#### JESSIE DOBSON M.Sc.

Curator, Hunterian Museum, Royal College of Surgeons

'ALTHOUGH LESS GREAT than his pupil, John Hunter, Pott did much to place surgery on a rational basis and to bring it into line with the new thought in physiology and medicine.' — DOUGLAS GUTHRIE, History of Medicine, 1945, p. 240.

PERCIVAL POTT was born on 6th January 1714 in a house in Threadneedle Street, on a site where the Bank of England now stands, and was baptized at St. Christopher-le-Stocks, where his father was buried only four months later.

In the 16th century, the Pott family lived in Cheshire. Roger Pott, born in 1535, lived at Dunge, near Kettleshulme; his son John married Bridget, daughter of Roger Jodrell of Erswick. Their grandson, John Pott, was rector of Darley in Derbyshire, and married Mary Byrde of Youlgrave.

In the 17th century, some members of the family settled in London as grocers, vintners, oilmen and potmakers. John Pott, oilman and grocer (1642–1705), married as his second wife Susan Stracey, daughter of 'a fine pot-maker at the sign of the Wheatsheaf in Gracechurch Street'. Their son, Percivall Pott (1681–1714), notary and scrivener, in 1712 married Elizabeth, daughter of William Symonds, vintner. Her first husband, Benjamin, was the son of Sir John Houblon, first governor of the Bank of England, Lord Mayor of London in 1695. Benjamin Houblon died in Lisbon in 1708; there was one child of this marriage, a daughter named Elizabeth.

It has been assumed, though without much evidence to support it, that Elizabeth Pott and her two children lived in straitened circumstances after the death of her second husband; but, at a suitable age, Percivall Pott was sent to a private school at Darenth in Kent, where he stayed until the age of 15. He was then apprenticed to Edward Nourse, assistant surgeon at St. Bartholomew's Hospital, for which purpose 200 guineas was found.

Edward Nourse was born in 1701 at Oxford, where his father, of the same name, was in practice as a surgeon. In 1731 he began to give series of lectures on anatomy and surgery and it was one of the duties of his apprentice to prepare subjects for demonstration. At the end of the apprenticeship, Pott presented himself before the Court of Examiners of the Company of Barber-Surgeons in order to prove himself qualified

(Ann. Roy. Coll. Surg. Engl. 1972, vol. 50)

to practise. There is an interesting item in the Minutes of the Court for 7th September 1736:

'... the question being put whether Mr. Percivall Pott should be examined by this Court, he not having waited on all the Governors and Examiners to desire the favour of their presence at his examination, and it appearing to the Court that Mr. Pott had been sent for out of town to attend Sir Robert Goodesall's lady, where he was detained so long as not to be able to return within the time limited for his attendance on the Governors and Examiners, and Mr. Warden Petty having been pleased to say that he would make his excuse to the Court: It was resolved that the Court would proceed to the Examination of the said Mr. Pott notwithstanding his default in attending Examiners: But this is not to be a precedent in time to come to any other person.'

Having overcome this difficulty, Pott proceeded on the same day to a further, higher, examination and was awarded the Grand Diploma.

He now began to practise in Fenchurch Street, where he lived with his mother and stepsister. Possibly with the help of his numerous relatives, his practice and reputation grew and three years later he moved to Bow Lane. He also felt emboldened at this time to apply for a vacant post of Assistant Surgeon at St. Bartholomew's Hospital but with no success. The year 1745 was an important one for him, however, for when Edward Nourse was made Surgeon, Pott was appointed on 14th March to the vacant post of Assistant. It was in that year that the Surgeons separated from the Barbers and formed their own Company in which from the first Pott took an active part. Elizabeth Pott died in 1745 and soon afterwards Percivall Pott married Sarah, daughter, of Robert Cruttenden, one of the directors of the East India Company, and they moved into a house in Watling Street. It was here that he began to give informal classes in anatomy and surgery, following the example set by his old master. His good fortune continued. On 30th November 1749 he was appointed Surgeon to the Hospital; on 5th July 1753 he was elected, with William Hunter, Master of Anatomy at Surgeons' Hall.

In 1756, soon after the visit to the Anatomy School in Covent Garden that aroused such resentment, Pott fell from his horse in the Old Kent Road, had himself transported on a door all the way back to Watling Street, a distance of over two miles, and while convalescing, having successfully avoided amputation, wrote his *Treatise on Ruptures*. In the same year he was appointed to the Court of Assistants of the Surgeons' Company; five years later to the Court of Examiners; and in 1765 was elected Master.

