# NEWS LETTER



Founded 20th February, 1914 October, 1966 No. 7

#### THE SCOTTISH SOCIETY OF ANÆSTHETISTS

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#### Editor of Newsletter

Dr. M. SHAW

12 Calderwood Road, Newlands, Glasgow, S.3

-Extracts from the Constitution

#### Subscription

£1 per annum.

10/- for Registrars and Senior House Officers.

<sup>&</sup>quot;The objects of the Society will be to further the study of the science and practice of anæsthetics and the proper teaching thereof, and to conserve and advance the interests of anæsthetists."

<sup>&</sup>quot;Ordinary membership will be restricted to members of the medical profession practising the specialty of anæsthetics."

#### Presidents of the Society since 1950

1950-Dr. John Gillies.

1951-Dr. H. H. Pinkerton.

1952-Dr. T. J. C. MacDonald.

1953-Dr. W. M. Shearer.

1954-Dr. I. M. C. Dewar.

1955-Dr. F. G. Gibb.

1956-Dr. H. Bruce Wilson.

1957-Dr. R. Lawrie.

1958-Dr. R. N. Sinclair.

1959-Dr. Alison Ritchie.

1960-Dr. A. Tindal.

1961-Dr. J. W. L. Bain.

1962-Dr. Margaret Muir.

1963—Dr. Alex. C. Forrester.

1964—Dr. J. D. Robertson.

1965-Dr. A. G. Miller.

1966-Dr. J. A. Bolster.

#### Guest Speakers at Annual General Meeting

1951-Dr. W. W. Mushin.

1952-Dr. M. H. Armstrong Davison.

1953-Dr. Ivan Magill.

1954-Prof. R. R. Macintosh.

1955-Dr. T. Cecil Gray.

1956-Dr. M. D. Nosworthy.

1957-Dr. J. Alfred Lee.

1958-Dr. L. B. Wevill.

1959-Dr. Margaret Hawksley.

1960-Sir Dugald Baird.

1961-Dr. G. S. W. Organe.

1962-Prof. W. D. M. Paton.

1963-Prof. E. A. Pask.

1964—Dr. Martin Holmdahl. 1965—Prof. J. G. Robson.

1966-Prof. A. Crampton Smith.

#### Honorary Secretaries of the Society since 1950

1950-53-Dr. R. N. Sinclair, Glasgow.

1953-57-Dr. A. G. Miller, Glasgow.

1957-63-Dr. M. Shaw, Glasgow.

1963 - Dr. A. H. B. Masson, Edinburgh.

#### Honorary Members

Dr. D. Keir Fisher, Glasgow.

Dr. John Gillies, Edinburgh.

Dr. T. J. C. MacDonald, Aberdeen.

Dr. D. S. Middleton, Edinburgh.

Dr. Margaret C. Muir, Dundee.

Dr. W. B. Primrose, Glasgow.

#### Senior Members

Dr. Ellen B. Cowan, Glasgow.

Dr. Margot W. Goldsmith, Edinburgh.

Dr. A. McCallum Millar, Edinburgh.

Dr. Charles Stewart, Dumfries.

Dr. T. T. Stocker, Glasgow.

Dr. Elaine Stocquart, Glasgow.

Dr. Sheina Watters, Edinburgh.

# The President Speaks .

Twenty-one years as a Highland anæsthetist! Plenty time surely for many things to change radically while others have hardly changed at all. The main hospitals themselves have not changed-Raigmore and the Royal Northern but here, too, change is evident; with the work now concentrated at these two hospitals, they are run and staffed as one integrated unit whereas formerly there was little coming and going between them. A new hospital has been started, planned to come into use about 1974, but it is a great pity that such a badly needed modern building should even at the blue-print stage have a built-in inadequacy; it is already fairly clear that a 650-bed hospital will be quite inadequate because we do not see much evidence of Highland depopulation in the hospital service. Among our problems here is the distance that so many of our patients have to come: a nationt who could be treated as an outpatient if his home were in Inverness has to be taken into hospital because he comes from Wick — and this is one aspect of our work which the authorities do not seem yet to be able to grasp.

Great changes have literally transformed the medical scene and perhaps none more so than in our own specialty. For 14 years I was the only Consultant Anæsthetist, Resident at Raigmore and two General Practitioners at the R.N.I. till 1948. I well remember the common practice at Raigmore of conducting two adjacent theatres together. an E.N.T. list in one and a General Surgical in the other! There were neither the anæsthetists nor the days of the week to do these lists separately. From my very first appointment I have seen it as my chief duty to provide a service and to concentrate on improving the staff situation. Up till the inception of the N.H.S. there was no change in the anæsthetic staffing for Inverness, but in 1948 I was asked to survey the needs of the whole region. Despite my recommendations and repeated endeavours, it was only recently that another Consultant was appointed. It is little wonder, therefore, that being so far away from the teaching centres there was frequently a feeling of isolation and of being very much on one's own. It was indeed difficult to get the odd Saturday afternoon off call, and attendance at even a week-end meeting some-

#### . . . Dr. J. ARTHUR BOLSTER

where meant cancelling up to three lists with consequent hardship to the patients and disruption of service. Rightly or wrongly throughout these 21 years I have taken the view that my job here was to keep the service going, and that such luxuries as attending conferences would have to await an enlarged staff. Now that the situation has improved it is our hope that this region will be better represented at meetings than in the past. Indeed we hope to dispel the idea that coming from as far north as Inverness we must disport ourselves as the conventional whiskyswilling, bagpipe-playing, kilt-clad Highlander! One of my more treasured testimonials came from a colleague whom I met in the far south: on learning that I came from Inverness he congratulated me on my remarkably civilised

Staffing has always been a problem, here as elsewhere: but here to be one member short could be a disaster as it invariably meant cancelling lists and causing hardship. I know that having a large staff also has its problems, but I am hoping that I will learn of these at first hand. The staff here has now reached the biggest it has ever been-3 Consultants. 1 S.Reg., 1 Reg. and 1 S.H.O. Certainly a great improvement on 2 G.P.s and myself, but on the other hand our commitments have increased from 1,200 anæsthetics per year to 8,000 now, with more duties to come. The staff of a peripheral, non-teaching hospital should, I think, be composed of senior members and should be able to fulfil its full obligations without depending on registrars: what junior members as there may be should be there for experience and training, and of that they can get plenty.

