff and George Morley. It was also noted that other members present included Messrs McLeod, Mappin, Clarkson and Bodenham.

It was a fairly light-hearted venture at first: the honorary secretary was picked because owing to his injuries he was unable to write the minutes and the honorary treasurer appointed because he was unable to walk and so abscond with the money. The linkman between the Guinea Pigs and the "Scientists", particularly with McIndoe, was an RAF PT instructor and former schoolmaster, Edward Blacksell. "Blackie" did much to main-

tain discipline and morale as "Chief Executive—Welfare."

The Club rapidly developed a corporate spirit and soon attracted many friends within and without the hospital. The local community soon became used to seeing young men in RAF uniform sporting an array of grafts and pedicles in various stages of development. These men also enjoyed the hospitality of the local pubs and dance halls as well as being welcomed in the homes of the citizens of East Grinstead.

Many different nationalities were represented among the Guinea Pigs: Americans, Canadians, Poles, Czechs, Australians as well as members of the home forces. Much publicity arose from the emotive reporting in the local and national newspapers of the activities of East Grinstead. McIndoe was not slow to exploit this and to turn it to the advantage of his patients and the hospital.

1943 was the year in which the expansion of the hospital began to gather momentum. Three major schemes were developing. The first, arising out of the activities of the Peanut Club to raise money, was to build a children's ward, the second, the erection of the Canadian Wing and following closely upon this the American Wing.

The Royal Canadian Air Force had been playing a greater role in the war with a subsequent increase in casualties. The Canadian Plastic Surgery and Jaw Injuries Unit under the command of Squadron Leader Ross Tilley, surgeon, with an anaesthetist and three nursing sisters had been attached to the hospital for training. The Canadian authorities expressed a wish to erect a building as a memorial to the Royal Canadian Air Force crews who died in the war. In June 1943 the Canadian Government granted £20 000 towards the cost of the building which was erected on land bought by the Peanut Club. On December 11th, the foundation stone was laid by Air Marshall Sir Harold Edwards in the presence of Mr Atlee, deputy Prime Minister, and other officials.

Nine patients were admitted to the Canadian Wing on July 12th, 1944 and in early August all forty-nine beds were occupied. Such was the expansion of the hospital that in September 1943 it was decided to drop the word 'Cottage' from the title subsequent to the approval of the Board of Trade.

January 1944 had witnessed the arrival of Squadron Leader F. T. ("Gerry") Moore of the RAF Medical Service to join the plastic surgical staff of the hospital. He drove into the hospital in a



Fig. 7

Figure 7—Two East Grinstead “characters”, c. 1948. Frederick Thomas (Gerry) Moore, FRCS and John Hunter, DA.

red MG sports car and wearing an airman's flying jacket with pilots wings (he had not only served in the army with the Hussars in Ethiopia but also gained his wings in the RAF). He allowed Cyril Jones, the duty NCO, who was to serve the hospital faithfully and well for nearly fifty years, to admit him as a patient, so effectively did he conceal his true identity. Unsympathetic to discipline, Gerry was an individual, a character, whose technical and innovative brilliance could sometimes contrast harshly with an almost reckless disdain of the routine type of operation. He is remembered with affection by many trainees because of his habit of allowing them free rein to undertake surgical procedures which they thought themselves incapable of undertaking. His judgement was usually, though not always, correct, but the confidence he instilled into young surgeons was inspiring and unforgettable to those who experienced it.

In 1945 the war ended. One of the difficulties arising from the war and particularly at the Queen Victoria Hospital was the rehabilitation of long-term plastic surgery patients.

Meetings were arranged between representatives of the Welfare Committee, the RAF Benevolent Fund, The British Red Cross Society, the Air Ministry Rehabilitation Department and the Guinea Pig Club in order to try and co-ordinate the granting of resettlement allowances and other matters. It was agreed that the Guinea Pig Club would be responsible for co-ordinating these and typically McIndoe succeeded in persuading the authorities to defer discharge from the services of these long-term patients.

Russell Davies in the McIndoe Lecture for 1976 has given a full first-hand account of the various ways in which he and McIndoe worked for the rehabilitation and pension rights of their patients. Two examples will suffice; the establishment of a satellite factory in the hospital grounds where, for a small hourly rate, patients were put to work making turn and bank indicators; this resulted in the production per man being greater than the parent factory while the rejection rate of tested instruments was less. In the appeals fought by McIndoe and Davies against the Ministry for “unfair” pension assessment, thirty-one of the first thirty-two were won.