In 1769 the Potts moved from Watling Street to Lincoln's Inn Fields, where they lived for eight years, then taking a house in Princes Street, Hanover Square. When Caesar Hawkins retired, Percivall Pott enjoyed the largest, most fashionable and most lucrative practice in London. Among the many honours that he received was election to Fellowship of the Royal Society in 1765; the Honorary Diploma of the Royal

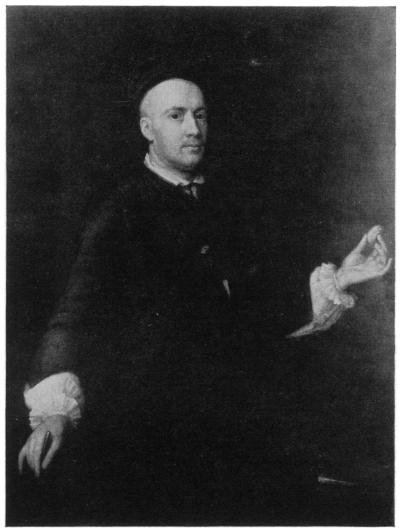


Fig. 1. Edward Nourse the Elder, Surgeon of Oxford, d. 1738. Unsigned; attributed to Joseph Highmore. R.C.S. Cat. Port. No. 180. Presented by Francis Wingrave in 1800.

College of Surgeons of Edinburgh in 1786, the first to be granted; and freedom of the Irish College in 1787. His devotion to the welfare of his patients led to his death from a chill on 11th December 1788.

# PERCIVALL POTT'S WORK

(a) Surgery. At a time when surgical instruments were clumsy and often ill-suited to their purpose, operations were unnecessarily painful.

By avoiding the use of the cautery and reducing the number and complexity of the instruments, Pott made valiant efforts to introduce more rational and kindly procedures. Nothing much is known of his personal technique but he is said to have taken particular pleasure in his many successful cranial operations. Although he urged his pupils to cultivate dexterity, he warned against the evils of mere speed. 'Time', he wrote, 'has produced a most absurd custom of measuring the motion of a surgeon's hand as jockeys do that of the feet of a horse, viz., by a stop-watch, a practice which, though it may have been encouraged by the operators themselves, must have been productive of most mischievous consequences.' (Preface to Observations on the Fistula Lachrymalis, Works, 1775, p. 176).

He was critical of routine surgery, as was John Hunter who may well have gained his own views on this matter from Pott's remarks: 'Caution and fear are different things; where any good can be done, it ought to be attempted by every practicable and justifiable means; but where no good is reasonably to be expected, there is no warrant for doing anything.' (*Injuries of the Head*, Works, 1775, p. 154.)

On the same theme, he wrote: 'The merely curing diseases is not all; that was done (sooner or later) while surgery and anatomy were in their most imperfect state, and while every branch of medicine laboured under many inconveniences which are now happily removed; but the different methods in which chirurgical disorders are treated, or their cures attempted, will make so considerable a difference in the sufferings of the patient, as to be well worth attending to.' (Preface to Observations on the Fistula Lachrymalis, Works, 1775, p. 176.)

Never content with mediocrity either in his own performance or that of his students, he did not, however, over-estimate the progress in surgical achievement that had occurred during his own lifetime. 'Many and great are the improvements which the chirugical art has received within the last fifty years; and many thanks are due to those to have contributed to them; but when we reflect how much still remains to be done, it should rather excite our industry than inflame our vanity.' 'Our fathers thought themselves a great deal nearer to perfection than we have found them to be; and I am much mistaken if our successors do not, in more instances than one, wonder both at our inattention and our ignorance.'

Pott was well educated and came of a better family background than most of his colleagues. He helped to raise the social status of the London surgeon much as William Cheselden had done. William Wadd said of him that he predominated early in life, 'in a profession which has been said not to procure its members bread until they have no teeth to eat it'. Among his patients were Samuel Johnson, David Garrick

# and Thomas Gainsborough. An account of the last illness of the latter appeared in the *Annual Register* in the year 1788 (*Chronicle*, p. 212):