The year 1948 also saw the beginning of an integrated regional service which in the periphery is based on G.P.s. More recently we have tried to lay down a basic standard: it is our aim to appoint a candidate who has a D.A. or has attained S.Reg. or Reg. grading, and we have achieved this in Dingwall, Golspie, Wick and Thurso. Stornoway is rather a different proposition and quite recently a Consultant has been appointed there: he is also in full charge of the area blood transfusion service.

The problem of distance has always been a complicating factor in this region. Either the

#### The President Speaks -continued

patient comes to us or we go to the patient. Acutely ill patients, accident cases and surgical or obstetrical emergencies frequently required a considerable amount of resuscitation before operation could be embarked on; indeed all too often they died on the doorstep. From time to time, therefore, we went to the patient to effect resuscitation before the journey to Inverness: this necessarily involved journeys day and night in all weathers, summer and winter, even as far as Portree, with breakdowns and punctures, often to find the patient completely recovered from the dire emergency and slumbering soundly. Memories abound: of agonisingly cold journeys, crossing ferries, waiting in the train at Kyle at 4 a.m. with the temperature below freezing and memories of desperate remedies for desperate cases. With the improvement in the peripheral anæsthetic services and the upgrading of the local hospitals, such expeditions have become less and less frequent until at the present time they rarely occur. There are times when I feel some nostalgia for the old days of dashing about at all hours and seasons, but advancing years assure me that it is all for

I have mentioned a feeling of isolation, and the employment of desperate remedies to meet desperate situations: the type of case we get here is much the same as anywhere else and i suppose our techniques of dealing with them are similar. It is more than probable that we are less scientific than our colleagues in the big centres, but although, of course, we all have our occasional triumphs, perhaps some of the things that have been done would be better left unpublished! Many cases could be cited which I have never seen recorded in the literature, but perhaps of most interest now is a problem which confronts the anæsthetist in this part of the world: that is the devastating psychological problem, and the dilemma of deciding on operating on a patient who is convinced he is going to die. An interesting light is thrown on this matter that I have been personally involved in three such cases from the same island. Having seen a number of such patients in these last 21 years. I am of the opinion that such an attitude of mind is an absolute contra-indication to operation unless the operation is life-saving in which case there is nothing to be lost and possibly something to be gained.

Over all these years we have been particularly fortunate in our colleagues. Twenty years ago the divine right of surgeons was widespread, but after a couple of major upheavals it was made quite clear that no one was going to be allowed to interfere in what we considered was our business. Since then our relationships have been of the happiest, and no problem now arises that is not settled by amicable discussion. I would like to make special mention, and to speak in the highest terms of our Theatre Technicians of whom we have one for each theatre in Raigmore and one for the Theatre Group in the R.N.I. They have the requisite diploma and in each theatre they have Theatre Attendants to assist them. Having been with us for 15 years and knowing their value in the service. I would sooner have one of these men with me in an emergency than almost anyone else: indeed I can envisage the day when theatres will be run almost entirely by

Looking back at this juncture, I can see that the years have in fact been years of progress, sometimes very slow but eventually moving in the right direction; despite times of irritation and frustration, sometimes intense, they were years of satisfying work with pleasant and helpful colleagues in delightful surroundings because Inverness is really a nice place in which to live and to work. It has been a privilege to assist in the accouchement of an entirely new service, and to have played some part in the steady growth and advance from nothing to its present state. I look forward to the time when in due course, under other direction, it will continue to advance to being a service as worthy as any in the country.

Proud and all as we are on that score, I consider our greatest achievement is to play host to such a distinguished body of anæsthetists as the Scottish Society, and it is my sincere hope that at some time in the not too distant future you will again hold the Annual General Meeting here when I can assure you of a very warm welcome.

### Activities of the Year

1. Registrars' Meeting.

Edinburgh Northern Group— Friday, 29th October, 1965.

- 2. Neurosurgical Anæsthetists' Travel Group.
  - (a) Visit to Manchester—18th September, 1965.
  - (b) Visit to Edinburgh -11th June, 1966.
- 3. Award of Registrars' Prize for 1955-66.
- 4. Annual General Meeting.

Inverness-22nd-24th April, 1966.

5. Scientific Session.

Edinburgh—28th May, 1966.

#### REGISTRARS' MEETING

Edinburgh-Friday, 29th October, 1965

On this occasion the meeting was arranged by the anæsthetists of the Edinburgh Northern Group of Hospitals and of the Royal Hospital for Sick Children. During the forenoon demonstrations of various anæsthetic techniques were offered, and the afternoon was devoted to papers as follows:—

Demonstrations-

The Jorgensen technique.
Anæsthesia for General Surgery and
Gynæcology.
Plastic and E.N.T. Surgery.
Neurosurgery and Pædiatric Surgery.
Epidural Anæsthesia and the use of

Methoxyflurane.

Papers-

Status epilepticus, Methoxyflurane.

The Cost of Anasthetics.

Head Injuries.

Dental Anæsthesia and Analgesia.

Common errors in the anæsthetic management of children.