Indeed, this lecture gives an excellent insight into McIndoe's character and pays a warm tribute to his courage.

The post-war development

On 25th July, 1946 the American Surgical Centre was opened by the Hospital's patron Queen Elizabeth (now The Queen Mother). This large building containing five operating theatres, a library and other accommodation was built largely from the generosity of the British War Relief Society of America under its president, Mr Clark Minor. A gift of £87 000 had been made thanks to the influence of Mr Kelsey Fry and Mr Le Crohn of the London Dental Society. Further monies became available from the war organisations of the British Red Cross Society and the Order of St John of Jerusalem for the building and equipment of an X-ray unit.

Various staff changes had also taken place. In 1945 Messrs McLeod and Shepherd had resigned from the Dental Department which was taken over by Mr Terence G. Ward, MBE, on his demobilisa-



Fig. 8

Figure 8—Her Majesty Queen Elizabeth, Patron of the Queen Victoria Hospital, at the entrance of the Cottage Hospital during a visit at which she opened the American Wing. July 25th, 1946.

L-R (front) Mr McIndoe, Mr Guthrie Kirkhope, Lady Kindersley, HM The Queen, Matron Hall, Mr William Kelsey Fry.

tion from the Royal Air Force in which he had been Squadron Leader in charge of the maxillo-facial unit at Cosford. The department, under his guidance, was soon to become the recognised Regional Centre for dental services soon after the nationalisation of the Health Service.

In February 1947 the first Marks Fellows in Plastic Surgery were appointed. Thanks to the generosity of Sir Simon Marks and his two sisters, Mrs Neville Blond and Miss Mathilda Marks, three trainee fellowships of £740 per annum each were instituted. The first Fellow to be appointed was John Watson, followed by Mr P. H. Beales and Mr A. L. Schofield. This generous long-sighted gesture helped to satisfy the very great need for suitable posts in which to train plastic surgeons: for it will be remembered that at the outbreak of war there was only a handful of men fully trained in plastic surgery in the United Kingdom, whereas shortly

after the establishment of the National Health Service ten years later there were approximately forty consultants.

These fellowships continued until 1972 and the list of holders (Table 1) bears witness to the success of the enterprise for all but one (Mr Beales who became an eminent ENT surgeon) have gone on to consultant or equivalent status as plastic surgeons.

A noteworthy appointment at this time was that of Dr William Campbell as radiologist to the hospital. He acquired a very high reputation as an expert in maxillo-facial radiology and many surgeons have come to be grateful for his advice and teaching over the years.

This then was the situation in the immediate post-war period. The Queen Victoria Cottage Hospital with a Plastic Surgery and Maxillo-facial Injuries Unit was in a flourishing state and under the patronage of The Queen. The Canadian Wing