'August 2nd. At his house in Pall Mall about 2 o'clock in the morning, Mr. Gainsborough, the painter, one of the greatest geniuses that ever adorned any age or any nation, died. His death was occasioned by a wen in the neck, which grew internally and so large as to obstruct the passages. The effects of it became violent, a few months since, from a cold caught one morning in Westminster Hall at the trial of Mr. Hastings. His malady began to increase at this time but his symptoms so much eluded the skill of Dr. Heberden and Mr. John Hunter, that they declared it was nothing more than a swelling in the glands which the warm weather would disperse. With this prospect he went to his cottage near Richmond, where he remained for a few days; but growing worse he returned. A suppuration taking place soon after, Mr. John Hunter acknowledged the protuberance to be a cancer. Mr. Pott was at this time called in with Dr. Warren, who confirmed this opinion but found it impracticable to administer aid. In a situation thus desperate, the esteemed and admired Gainsborough languished and died ignorant of the malady which brought him to his end. Since his death, the part has been opened, the excrescence examined, and replaced.'

(b) Lectures. When Percival Pott was successful in getting on to the surgical staff of St. Bartholomew's Hospital in 1745, he began to hold classes in surgery and bandaging occasionally in order to train his dressers and improve their methods to accord with his own ideas. At first this was quite informal and the meetings were held usually at his house in Watling Street which had a long reputation of being a medical residence. (In the 13th century, 'Thomas the Chirurgeon' lived there and in the following century it was occupied by 'William the Chirurgeon'.) As his skill as a teacher improved with the years. Pott's reputation grew and the classes became larger, attracting students from Edinburgh, Dublin and the continent. He had the facility of making his subject interesting and his manner was always pleasing. By the year 1765 he was giving regular classes at the hospital and it was partly due to the success and popularity of this venture that John Hunter was prompted to attempt a similar course at St. George's Hospital. Many of Pott's works appeared in an inexpensive form and some were translated into French and German, so that he came to have a great influence upon medical education and held an indisputable position as a great leader in surgery.

(c) Publications. Pott wrote his first paper in 1741, An Account of Tumours which rendered the bones soft, which was communicated at a meeting of the Royal Society and published in the Transactions. It was, however, his work on Ruptures that established him as a writer of distinction. The first of the four editions was completed in 1756 and the work had been written while he was convalescing from the effects of his broken leg. It was his second investigation on this subject which attracted much attention and led to the paper war between himself and the Hunters, with others participating. William Hunter

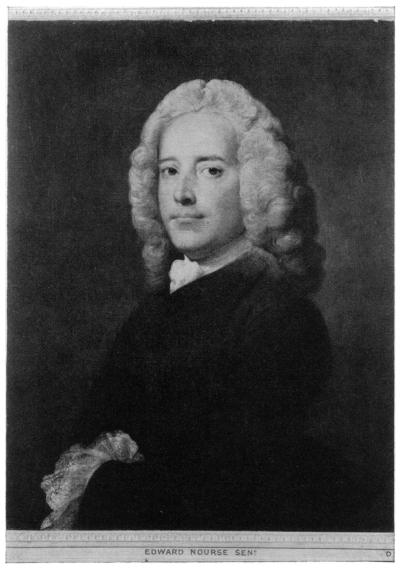


Fig. 2. Edward Nourse the Younger, 1701-1761. Unsigned; probably by Joseph Highmore. R.C.S. Cat. Port. No. 181. Presented by Francis Wingrave in 1800.

observed that the work 'bore strong marks of second-hand observations, and of a time-serving hurry in the composition' (*Medical Commentaries*, Part 1, 1762). A copy of this work of William Hunter was sent to Pott, who took exception to it, for, he said, 'it contained some things

which could not be pleasing to me'. Two years later, in a Supplement, Hunter begs Pott's pardon for the unintended offence and promises that he will never again send Pott any of his publications!

In the argument, William Hunter claims to have priority in the discovery of the condition known as hernia congenita. He asserted that Pott had called at the Covent Garden Anatomy School just prior to his accident, at a time when he knew that Hunter would not be present, and had inspected some specimens that his brother had prepared to demonstrate this form of hernia. Jesse Foot made much of the dispute and pointed out that Albrecht von Haller had published an account of the hernia congenita in the Opuscula Pathologica in the year 1755; that it had been translated into English in the following year; and that William Hunter had quite properly mentioned this. Tobias Smollett reviewed Pott's work in the Critical Review of March 1757 and makes the comment that the author had the misfortune to be under suspicion of having learned all that he had published upon this subject at second hand'. Pott maintained that he had not known of Haller's observations when he wrote his own paper and, knowing his reputation for honesty and his ethical principles, his word must be accepted.