#### SCIENTIFIC MEETING

Edinburgh-Saturday, 28th May, 1966

This was the seventh such session to be promoted by our Society, and in spite of the counter-attraction of a beautiful afternoon there was an excellent attendance. Normally this meeting is of the symposium type, but for this occasion the practice was abandoned and the following programme was sustained:—

"Logic in Anæsthesia"—Prof. T. Cecil Gray, Dean of Faculty of Anæsthetists.

"Some Pharmacological Aspects of local

anæsthetics"--Prof. Arne Astrom, Stock-holm.

"The Coronary Care Unit"—Dr. D. G. Julian, Senior Lecturer in Medicine, Edinburgh Royal Infirmary.

#### PROCEEDINGS OF TRAVEL GROUP IN NEUROSURGICAL ANÆSTHESIA

This group continues in a most virile and lively manner: it is small and active, affording a great deal of valuable exchange of information and co-ordination of effort between the various centres. Anyone interested in the specialty should contact Dr. Allan S. Brown, Western General Hospital, Edinburgh, or Dr. A. Harvey Granat, Killearn Hospital, Glasgow.

#### 1. Manchester Royal Infirmary

By invitation of Dr. A. R. Hunter, Saturday, 18th September, 1965.

Papers and Discussions-

Hypothermia during neurosurgical anæsthesia.

Moderate hypothermia and circulatory arrest for operations on intracranial aneurysm.

Some aspects of anæsthesia for cerebral

aneurysm.

Experiences of the Dept. of Surgical Neurology of Edinburgh with the use of cardiac pace-makers for the control of blood pressure during aneurysmal surgery.

Comments on the use of E.C.G. during

pudenz shunts.

Treatment of status epilepticus.

Variations in venous pressure during controlled respiration.

#### 2. Western General Hospital

Edinburgh -- Saturday, 11th June, 1966.

Elective hypotension with intracardiac pacemaking in the operative management of ruptured intracranial aneurysms.

Monitoring and control of pCO2 and acid/base levels during neurosurgical

operations.

Respiratory complications associated with spinal cord antero-lateral tractotomy.

Anæsthesia for cordotomy.

Drug control of severe intractable pain.

These meetings are characterised by informality and freedom of discussion. The programme for 1966-67 will be initiated by Dr. A. Harvey Granat.

## The Registrars' Prize

THE Society awards annually a prize of £35 for the best original paper submitted by an anæsthetist in Scotland, holding the grade of Senior Registrar or under. It is not necessary that he/she be a member of the Society.

The conditions attaching to the award are

as follows:-

1. The paper must be original, i.e., it should not have been read previously at any meeting or published in any journal. The winning of the prize is in no way a bar to the subsequent

publication of the paper.

2. It is desirable that papers submitted show evidence of personal work, but papers consisting of surveys of the literature are eligible for consideration. The Council of the Society wishes to stress that intending competitors should not be discouraged through fear of their efforts being judged elementary. It is fully realised that junior anæsthetists in some peripheral hospitals may not have opportunities to deal with special types of cases or to employ advanced anæsthetic techniques.

Papers for adjudication must reach the Secretary by the end of February at the latest.

 The winner of the prize will be required to give a digest of the paper at the Annual General Meeting of the Society towards the end

of April.

The Secretary places all entries in the hands of the Award Committee which consists of the President, Vice-President and Past President. The members of this Committee have expressed the desire to be able to adjudicate without knowing the name or hospital of the writer: it is requested therefore that the name, address, etc., of the entrant be submitted on a separate covering page. This will be retained by the Secretary, but otherwise the essay itself should give no indication as to its source: acknowledgment to colleagues, etc., should not be included.

The price for 1965-66 was awarded to Dr. B. C. Hovell of the Edinburgh Royal Infirmary; his entry was a novel one in that for the first time a candidate chose a historical topic. The following is a digest, but even so an impression will be gained of Dr. Hovell's treatment of the subject and of the enormous amount of delving into the archives for his information.

On 20th February, 1914, after a short but convivial labour at the Balmoral Hotel (now Littlewood's new store in Princes Street, Edinburgh), the Scottish Society of Anæsthetists

was born. It numbered eleven members. Its first president, Dr. D. C. A. McAllum, who was an expert chloroformist and a leading exponent in pædiatric anæsthesia, died shortly after the Society was founded.

The Society was no sooner launched than it grounded, for the members were soon swept into war in France. All but one came back and the Society was refloated in 1919.

Its main purpose was to raise the status of the anæsthetist, but this was an uphill task in Scotland where anæsthetists were treated with scant respect by surgeons, and with scarcely veiled antagonism by general practitioners who saw the bread and butter being taken from their mouths.

Meetings were enlivened by lectures and discussions on instructive cases and interesting apparatus—Kelly's insufflation machine, Pinson's bomb, Dott's intratracheal apparatus and others

The tenth birthday was a novel one—subscriptions were halved! In addition, females

were allowed to join.

In 1931 the first Lady President was elected. She introduced rectal ether to the Society, having just returned from America where she had studied the method under Gwathmey. In fact, this lady. Dr. Winifred Glover (nee Wood) is the most senior past president of the Society. She now lives in retirement on the Isle of Coll.

Characters abounded in the Society. Torrance Thomson dabbled in psychoanalysis; one gentleman had even been a jockey. Many reeled home at night after inhaling the vapours of chloroform and ether, which was unavoidable in those days, and some became addicted to the agents.

As the years passed by, techniques improved and status improved; fees did not. Primrose of Glasgow introduced his closed circuit technique with cyclopropane.

In 1939 the Society again dispersed to fight Germany. The President's chain and the

records were carefully stowed away.