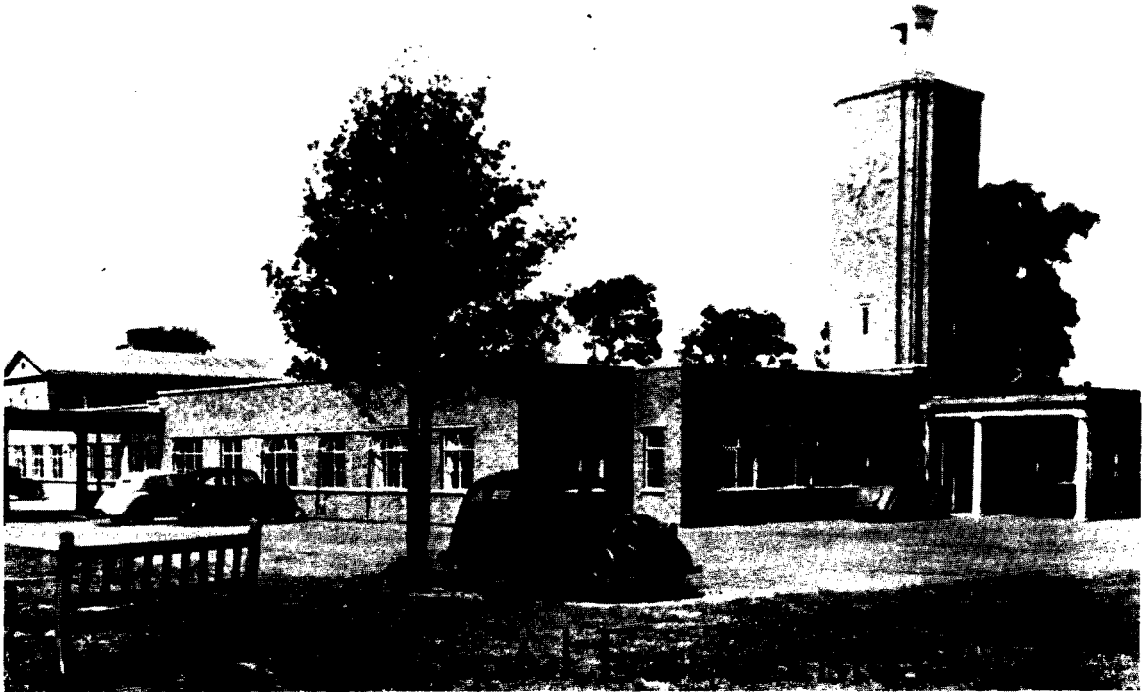


Fig. 9

Figure 9—The American Wing.

and American Surgical Centre were built, equipped and fully operational. Trainee posts in plastic surgery had been recognised and established and the reputation of the dental and anaesthetic departments was such that they too were recognised as training centres. McIndoe and his colleagues could view with satisfaction the fruits of their achievement but the full post-war expansion was

yet to come, albeit in a situation which was to change the face of British medicine and which still affects us today.

On July 5th, 1948 the hospital, like many others, passed into Government hands as part of the new National Health Service. No longer did the Hospital Management Committee have control over the affairs of the hospital. Consequently the intimate

Table 1 Marks Fellows. Queen Victoria Hospital, East Grinstead. 1947–72

J. Watson	1947	David Forbes	1962–63
P. H. Beales	1947–48	J. R. Cobbett	1963–64
A. L. Schofield	1947–48 & 1953	R. W. Hakstian	1964
T. Faulkner	1948	T. D. Cochrane	1965 & 1967
D. Wynn-Williams	1950–55	N. Michael Hogan	1965
R. Campbell Ower	1953–56	J. A. Buntine	1966–67
A. M. Wood (now Sir Michael Wood)	1955	P. G. Lendvay	1968
Henry J. Buncke	1955–56	D. Tolhurst	1968–69
Thomas D. Rees	1955–56	J. P. Bennett	1969
J. Shulman	1960–61	Max Lovie	1969–70
Catrina Kaufman	1962	M. E. Hackett	1970–72

knowledge and expertise of local citizens gained over the years was attenuated although it survived in a different guise as the House Committee until the reorganisation in 1974. This committee was then disbanded to the satisfaction of few and the regret of many.

The hospital had long needed a children's ward and the money for this project had been raised by the Peanut Club. This curious and typically British affair had been born in 1931 in connection with a special appeal which was being held in Tunbridge Wells to raise money for the new Kent and Sussex Hospital. A comic newspaper called "Glad Rag" was produced by journalists. Mrs Clemetson wrote in this paper an intended parody on a children's feature called the Peanut Club, offering a bag of peanuts to anyone who gave twelve 1931 pennies to the hospital funds. She signed the piece "Your adoring Aunt Agatha". To everyone's astonishment a little girl presented herself together with twelve pennies at a local bank and demanded a bag of peanuts. It was quickly realised that if one child had taken the suggestion seriously no doubt many more would do the same. Within 7 years £14 000 had been raised for the Tunbridge Wells Hospital and McIndoe, seeing the possibilities, asked Aunt Agatha, as she is still known today, about raising funds for a children's ward.

In 1949 the Regional Board accepted with gratitude the offer of the Charitable Trust of £24 000 to provide a children's wing at the Queen Victoria Hospital. Imagine then the local feeling when, in 1951, the Ministry of Health sent a letter to the Trustees of the Peanut Fund saying that the money belonged to the Ministry. This epistle contained the assertions that the money was to be handed over immediately, together with the inflammatory statement that "the cost of the Children's Ward, if and when built, will be borne by the Exchequer". The local response was swift and uninhibited. The draft speech made by McIndoe to a public meeting held on the subject is extant and gives a clear idea of his pungent, uncompromising but clear-sighted approach to a situation of this kind. Needless to say the Ministry of Health gave way and the Peanut Ward for children was eventually opened by The Queen Mother in 1955.