Pott has been criticized with regard to another of his works, his Observations on the Fistula Lachrymalis, first published in 1758. Jesse Foot is disparaging about it, as is Timothy Brand, Surgeon to the Greenwich Hospital. Pott remarks that it is easy to distinguish between pus and mucus: 'These two fluids, pus and mucus, which have been so frequently confounded together, do really differ so widely from each other in their nature, constitution, sources, purposes and effects, that to distinguish them properly, and to point out the true character of each, seems to be a matter of much importance.' (Works, p. 188.) Brand says, however, that 'Mr. Pott's pamphlet contains less on the subject of pus than was known and even published before his work made its appearance'; and he accuses the author of 'a trumpery ostentatious affectation of a knowledge that he does not possess'; furthermore: 'It is too often the misfortune of Mr. Pott's language that it leaves room for conjecture where the utmost perspicuity is absolutely necessary.'

Another criticism comes with regard to Pott's treatise on disease of the spine which was published in 1779. A dissertation on the same theme was presented by Jean-Pierre David in 1778 for the prize offered by the Royal Academy of Surgery in Paris and was published in the following year.

Jean-Pierre David was born in 1737 and died at the early age of 47. During his surgical career he showed great versatility of interests and won much appreciation of his ability both as surgeon, writer and inventor. In his essay he describes cases of injury and disease of the

spine where prolonged rest had made great improvement and his treatment is almost exactly that recommended by Pott. David's work seems to have been completely overlooked until 1858, when R. H.

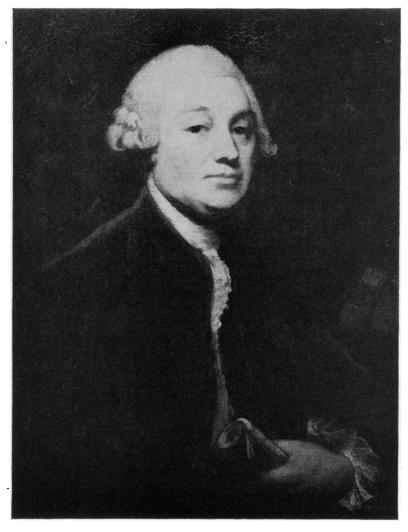


Fig. 3. Percivall Pott. Unsigned; by Sir Nathaniel Dance Holland. Presented by Francis Wingrave in 1800. R.C.S. Cat. Port. No. 192.

Bouvier, Physician to the Children's Hospital in Paris, pointed out the injustice that a malady, bearing Pott's name quite rightly in his own country, was known as *le mal vertébral de Pott* in a country which

had produced a surgeon able to treat and write about the condition with equal authority, Bouvier remarks that, in this case, renown has triumphed over truth: 'The imaginings of Pott have been translated into all languages, but his methods were no different from those of the Arabs and their successors. But what of David's book? Very few people have read it and it lies covered in the dust of the Libraries. Great men like Dupuytren, Roux, Marjolin and Cloquet, have scarcely been able to remove the shadow cast by Pott over the great truths expressed by the humble Normandy surgeon.'

#### Conclusions

Little is known of Percivall Pott's appearance. Earle states that his person was 'elegant, lower than the middle size'. His dress was always neat and stylish, as can be seen from his portraits. He preserved a youthful appearance almost to the end of his life; when he was 70 he looked no more than 50.

Despite the criticism they received, Pott's publications exercised a great influence upon surgery. They were perhaps better known on the continent than in Britain; certainly no other surgeon save Lister achieved such popularity in France and Germany. This was in part due to the fact that he wrote well and clearly, from his own experience. He was not much in advance of his time; for the most part he followed the old lines of treatment and taught his pupils to do the same but, as Sir D'Arcy Power has stated, 'he straightened out and made plain the paths so that his followers walked along them more casily and were able to go further'.

Contemporary opinion of his merits was on the whole laudatory. William Hunter said of him: 'He has treated me for the most part with the language of a gentleman, for which I thank him.' William Blizard wrote: 'It was difficult to give an idea of the elegance of his language, the animation of his manner, or the perceptive force and effect of his truths and doctrines.' Edward Alanson of Liverpool said that he 'was the best practical surgeon, the best lecturer, the best writer on surgery and the best operator of which London could boast'.