In 1950 the Society re-united after much preliminary work had been put in by Dr. Pinkerton and Dr. Gillies. Now the membership, after being virtually static for years, reached 72. By 1963 the last original member had passed away to join his ten colleagues, where they can now look down on a Society which has grown to over 200 members and which still pursues the aims they set out to achieve in 1914.

## Annual General Meeting

#### INVERNESS

FRIDAY, 22nd, to SUNDAY, 24th APRIL, 1966

WHY Inverness? Many reasons, and all of them good! Included among them must be numbered the weather for which that coast is well known: how superb the sunshine of Saturday and Sunday, and what a contrast to the weeping heavens of Friday afternoon on our way to Inverness. For once our golfers had conditions which were really inviting: for this year anyway I can forget my usual descriptives of "dreich" and "drookit" - this occasion had many things to be remembered by, and certainly one of them was the beautiful weather once we got there. surrounding hills still snow-girt, the sun and the sea glistening and gleaming, the wind a benison: what a wonderful place to have a conference!

Friday night after dinner saw a complete innovation: we were the guests of the Board of Management of the Inverness Hospitals to a social parley whose success was immediately apparent with that spontaneous "go" that carries the hours away. Enjoyment was everywhere so obvious as surely to convey to the Board how very acceptable the Society found this nice gesture. We felt from this most auspicious beginning that the meeting in Inverness was going to be a happy and a memorable one.

During the Business Meeting on Saturday afternoon we were told by the Hon. Treasurer that membership of the Society had now reached the figure 215, but Dr. Masson made a plea for a renewed impetus in recruiting; he felt that the Society had a lot to offer to members and advocated a fresh drive among the junior anæsthetists. Our financial position remains very satisfactory, but, of course, with costs rising in all directions our resources will have to be carefully husbanded: at the time of the report our balance was £399 17s 9d.

It is interesting that in view of the praise with which Dr. Bolster was going to refer to his operating theatre attendants in his Presidential Address almost immediately afterwards, a good part of the discussion time was devoted to them: the duties expected of them and the training to be given to enable them to perform these duties were indicated by Dr. Masson and elaborated by Dr. Donald Campbell.

The Society under the presidency of Dr. Miller had had a very full year, including the first foreign tour, and in an apt little speech he handed over the Presidential Chain of Office to Dr. Bolster. In a most effective manner Dr. Bolster told how deeply he was touched that the Society should come to Inverness on this occasion for its Annual Meeting, and this introduction set the pace for what we all felt was going to be a particularly good conference. He got off to a rousing start by inviting his audience to go for a sleep, but the fare provided by his "Twentyone years as an anæsthetist in the Highlands' was a most effective deterrent to such indulgement! Indeed one of the abiding memories of this entire meeting is of the prolonged and sustained applause for his address. The happy "different" tone imparted by Dr. Bolster up to this juncture was continued throughout the remainder of the proceedings, and it was quite remarkable that the Registrar's paper came in the same vein. Dr. B. C. Hovell, Edinburgh, in spite of his "nerves" making him inadvertently use the curtain for a towel, delivered his address in a most competent and entertaining manner. Even in its digest form elsewhere in this Newsletter, a perusal of his paper will reveal its light touch; but no amount of entertainment-value can conceal the work which must have gone into its preparation.

Our Guest Speaker was a most appropriate choice: Prof. A. Crampton Smith, a native of Inverness and the newly appointed Nuffield Professor at Oxford in succession to Sir R. R. Macintosh; in 1954 Sir Robert was himself our Guest Speaker. Prof. Crampton Smith spoke on "Recent Advances in Artificial Respiration," but here was a talk with a difference. With a most erudite performance on the blackboard and a practised juggling with basic formulæ of respiratory physiology, he put over an eminently practical contribution to our knowledge of the handling of those patients with chronic respiratory insufficiency:

a full account is given later.

On Saturday evening we had a Reception given by Dr. and Mrs. Bolster: this was again a most happy function. Dr. Bolster, in what he assured us was not a speech, referred to

the presence at dinner of members of the Board of Management as our guests. "Some of you may remember," he said, "that they were our hosts at the party last night "—this delightful touch got home and was accorded that immediate applause which surely must have convinced our guests as to how thoroughly we had enjoyed their hospitality.

The Trade Exhibition was again a feature, each year seeming to provide a character of its own. I hope the representatives who so faithfully man the stands through fair weather or foul, and who know their products so thoroughly, realise what value we place on

their efforts.

On the Sunday as we took our leave, Inverness was bathed in glorious sunshine, Loch Ness was like a mirror and the surrounding hills still capped with snow; the air was warm and everything inviting, but the atmosphere of hospitality will always radiate round the memory of the 1966 meeting at Inverness.

#### Highlights of the Inverness Meeting, 1966

The Annual General Meeting at Inverness was an unqualified success: as the time passes details, of course, recede in memory, but the following are some of those features that stand out:—

- Weather: the contrast between driving to Inverness on Friday afternoon in relentless rain and the glorious sunshine on a mirrorlike Loch Ness on Sunday.
- The obvious and spontaneous enjoyment of everyone at the hospitality provided on Friday night.
- The prolonged sustained applause for Dr. Bolster on his Presidential address.
- The President's invitation to indulge in the luxury of a sleep—which he would do if he could—but an invitation which no one accepted because of the quality of the fare provided in his address.

5. The delightful touches of a very different

Registrar's paper.

- Prof. Crampton Smith's "arithmetic" on the blackboard!
- 7. When the smoke of a cigarette saved a life.

  8. The old lady with double pneumonia and
- gangrene: what wonderful anæsthesia (for the patient) from two double whiskies!

  9. Grace before dinner on Saturday evening:
- Grace before dinner on Saturday evening: the words used and the rich resonance of the voice.
- The magnificent view from the bedroom window over the Firth with the Black Isle beyond.