One of the other consequences of the advent of the National Health Service was the appointment of four full plastic surgical consultants to the staff in addition to Sir Archibald McIndoe and Mr N. Eckhoff. These were Mr Fenton Braithwaite, who was to be succeeded by Mr John Watson in 1950

upon the former's appointment to Newcastle, Mr P. H. Jayes, Mr C. R. McLaughlin and Mr F. T. Moore.

John Watson had been demobilised late from the far East and had little prospect of employment. As was customary at that time he reported to his old medical school, Guy's, for help in seeking an appointment and was told by Nils Eckhoff that there was a possibility of a job at East Grinstead. An appointment was made with McIndoe whose opening gambit was "If my watch was broken could you mend it?". "Yes" came the immediate reply for not only had John Watson been apprenticed to a clock and watch maker, but had also, as a schoolboy, constructed a television set so as to receive Logie Baird's first transmissions. This auspicious interview was the start of John Watson's career in plastic surgery. The application of his extraordinary talents to the benefit of all who came into contact with him have been immense and the scale of his contributions to the development of our specialty at home and abroad have not yet been fully appreciated.

In 1949 the Regional Board recognised the institution of the corneo-plastic department of 10 beds. Mr Benjamin Rycroft was the surgeon-in-charge who had been appointed by McIndoe in order to apply his knowledge of corneal grafting to the ocular complications of severe facial burns.

Thus unit, too, was soon to become the focal point of controversy. There was no legislative procedure for cadaver eyes to be removed and transplanted into a patient's eye so as to restore sight. Such an undertaking was prevented by the provisions of the Anatomy Act of 1832 which had been passed to halt the nefarious activities of the grave robbers and body snatchers of that time.

After a vigorous public campaign and the introduction of a Bill under the ten minute rule in Parliament, the Corneal Grafting Act was passed in 1952. It is to the credit of the staff of the hospital, the local people and the enthusiastic support engendered throughout the country that this important piece of legislation was placed on the statute book. The Act was later superseded by the Human Tissue Act which was extended to cover the removal and transplantation of other organs.

At the beginning of 1960 the reputation of the Queen Victoria Hospital had seemingly reached its zenith. Sir Archibald McIndoe was Vice-President of the Royal College of Surgeons and his colleagues held appointments at London teaching hospitals as well as East Grinstead: Mr R. L. B. Beare at St



Fig. 10

Figure 10—A light-hearted occasion:

Gerry Moore investing Sir Archibald McIndoe with the 'Slougher's Medal'.

L-R (seated) Sir Harold Gillies (back of head), Sir Henry Dale, OM, Rainsford Mowlen, remainder unidentified.

L-R (standing) Gerry Moore, Norman Hughes, Sir Archibald McIndoe, Percy Jayes, A. L. Schofield, C. R. McLaughlin, Tom Faulkner, not identified.

Mary's, Mr Jayes at St Bartholomew's, Mr Moore at King's and Mr Watson at The London. Mr Redmond McLaughlin was responsible for the Medway Towns and Canterbury.

Furthermore, in this year Percy Jayes was President of the British Association of Plastic Surgeons and John Watson Secretary. Gerry Moore had been one of the original members of the Council of the Association and McLaughlin, best known for his eponymous tarsorrhaphy in the treatment of facial palsy, its Secretary. It was therefore a great shock when on April 12th, 1960 the sudden death of Sir Archibald McIndoe was announced.

His original contributions to the development of burns treatment, facial reconstruction, Dupuytren's contracture, hypospadias and vaginal reconstruction are well known but it was his influence in establishing the speciality of plastic surgery within the wider world of surgery which was perhaps his greatest contribution. He was Vice-President of the Royal College of Surgeons and certain to be elected

its next President before death removed him from the scene. It is sadly tantalising to reflect on what might have been had he held such a high office in the profession. Nonetheless his high reputation, high standards and pervasive influence for the good still linger now, more than a quarter of a century since his demise.

The Blond-McIndoe Research Unit and the McIndoe Burns Centre

At the end of 1959, McIndoe had been involved in planning the establishment of a Research Unit at East Grinstead. The idea of a Research Unit based at East Grinstead was engineered by Russell Davies, John Watson and Robin Beare who, because of lack of facilities, had been conducting experimental work in the sister's office of a disused ward.