In the 19th century opinions were divided. Sir James Paget once described Pott as the 'Compleat Surgeon'. Thomas Jeeves Horder wrote in his Wix Prize Essay of 1894: 'The name of Percivall Pott is singularly devoid of magic. It is not a name to conjure with. It is a name which scarcely suggests anything to the lay mind, and very little more to the student of surgery, unless his attention has been engaged in historical retrospect. The eponyms alone are remembered — disease, fracture and tumour. Nevertheless there is still a great mass of surgical knowledge and treatment which owes its birth to Percivall Pott; and also the record of a career of half a century spent in continuous effort both at healing and teaching.'

Pott made a very handsome income from his professional activities. which was desirable since he had nine children. The first-born died when only five months old. The four girls married well. Edward Holden Pott (1751–1833), banker, and Joseph Holden Pott (1758–1847), Canon and Chancellor of Exeter, were unmarried. Robert Pott (1756-1795) was possibly the boy referred to in a letter written by his father for the attention of the Duke of Newcastle who was to use his influence to obtain a Charterhouse Scholarship for him. Pott writes that his son wished to go to sea and had no liking for letters (B.M. Mss. 32968. f. 164). Robert Pott had a far more adventurous life than the rest of his family, and had his father, who lived an utterly blameless existence, known what some of his son's interests were, he would no doubt have been greatly shocked. Possibly through the favour of his grandfather. Robert Cruttenden, Robert Pott was appointed Resident at the Durbar of the Nabob of Bengal, the most lucrative office in the East India Company's service. He had the most grandiose ideas and lived in a magnificent palace, splendidly furnished, with a personal bodyguard of 60 men. His affairs, however, were not above suspicion and he was dismissed in the year 1788, soon after which he married his cousin, Sally Cruttenden. In Percivall Pott's will there is no large bequest to him since, his father writes, 'he is in a situation to do much better for himself than I can do for his brothers and sisters'. He was to receive, however, a hundred guineas for a ring 'in memory of a parent who loved him tenderly'.

Other bequests mentioned in the will are 'mourning rings to the value of  $\pounds 100$  to the physicians, surgeons, assistant surgeons, clerk and apothecary of the hospital' and the sum of five guineas for a ring to Okey Belfour, Secretary of the Company of Surgeons, 'for the trouble he may have in execution of the will'.

Percivall Pott lived with honesty and integrity, was considerate to his patients and generous to the unfortunate. He would frequently assist those of his own calling who had fallen on lean times, offering them hospitality in his own house and lending his support to restore them to good standing. The obituary notice that appeared in the *Annual Register* (1788, *Chronicle*, p. 24) includes the following remarks: 'He succeeded Nourse, his master, at St. Bartholomew's where, man and boy, he had been occupied above fifty years; and yet in all that time, who ever found him wanting in any pursuit of urbanity and elegance? He was an interesting converser; he had cultivated literature; he was fond of art. But his best praise was in real life, in the relative duties, and more trying efforts of active life. In the more pecuniary parts of character, happy is he who can be as liberal.'

#### THE PUBLICATIONS OF PERCIVALL POTT

- 1741 An account of tumours which rendered the bones soft. Phil. Trans. Lond. xli, 616-622.
- 1756 A treatise on Ruptures. London, Printed for C. Hitch and L. Hawes, at the Red Lion, Paternoster-Row. Second edition, 1763. Controversy re plagiarism from Hunter's Congenital Hernia. Third edition, 1769. Fourth edition, 1775.
- 1757 An account of a particular kind of rupture, frequently attendant upon newborn children; and sometimes met with in adults; viz. that in which the intestine, or omentum, is found in the same cavity, and in contact with the testicle. London, Printed for C. Hitch and L. Hawes, Paternoster-Row. Second edition, 1765.

Third edition, 1775.

'It bore strong marks of second-hand observation, and of a time-serving hurry in the composition.' William Hunter: Medical Commentaries, Part I. London, 1762, and in the Supplement, 1764.

1758 Observations on that disorder of the corner of the eye, commonly called fistula lachrymalis. London, Printed for C. Hitch and L. Hawes, Paternoster-Row.

Second edition, 1763. Third edition, 1769. Fourth edition, 1772. Fifth edition, 1775.