## The Editor Reports

. . . Dr. M. SHAW

N any Society the members can be divided into two categories on a number of scores. but one of the easiest of exercises is to decide which members attend conferences and which Attending conferences has become do not. part of our professional life: at least it is considered essential for those who do attend, but others again seem to ignore these carefully organised assemblies and obviously dismiss them from their minds as being no great loss. I suppose the motives for participating in these meetings are very mixed: ranging from the ardent pursuit of knowledge in our chosen specialty, with the champagne of intellectual stimulation by seeing and hearing the giants, to the frank let-up of a pleasurable few days off duty admittedly guising as study leave. An analysis of what can be gained is given by Prof. Hugh Trevor-Roper in the "Sunday Times" of 26th September, 1965: "... what I have gained, and what I suppose we all gain, if we gain anything, from these summer jaunts, is something more private than this. The value of any conference lies less in the formal process than in the private social discussions on the fringe: less in , its organisation than in its gradual decomposition. I hope this is not an ungrateful thing to say . . . So let the organisers go on organising." After such a conference, how usual it is to hear "I am not sure if I have learned much. but I did enjoy it." It is surely a poor gathering that does not yield some piece of information worth stowing away and eventually incorporating in the rag-bag of our technique, but how very frequently it seems that this one pearl of wisdom has not been thrown up in the printed programme at all; private conversation with a colleague at the coffeebreak was the source, and it was worth travelling all these miles to get it.

It is fascinating to approach the large hall and first of all be surprised at the numbers of your colleagues there assembled. Among the speakers there is the extraordinary difference in the clarity of different accents: and what a revelation it is to have the microphone and the sound amplification system used to the best avail by an experienced performer. A good chairman can do so much for the success of a gathering by controlling not only the audience but the speakers as well: one particular senior member whom I love to see

occupy the chair, once urged a speaker not once but several times to raise his voice. I cannot make out a word you are saying, what about the audience?" At the Simpson Memorial Lecture in Edinburgh, Prof. Keller regaled us for a full hour with a beautiful voice, every syllable clear and distinct, and with perfect modulation of delivery. In one particular chamber where admittedly the acoustics are not of the best, I whiled away the minutes by carefully and deliberately listening to whole sentences of an address coming over the public address system, and realising that I could not decipher a single word emitted: I just could not grasp what the speaker was attempting to put over, it was all one continuum of jumble and halfheard expressions. It was, therefore, much more intriguing to abandon the attempt to follow the speaker and to enumerate instead the distractions that were going on all around: this was made quite excusable by the salve that I would get his paper printed in the subsequent proceedings when I could browse over his message at my leisure.

What were the distractions? The almost constant coughing from some quarter of such a large area and a cough at the appropriate moment can blot out a whole "punch line" or the well-timed trumpet of a nose being blown nearby; the creaking of chairs and floorboards; the doodling clicking of ballpoints; the drumming of fingers on the vacant chair beside you, beating out an imaginary piano concerto, at least to the performer; muttered interjections about points missed; the crackling and echo of an ill-adjusted sound amplification system. There is also the infuriating habit in some centres of extinguishing the lights completely during the projection of slides, affording opportunity neither for recording details from the screen nor for continuing a previous thread. When will these seasoned lecturers learn not to use slides which contain an encyclopædia of data. and with poor contrast of colour? It always seems to me that there should be some method of communicating with the chair that all is not well down among the audience.

Nevertheless for any anæsthetic department not to be conference-minded is an omen of foreboding and bids well to providing no mental stimulus to its junior staff. Whether a senior member attends a national or international assembly is probably his own affair: he knows what good can come out of it and he goes-or he is confident that little of use will accrue anyway and he does not go. Local and hospital meetings are to my mind entirely different, and here I quote Sir Charles Illingworth whose writings on medical education are always so refreshing and forthright. In the Scottish Medical Journal he speaks out loud and clear about the value of attending discussions, debates, journal clubs, etc.: he advocates the American practice of making attendance at these exercises obligatory and adds the cautionary clause that the persistent absentee will soon find himself out of work! The high status of our specialty currently enjoyed by us has been gained largely through the efforts of our present generation of senior anæsthetists: respect can only be earned and we must retain that respect by an avid pursuit of academic attainment. Asked recently what will the first man on the moon be instructed to bring back-minerals, evidence of life?an astronomer replied that the man who will be first back on earth from such an expedition will bring back the most precious commodity of all-knowledge.

Harking back to my diatribe on Pulse Monitors in last year's Newsletter, I was amused at the unwitting support I received from one colleague who admitted, surely facetiously, that he had no time to look after the patient as he was too busy trying to resuscitate the machine.

I do wish the back-room boys who produce these ingenious gadgets would make available a never-fail surefire method of getting a blood pressure reading; not when the reading is up in the 150s—I do not need any help then—but when it is down in the hypotensive region of 70 and below. I suppose the truth is that, apart from intra-arterial measurements which are scarcely justifiable for run-of-the-mill cases, there is no method which can be relied on completely to give an unequivocal reading. I shall therefore keep on hoping and attending the Trade Exhibitions!

## It Has Been Said . . .

Man shall not live by cortisone alone. Temperatures rise and hopes fall. Old doctors . . . pontificate and posture, residents disappear, and sisters know. Individuals conspire, sub-committees confer, full committees recommend, and boards of management pass on for higher action, one man's dream.

-Glasgow Herald: Saturday, Sept. 11th, 1965, pg. 10

To many outside the specialty of anæsthesia, it is disturbing to learn that there is no satisfactory objective sign of unconsciousness in the paralysed patient. Under normal circumstances the anæsthetist refies upon an intuitive sense of the level of consciousness based on his experience and this is usually adequate.