His investigative work on the effect of freezing on the survival of large full thickness grafts of skin



Fig. 11

Figure 11—The Surgeon's Mess c. 1948—The Maxillo-Facial Unit Club still flourishes and is remembered with affection by many who have worked at the hospital.

L-R Terence Ward, John Watson, unknown, Norman Hughes, Gerry Moore, Douglas Hamilton Ritchie, S. E. Ryba, Basil Morton Palmer, Bill Campbell, unknown.

and fat highlighted the need for more suitable and sophisticated facilities.

The money and sustained interest which enabled the whole project to go forward stemmed entirely from Mr and Mrs Neville Blond.

On Boxing Day, 1958 they had been approached by John Watson and Russell Davies with the idea of providing research facilities at the hospital. They urged the necessity of a Research Centre devoted to the investigation of wound healing and to the surgical reconstruction of missing tissues. A board of Trustees—The East Grinstead Research Trust—was formed and met on 14th December, 1959 with the following membership: Neville Blond (Chairman), Sir Archibald McIndoe, General Sir Euan Miller, Douglas Stern, MC, Dr Russell Davies, Mr R. L. B. Beare and John Watson (Honorary Secretary). At the second meeting of Trustees, Mrs

Neville Blond was appointed a Trustee to fill the vacancy arising from Sir Archibald's death and it was proposed that, in his memory, the research group who would in the future work in the laboratories should be named the "McIndoe Memorial Research Unit". The laboratories were opened in 1961 thanks to the continued generosity of Mr and Mrs Neville Blond as well as grants from Johnson and Johnson and the Leverhulme Trust.

Professor Morten Simonsen was the first director and following him Professor J. R. Batchelor, Professor Page Faulk and the present director, Professor John Fabre. All the directors have been Honorary Professors of the Royal College of Surgeons.

The present research is concerned with a number of projects such as investigation of the molecular nature of the major histo-compatibility complex,

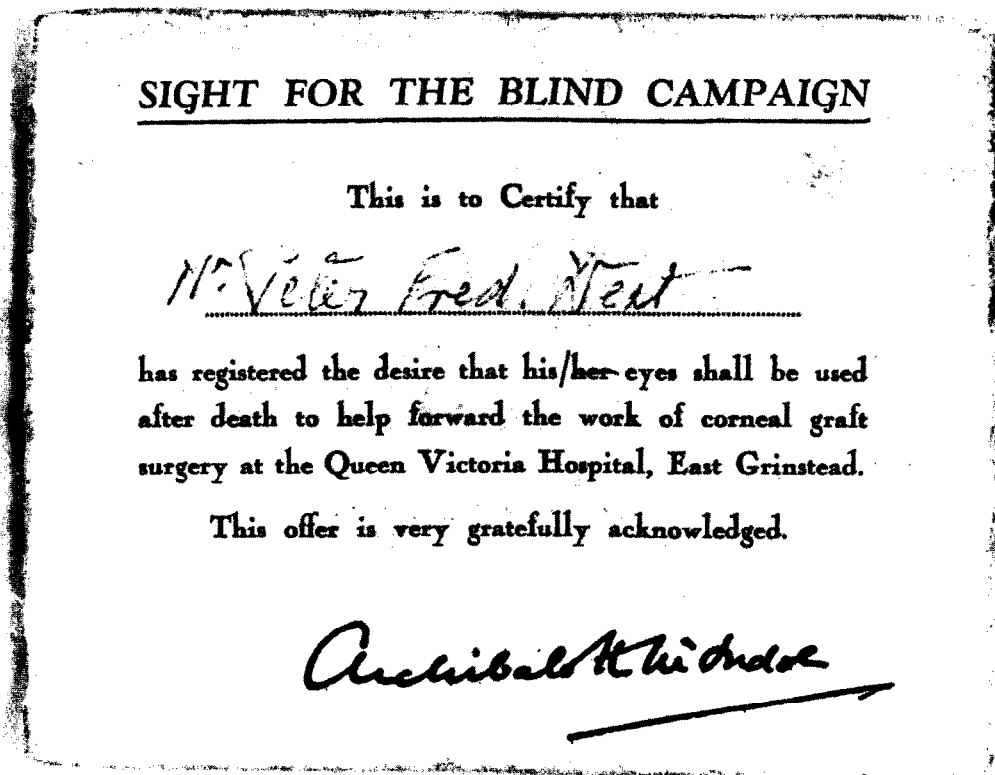


Fig. 12

Figure 12—Sight for the Blind Campaign which led to the passing of the Corneal Grafting Act, 1952.

in-vitro keratinocyte culture, the molecular biology of human leucocytes, and the linkage of potent toxins such as ricin to monoclonal antibodies in order to attach the poison to cancer cells with which the antibody reacts. Facilities are available for trainee surgeons to carry out research projects under the guidance of the director of the Unit.