- 1760 Observations on the nature and consequences of wounds and contusions of the head, fractures of the skull, concussion of the brain &c. London, Printed for C. Hitch and L. Hawes
- Practical remarks on the hydrocele or watry rupture, and some other dis-1762 eases of the testicle, its coats, and vessels; illustrated with cases; being a supplement to a general treatise on ruptures, published in the year 1756. London, Printed for C. Hitch and L. Hawes, Paternoster-Row. Second edition, improved with very considerable additions, 1767. Third edition, 1773.
- An account of a hernia of the urinary bladder, including a stone. *Phil. Trans. Lond.* liv. 61-64. 1764
- Remarks on the disease, commonly called a fistula in ano. London, Printed for L. Hawes, W. Clarke, and R. Collins, Paternoster-Row. Second edition, 1767. Third edition, 1771. Fourth edition, 1775. 1765
- 1768 Observations on the nature and consequences of those injuries to which the head is liable from external violence. London, Printed for L. Hawes, W. Clarke, and R. Collins, Paternoster-Row. Second edition, 1771. Third edition, 1773.

Note: Some copies of the 1768 edition were published with the first edition of the succeeding work, with a general half-title page: 'Observa-tions on . . . external violence. To which are added, some few general remarks on fractures and dislocations.'

- 1768 Some few general remarks on fractures and dislocations. London, Printed for L. Hawes, W. Clarke, and R. Collins. Second edition, 1773.
- An account of the method of obtaining a perfect or radical cure of the hydrocele, or watry rupture, by means of a seton. London, Printed for L. Hawes, W. Clarke, and R. Collins, Paternoster-Row. 1771

- 1775 Chirurgical observations relative to the cataract, the polypus of the nose, the cancer of the scrotum, the different kinds of ruptures, and the moriti-fication of the toes and feet. London, Printed by T. J. Carnegy, for L. Hawes, W. Clarke and R. Collins, Paternoster-Row.
- Remarks on that kind of palsy of the lower limbs, which is frequently 1779 found to accompany a curvature of the spine, and is supposed to be caused by it. Together with its method of cure. To which is added observations on the necessity and propriety of amputation, in certain cases, and under certain circumstances. London, Printed for J. Johnson, 72 St. Paul's Church-yard.
- 1782 Further remarks on the useless state of the lower limbs, in consequence of a curvature of the spine; being a supplement to a former treatise on that subject. London, Printed for J. Johnson.

The author acknowledges the information provided by Dr. Alfred White Franklin.

#### COLLEGE NEWS

AT AN ORDINARY MEETING of the Council held on 9th December 1971, with Sir Thomas Holmes Sellors (President) in the Chair, a presentation of a bronze bust of the President by Mr. David McFall, R.A., was made.

The Colyer Gold Medal has been awarded by the Faculty of Dental Surgery to Sir Terence Ward for his outstanding contributions to the teaching and prac-

tice of oral surgery. The John Tomes Prize for 1969-71 has been awarded to Mr. Paul Toller for his research on cysts and the temporo-mandibular joint.

Hallett Prizes were presented to Dr. O. A. M. Asaad of the University of Cairo and Dr. P. C. A. Ratnatunga of the University of Ceylon.

The Hallett Prize was awarded to Dr. William Jones Owen of Guy's Hospital Medical School.

A Diploma of Fellowship was granted to Arulpiragasam Thavendran. Mr. Norman L. Capener of Exeter was appointed Bradshaw Lecturer for 1972. Sir Thomas Holmes Sellors, President, was appointed Hunterian Orator for 1973.

Sir Lionel Denny was appointed Thomas Vicary Lecturer for 1972.

Mr. Arnold S. Aldis was appointed Regional Adviser for Wales in succession to Mr. J. S. H. Wade. Mr. H. R. Ker is to represent the College on the Welsh Regional Postgraduate Medical Committee.

A full list of the College's Regional Advisers and Tutors is being published in this and subsequent issues of the Annals.

## BASIC MEDICAL SCIENCES AND THE PRIMARY FELLOWSHIP **EXAMINATION**

FOLLOWING A REVIEW by a Working Party of Council on the place of the basic medical sciences in the training of a surgeon, Council has passed the following resolutions:

1. That the present view of Council is that a Primary Fellowship Examination should be retained for the foreseeable future as Part I of the F.R.C.S. Examination of this College.

2. That the Board of Surgical Training be asked to emphasize the importance, when inspecting clinical training posts under the F.R.C.S. Regulation, of giving trainees access to instruction in basic medical sciences.

3. That greater emphasis be laid on experience in the basic medical sciences in the period of higher specialist training and that the College and Institute of Basic Medical Sciences should expand and develop the provision of facilities for such experience.

In view of the uncertainty that is known to have existed amongst teachers