—Prof. Nunn: Medical Annual 1965, Pg. 83

Nowadays when a patient enters hospital to undergo surgical treatment, he can rest assured that he will suffer no pain during the operation. This was not always so . . .

—Opening of Chapter I of Norris & Campbell's "A Nurses' Guide to Anæsthetics"

Uncounted millions of dollars are wasted annually by scientists repeating research that someone clse has already painstakingly carried out and published. An odd medical fact tucked away in a periodical might save a life if the right doctor only knew that it was there.

—Time, Sept. 3rd, 1965, Pg. 37

Committees can be very useful things, but it is not altogether untrue that a committee is a thing which keeps minutes and wastes hours.

—Brit. Weekly, Sept. 12th, 1963

Because there is now so much more to learn, a man can hardly be called completely competent before he's forty, and by fifty he is ripe for retraining. The situation is made worse by the fantastic increase in the country's demand for medical services.

-Sunday Times, May 8th, 1966

The article is really delightful. It typifies the British art of getting to the point clearly and simply. The main point that Sir Charles (Illingworth) makes is that the surgeon's success depends more upon physiologic handling of the patient post-operatively than his operative technique. The lesson is not new . . .

-Survey of Anas. 1964, 8 5 446

In surgical treatment the field can hardly grow much larger and might well diminish, if medical measures can be devised for conditions such as peptic ulcer, appendicitis, colitis. Probably the main advance in the future will be to make surgical operations even safer than at present, and to abolish the discomforts of the post-operation phase.

—Sir Chas. Illingworth: Glasgow Evening Citizen, October 9th, 1964

Among his colleagues the scientist is accustomed to the very highest standards of truthfulness. Outside the laboratory he still tends to take everything that is told him at its face value.

—Sunday Telegraph: June 12th, 1966, pg. 10

It was stated by Crosby that blood transfusion is like playing Russian roulette with bottles of blood, and that while the odds are in the physician's favour, the patient takes the risk. This statement is supported by the fact that one death occurs for each 5,000 transfusions given . . . and that 50% of these transfusions are unnecessary.

-Surg. Gyn. & Obstet. 1964 119 1069.

A low mortality figure for any anæsthetic is not much help to a patient who is 100% dead.

-Letter in Brit. Dental J. 1964, Nov. 3rd, pg. 359

Equality of opportunity is simply an opportunity to prove unequal talents.

-Glasgow Herald, May 11th, 1966. pg. 8

WANTED. Any offers of interesting useful employment for consultant anaesthetist, frustrated by the narrowness of the specialty.

Advert, in RIKERSERVICE 1965,
 November No. 6, pg. 10

The quality of a champagne is judged by, among other things, its effervescence. The quality of a hospital may equally be judged by the extent to which its medical members indulge themselves in the sparkling froth of debate. . . . It still remains true that in most hospitals the success of these exercises depends mainly on the energetic goading of a few ardent spirits, and the attendance often falls far short of what might be expected. In these matters we can learn from the example of America . . . attendance at these exercises is obligatory. . . . The persistent absentee will find that at the end of the semester he is out of work.

-Sir Chas. Illingworth: Scot. Med. J.

1966 11 57

# Professor A. Crampton Smith's Address at Inverness

Under the title of Recent Advances in Artificial Respiration, Prof. Crampton Smith, our Guest Speaker for 1966, dealt with the relationship between the oxygen tension of arterial blood and the percentage of oxygen in the inspired air. With the aid of a lot of basic respiratory physical arithmetic on the blackboard and a frequent correlation with the oxygen dissociation curve, he produced the following beginners guide to the treatment of obstructive lung disease.

Considering first the situation in the alveolus, there is 760 mm.Hg. pressure to accommodate all the gases there. Of these, 47 mm.Hg. = water vapour pressure, 80% of the remaining 713 mm.Hg. = nitrogen = 563 mm.Hg. Therefore, 713 - 563 = 150 mm.Hg. is left for

O2 and CO2.

It is currently believed that an arterial PO2 (PaO2) of 30 mm.Hg. is the minimum necessary to sustain life. The normal alveolar arterial gradient is 10 mm.Hg. and in a patient with respiratory failure will be at least 20 - 30 mm.Hg. Therefore, in a patient breathing air, the minimum alveolar PO2 to sustain life is 50 - 60 mm.Hg. Therefore, a patient breathing air must have an alveolar PO2 of 30 - 60 mm.Hg. to sustain life, and therefore cannot have a PCO2 of more than 150 - 50 = 100 mm.Hg.CO2 pressure. With this PCO2 he will not be seriously narcotised.

He will become seriously narcotised with

CO2 only if-

His hypoxic drive to respiration is removed by giving him 100% oxygen.

2. He is given sedatives to control his

hypoxic restlessness.

It is proper to give small controlled increments of oxygen in the patient's inspired air. The reason can be shown by a simplified form of the alveolar air equation.

 $PAO^2 = P1O^2 - PCO^2$ 

RO

In a patient breathing air with a PCO<sup>2</sup> of 100

 $PAO^2 = 150 - 100$ 

= 150 - 125

= 25 mm.Hg.=a percentage saturation of hæmoglobin of 40%. This is inconsistent with life.

 In a patient breathing air with a PCO<sup>2</sup> of 80 and therefore not seriously narcotised with CO<sup>2</sup>.

 $PAO^2 = 150 - 80$ 

0.8

= 150 - 100 = 50 mm.Hg

which, assuming an A-a gradient of 20 gives a PaO2 of 30 mm.Hg., a percentage saturation of 58, which is just adequate.

 The patient in 2, is given 25%O<sup>2</sup> to breath. This depresses his respiration slightly and his PCO<sup>2</sup> rises to 90, but he is still not seriously narcotised with CO<sup>2</sup>.