In 1963, the hospital centenary year, Her Majesty Queen Elizabeth the Queen Mother laid the foundation stone of the McIndoe Burns Centre. It had been appreciated for many years that there was a need for such a Centre and this was even more apposite because of the opportunities available for applying the fruits of the research carried out in the McIndoe Memorial Research Unit (now the Blond-McIndoe Medical Research Centre) directly to the patients. Again Elaine Blond successfully rallied her entire family to provide funds to build such a centre. The benefits which Elaine and Neville Blond, their families, supporters and friends have brought not only to the speciality of Plastic Surgery

at the Queen Victoria Hospital but also to the Royal College of Surgeons are incalculable. Elaine Blond gave of her time and interest to the hospital for nearly fifty years and for 10 of these, until her death in November 1985, was Chairman of the East Grinstead Research Trust. Neville Blond was appointed an honorary FRCS and Elaine a member of the Court of Patrons of the Royal College of Surgeons in recognition of their efforts.

The Research Trust undertook the administrative and executive tasks necessary to bring this major project to a successful conclusion. Negotiations had been conducted with the Ministry of Health who offered the land and had agreed to finance the running of the Centre after handover, provided that neither the building nor equipment would cost them a penny.

The Trustees, medical staff, and John Watson in particular, after much research into alternative designs for there was no specialised Burns Unit in the world at that time, set the requirements, design



Fig. 13

Figure 13—The saline bath: (A) the original bath in Ward 3. “Immediately on the left of the entrance passage was the saline bath, a complicated arrangement of pipes that maintained a constant flow of saline around the bathed patient at a regulated temperature”. (Richard Hillary, *The Last Enemy*). (B) The saline bath in the McIndoe Burns Centre. The hydraulic mechanism being explained to the President of the Guinea Pig Club, HRH The Duke of Edinburgh, by John Watson. Also in picture L-R Gerry Moore, Robin Beare and Percy Jayes.





Fig. 14

Figure 14—The East Grinstead Research Trust—1982.

Back row L-R Mr Norman Civval, Mr Sam Gallop, Dr Hale Enderby (representing the President of the Royal College of Surgeons), Lady McIndoe, Mr Tom Casey, Professor Richard Batchelor, Mr John Bennett, Mr Peter Blond.
 Front row L-R Professor John Fabre, Mrs Simone Predergast, Mrs Elaine Blond (Chairman), The Lord Porritt, Mr Robin Beare.
 Absent Mr John Cobbett, Sir Peter Medawar, The Lord Rayne, Mr John Watson.

of the layout and the fittings of the building from scratch. Every item of equipment down to the last thermometer had to be selected and ordered and John Watson, who bore the brunt of the frustration and worries of such an exercise, found in Neville Blond a tower of strength who did much to alleviate the anxieties consequent upon escalating costs and recurring demands for cash from the builders.

Eventually all came to fruition and the McIndoe Burns Centre became operational in January 1965, and on July 8th the building was formally opened by Her Royal Highness Princess Marina of Kent.

The establishment of the Burns Centre allowed further collaborative research between the new Unit and the Research Centre. As early as 1940, Archibald McIndoe had stressed that the prime objective of burns treatment was to provide early skin cover so as to achieve healing and restore

function. The possibilities of using homograft or heterograft skin were explored and the immunological problems and possibilities studied in the Research Centre. A skin bank was established whereby living skin could be stored indefinitely in the frozen state. The research and eventual successful development of this unique apparatus was carried out by Mr T. D. Cochrane under the guidance of John Watson and Dr Audrey Smith of the Medical Research Council. The bacteriological control of the environment in the Burns Centre was the subject of wide-ranging investigations carried out by the hospital's pathologist, Major General Sachs.

Clinical research investigating the techniques of small blood vessel anastomosis in rats was undertaken by Mr John Cobbett as part of Professor Batchelor's research programme. The technical

lessons learned in this project culminated in the first ever successful free toe-to-thumb transfer using microvascular anastomosis being achieved by John Cobbett in April, 1968. This work was further applied to the replantation of severed digits and limbs and is now a standard part of the plastic surgeon's technical armamentarium.

In the early days of the Research Unit, in 1961, Professor J. Eckenhoff and his team arrived from America to commence a programme of twelve months research into the special anaesthetic technique of induced postural hypotension. This method of achieving "bloodless surgery" was pioneered by Dr Hale Enderby who had been appointed consultant anaesthetist to the hospital in 1950. This skilled technique was described by McIndoe as presenting opportunities "so great as to constitute a surgical advance".

Eckenhoff and his colleagues used direct elec-

tronic monitoring of arterial pressure in major vessels during surgery as well as carrying out physical and chemical assays of blood specimens. Russell Davies, too, extended and published his work in anaesthetics and particularly analgesia for burns dressings. These men together with Dr A. Edridge did much to establish a strong anaesthetic department whose techniques have done so much to facilitate surgical advance in our specialty.

Indeed the hospital has the unique record that the chiefs of its three major surgical departments, Archibald McIndoe—plastic surgery, Benjamin Rycroft—corneo-plastic, Terence Ward—oral surgery, have been honoured with knighthoods. Furthermore, McIndoe had attracted visiting consultants to the Cottage Hospital, men such as Henry Osmond Clarke, John Peel and Edward Muir as well as other eminent specialists from the London teaching hospitals.

Table 2 The McIndoe Lectures

This lecture was founded in 1962 with the proceeds of an appeal sponsored by the Royal Air Force Association in memory of Sir Archibald McIndoe. It is a bi-annual lecture on plastic surgery, or another allied subject based on the lecturer's experiences in that field. The lecturer is nominated by the President of the College and the President and Honorary Secretary of the British Association of Plastic Surgeons. A commemorative medal is presented to each lecturer by the Guinea Pig Club.

<i>Year</i>	<i>Lecturer</i>	<i>Title</i>
1962	Air Vice-Marshall George H. Morley, CBE, QHS, FRCS	"Si monumentum requiris circumspice": Plastic Surgery in War and Peace.
1964	Percy H. Jayes, MB, FRCS.	The Establishment of the Speciality of Plastic Surgery and its contribution to other Specialities.
1966	D. N. Matthews, OBE, MD, MCh, FRCS.	A Tribute to the Services of Sir Archibald McIndoe to Plastic Surgery.
1968	F. Braithwaite, OBE, FRCS.	Oral carcinoma in relation to reconstruction.
1970	John Watson, FRCS.	Trends in the Treatment of Burns, The Influence of McIndoe.
1972	Julian M. Bruner, MD, FACS.	The Contributions of Sir Archibald McIndoe to Surgery of the Hand.
1974	Sir Terence Ward, CBE, FDSRCS, FRCS.	The Maxillo-facial Unit.
1976	Russell M. Davies, FFA, RCS.	Relationships, Archibald McIndoe, his times, society and hospital.
1978	Douglas MacG. Jackson, MD, FRCS.	Burns: McIndoe's contribution and subsequent advances.
1980	D. C. Bodenham, FRCS.	In Quest of Perfection. Training in Plastic Surgery.
1982	John Barron, MS, FRCS, FRCS(Ed).	McIndoe—the gentle giant.
1984 (given 1985)	J. T. Hueston, MD, MS, FRACS, FRCS.	Dupuytren's disease—The role of the skin.
1986	Sir Michael Wood, FRCS.	The Birth of Plastic Surgery in East Africa.

The present consultant plastic surgeons appointed to the staff are J. P. Bennett (1975), J. E. Bowen (1974), R. J. Cobbett (1968), T. D. Cochrane (1969), B. J. Mayou (1982) and N. S. Brent Tanner (1984).

International Study Courses held at East Grinstead in 1978, 1979 and 1980 attracted many surgeons from all over the world, which contributed greatly to their success. A reunion meeting held in 1985 highlighted the affection which many former trainees felt for the hospital and its staff. John Cobbett and Tom Cochrane have both served as Honorary Secretary of BAPS and the latter is Honorary Treasurer.

In 1980 John Bennett succeeded John Watson as Honorary Secretary of the East Grinstead Research Unit. Collaborative research continues: for example, the use of growth factors in the healing of burns is currently being investigated by Professor Fabre and Brent Tanner (surgeon-in-charge of the McIndoe Burns Centre), and other clinical projects relating to cleft palate, facial anomalies and hand surgery are in progress.