 $PAO^2 = 180 - 90$ 

= 180 - 112

= 68 mm.Hg.

Again assuming an A-a gradient of 20, this gives a PaO2 of 48 and hence because of the steep slope of the lower part of the O2 dissociation curve a percentage saturation of nearly 85% which is a considerable improvement. If the PIO2 can be increased to 28% without deterioration in the patient's clinical condition, the PaO2 will be quite acceptable.

In practice use can be made of this as follows:—

 The concentration of O<sup>2</sup> and inspired air should be raised to 25% and the patient watched. If he remains conscious the O<sup>2</sup> may be further increased to 28% and the patient may need no further treatment.

2. The increase in inspired oxygen concentration may depress the patient's respiration so that he becomes unconscious with CO2 narcosis. In this case, an endotracheal tube should be passed and I.P.P.V. instituted for twenty-four hours. At the end of the twenty-four hours the tube is withdrawn and the effect assessed. The patient may need no further treatment. If he does, a tracheotomy should be performed and I.P.P.V. resumed.

Professor Crampton Smith gave details of some encouraging results in the treatment of obstructive lung disease in this way, especially

in severe status asthmaticus.

## Heard at the Meetings

#### Association of Anæsthetists-Edinburgh, October, 1365

Prof. Jenkins of Dallas, U.S.A.-

- Space to expand a department is like power: it cannot be won, it must be seized.
- The wisdom of others is usually dull until it is covered over with your own blood.
- I judge the importance of a patient by the number of people around him: you know what I mean—the general buzz of activity. Hence the "buzz index."

#### Anæsthetic Staff Meeting — Victoria Infirmary, Glasgow

Dr. I. M. Campbell Dewar-

- 1. It is all very well getting a good job in a peripheral hospital, enjoying the country air, golf, etc., but you may get no time even to notice the fresh air. You tell your chief what holidays you want and he tells you what you're going to get.
- It is quite legal for the Receptionist to give the anæsthetic while the Dentist extracts the teeth; but it is highly illegal for the Dentist to give the anæsthetic and the Receptionist take out the teeth.
- In a Dental Hospital where there are four anaesthetists, the only thing that they all agree on while teaching students is the advisability of the patient's preliminary visit to the lavatory.

#### Combined Meeting-Glasgow-Edinburgh, October, 1965

Mr. Brian Jennett-

- 1. There is no anæsthetic like NO anæsthetic.
- 2. I would suggest a notice for tourists outside Killearn Hospital—"Last Neurosurgical Unit for 200 miles."
- "As the patient was unconscious he would not have appreciated an escort": this was given in explanation as to why a patient was unaccompanied.
- To teach a student to pass 20 endotracheal tubes would be better than have him deliver babies.
- It is relatively easy to make an incision, but it may be very difficult to make a decision.
- A surgeon will find it difficult to embark on a major project when he sees a look of disapproval on his anæsthetist's face.

7. For the poor post-operative condition of a patient, the anosthetic is usually blamed: it may well be that the amount of surgical work done while the patient re was under the anosthetic was excessive.

#### Anxisthetic Meeting—Glasgow, January, 1966

Prof. Nunn. Leeds-

95%, of all the scientists who have ever lived are still alive, and we are now limited only by our own capacity for work.

#### Scientific Meeting-Edinburgh, May, 1966

Dr. D. G. Julian-

There was a time when cardiologists and anæsthetists were not on speaking terms, but now they sit and commiserate with each other on their hard lot.

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Professor Astrom, Stockholm-

- We run with the brakes on much more than we think.
- 2. The higher the concentration of procaine the higher the concentration of adrenaline required for vasoconstriction, and this concentration varies with each drug. It is hardly correct, therefore, to say that a certain concentration of adrenaline is optimal for all local anaesthetics.

#### Prof. T. Cecil Gray, Liverpool-

- The days of stages and charts are gone, the whole line of thinking was wrong and blatant nonsense.
- 2. In the triad with narcosis and relaxation, the use of the term analgesia was wrong. Analgesia usually refers to the freedom from awareness of pain and is, therefore, not applicable to the unconscious state. We should have used Reflex Depression, and we may be using the wrong drugs to achieve this.
- The antanalgesic effect of barbiturates continues for a long time after the narcotic effect has worn off; the more barbiturate you give to your abdominal patients, the more sweating, etc., you will get.
- 4. With the exception of pentobarbitone, there is an enormous increase in the excitability of these reflexes with all barbiturates; but with thiopentone the increase is truly tremendous.

## You Will Have Heard .

Aspiration of gastric contents into the lungs in remains the commonest cause of death related solely to anæsthesia.

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. . . Brit. J. Anæs. 1966 38 370

One hundred maternal deaths every year in U.S.A. are caused by pulmonary aspiration. Every patient who is in labour should be considered to have a full stomach of highly acid fluid contents.

... Lancet 1966, 5th Feb. pgg 290 & 291

The careful measurement of operative blood losses and meticulous replacement by transproved most disappointing fusion have manœuvres in the prevention of post-operative hypotension.

... N.Y. State J. Med. 1964 Nov. pg. 2646

Any good doctor will tell you that a badly shocked patient can take as long as 20 years to recover properly.

> . . Scotsman 4th June 1966; Weekend Mag. pg. 5

The proper use of water and electrolytes is probably responsible for saving more lives of seriously ill patients than is the use of any other group of substances.

. . . J.A.M.A. 1950 143 365

In recent years a revolution has taken place in general anæsthesia in dental practice. Instead of the cyanosed struggling patient and the anxious hurrying dentist, the standard picture should now be the quiet pink patient and the quiet relaxed dentist.

. . . The Probe 1966, Feb. pg. 82

Specialist anæsthetists with additional experience of dental anæsthesia are few and far between, and could not cope with more than a fringe of the demand, even if they were prepared to give their services for the fees available.