Nonetheless, the reputation of a hospital is the product of the efforts and commitment of many folk — patients, doctors, nursing and ancillary staff, therapists, secretaries and so on. This hospital has been fortunate that these people together with the local community and its League of Friends have served and supported us faithfully over the years. The original hospital, with its general practitioner beds serving the local community, still exists and the origins and relationships with the specialised units which grew from it are apparent to this day. The team spirit established by Archibald McIndoe lives on, so that this surgical microcosm built in a small Sussex market town has influenced and trained many surgeons who have come here over nearly half a century. Their story in the words of Pericles, “abideth everywhere . . . wrought in the stuff of other men’s lives”.

Acknowledgements

I owe a great debt of gratitude to my East Grinstead mentors: Percy Jayes, John Watson, John Cobbett, the late F. T. Moore and Redmond McLaughlin and particularly to Robin Beare who first guided my footsteps along the plastic surgical road. Many friends and colleagues have provided me with useful information, particularly the late Elaine Blond, OBE, Dr Russell Davies, FFA, RCS, The Chief Guinea Pig Group Captain Tom Gleave, CBE, G. A. Johns, AHA, Cyril Jones, Lady Constance McIndoe, Ann Standen and her late husband Henry Standen, MBE, Sir Terence Ward, KT. I am very grateful to Mr Trevor Hill of the Department of Medical Illustration for the photographic

reproductions. Finally, thanks go to my secretary, Miss Debbie Wykes, who has patiently typed the many drafts of this history.

References

- Bishop, Edward** (1963). *The Guinea Pig Club*. London: Macmillan & Co.
- Blond-McIndoe Centre**. Reports, 1961—present.
- Dennison, E. J.** (1963). *A Cottage Hospital Grows Up. The story of the Queen Victoria Hospital, East Grinstead*. Anthony Blond.
- Dickson, Lovat** (1950). *Richard Hillary*. London: Macmillan & Co.
- East Grinstead Cottage Hospital** (1889). First Annual Report.
- Froude, J. A.** (1909). *The Divorce of Catherine of Aragon*. London: Longman's Green & Co.
- Froude, J. A.** (1909). *Short Studies in Great Subjects, Vol. 1*. London: Longman's Green & Co.
- Gleave, Tom** (1943). *I had a row with a German*. By “RAF Casualty.” London: Macmillan & Co.
- Guinea Pig Magazine**. 1945—present.
- Hillary, Richard** (1942). *The Last Enemy*. London: Macmillan & Co.
- Hills, Wallace** (1906). *The History of East Grinstead*. Lewes: Farncombe & Co.
- HMSO** (1935). *Report to the Army Council of the Army Advisory Standing Committee on Maxillo-facial Injuries* (London). Reynolds, 1940. P. 4.
- Koestler, Arthur** (1945). *The Yogi and the Commissar*, p. 70. London: Jonathan Cape.
- Linklater, Eric** (1947). *The Art of Adventure*, p. 96. London: Macmillan & Co.
- McIndoe, A. H.** (1983). Total reconstruction of the burned face. The Bradshaw Lecture 1958. *British Journal of Plastic Surgery*, 36, 410.
- McLeave, Hugh** (1961). *McIndoe: Plastic Surgeon*. London: Frederick Muller Ltd.
- Moran, Lord** (1945). *The Anatomy of Courage*. London: Constable.
- Mosley, Leonard** (1962). *Faces from the Fire*. London: Weidfeld and Nicolson.
- Pound, Reginald** (1964). *Gillies: Surgeon Extraordinary*. London: Michael Joseph.
- Queen Victoria Cottage Hospital** (1939a). Board of Management. Minute Book, 4th September 1939.
- Queen Victoria Cottage Hospital** (1939b). Board of Management. Minute of Special Meeting, 30th October 1939.
- Queen Victoria Cottage Hospital** (1939c). 51st Annual Report to year ended 31st December 1939.
- Simpson, William** (1944). *The Way to Recovery*. London: Hamish Hamilton.
- Simpson, William** (1955). *I Burned my Fingers*. London: Putman.

NB. This is a list of works consulted and does not represent a complete bibliography of the books written about the hospital or by those treated here.

The Author

J. P. Bennett, FRCS, Consultant Plastic Surgeon, The Queen Victoria Hospital, East Grinstead, Sussex.

Requests for reprints to the author.