. . . Brit. D. J. 1966, 15th Feb. pg. 156

Dental Anæsthetic Fees. The N.H.S. Act of 1948 laid down a scale of fees which doctors have always thought inadequate. Indeed the lowest fee on this scale has cynically been compared with that charged by a plumber's mate for renewing a washer in a water-tap; the flaw in this comparison being the fact that, whereas the price of mending

## That

water-taps has progressively risen, the fees paid for dental anæsthesia are no higher now than they were in 1948. Efforts to raise this scale have met with failure . . .

> . . . Letter in B.M.J. 1966, 28th May, pg. 1362

Cost of Supplies: Price of a spare glass bowl for a Goldman Halothane Inhaler. The catalogue from the anæsthetic equipment company stated that the price of a bowl was eighteen shillings. A close look at the bowl reminded me of the glass sediment bowl on the petrol filter on my car. To my surprise the garage produced an identical bowl, identical even to the markings on the bottom. The retail price was 1s 3d.

. . . Letter in Brit. D. J. May 17th, 1966

It is the general feeling that as a nation we are having a bad patch, that the young are lazy and decadent, and that the old men dream dreams of the glories that are past . . . this is not true of British dentistry. Why do surgeons from all over the world come to this country . . . ?

. . . Dental News 1965, Nov. pg. 3

There are two big shortages in anæsthetics to-day-too few practitioners in the specialty and too few coming into it to do research. At least that seems to be the case in the United States. Too few young doctors are coming in at the bottom to help answer some questions which have gone unanswered since the early days of the science. The shocking fact is that we don't know any more to-day about how anæsthesia works than they did 120 years ago when Morton first demonstrated

... Medical News 1966, 25th Feb., pg. 8 Histotoxic anoxia is a sine qua non of chemically induced anæsthesia.

. . . B.J. Anæs. 1964 36 536

The amount of adrenaline produced by fear is within measurable distance of the amount which can cause ventricular fibrillation . . . and while it is recognised that the adrenalinechloroform combination is dangerous, it is not so well known that ethyl ether exhibits the same dangerous trait though not to the same . . . "Anæsthetic Accidents" by

V. Keating, pg. 25

#### You Will Have Heard-continued

Dr. Andrew Tindal writing in 1941:—Deaths that occur 24 hours or more after the operation are seldom blamed by the surgeon on the anæsthetic, but I am of the opinion that the anæsthetic kills five or even ten times more cases in their beds than it does on the table. Many things in the future may be found to reduce the heavy mortality following major surgery, but first a better anæsthetic must be found.

... Surgo 1941 7 2 pg. 2

The road to success must be paved with publications. Pg. 636

This is paradise after general practice. Pg. 634

. . . These are comments given by S. Registrars in a questionnaire on anæsthetic training. B.J. Anæs. 1965 37 8

You will find particulars of the F.F.R. (Faculty of Fatuous Research) in PULSE, January 1st, 1966.

### Payment of Annual Subscription by Banker's Order

I'ROM time to time, members have requested that they be allowed to pay the annual subscription to the Society by Banker's Order. It was realised that this would be of benefit to the member and to the Society alike, but with successive secretaries operating through different banking accounts it was not considered workable to inaugurate such a scheme.

Arrangements have now been made whereby those members who prefer to pay the annual subscription by Banker's Order may do so through the Head Office of the Bank of Scotland, The Mound, Edinburgh. The Society's financial year ends 31st March, and payment by Banker's Order may therefore begin with the subscription for the ensuing year, payable 1st April. The scheme is commended to members for their own convenience, for the Society's financial situation and for the facilitation of the Hon. Treasurer's duties.

A form suitable for use is available of application to the Hon. Treasurer.

# The Scottish Society of Anæsthetists

#### PROGRAMME FOR 1966-67

- Registrars' Meeting—Aberdeen. Friday, 14th October, 1966.
- Neurosurgical Anæsthetists' Travel Group— Enquiries should be made to Alan S. Brown, Edinburgh, or to Dr. A. Harvey Granat, Killearn Hospital, Glasgow.
- Tuesday, 28th February, 1967.
   Closing date for submission of papers for Registrars' Prize.
- Annual General Meeting—Pitlochry Hydro. Hotel—21st-23rd April, 1967.
   Guest Speaker—Dr. Sheila Kenny. Dublin.
- Scientific Meeting—Glasgow. Saturday, 27th May, 1967.

#### EDINBURGH AND EAST OF SCOTLAND SOCIETY OF AN/ESTHETISTS

Syllabus 1966-67

Meetings will be held in the Royal College of Surgeons, Nicolson Street, on the second Tuesday of each month, unless specified otherwise. Tea at 7.45 p.m. for 8 p.m.

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Saturday, October 29

The Combined Meeting with Glasgow and West of Scotland Society of Anasthetists will be held in the University of Edinburgh Staff Club, Chambers Street, Edinburgh, at 5.30 p.m.

"Neuroleptanalgesia—pharmacology and clinical application."

Speakers-Dr. Neville W. Shephard, Medical Director, Janssen Pharmaceuticals, and Dr.

A Buffet Supper will follow the presentation of papers.

Tuesday, November 8

The physiology of adrenergic receptors and the drugs which influence them."-I.C.I. Lecture.

Tuesday, December 13 "Poisoning" - Dr. Henry Matthew,

Tuesday, January 10 Presidential Address-Dr. I. M. Lawson.

Tuesday, February 14 Members' Short Papers.

Friday, March 3 Informal Dinner at the University Staff Club.

Tuesday, March 14

Symposium on Shock and allied problems-Dr. Cash, Dr. Mackenzie and Mr. Walker.

Tuesday, April 25 Annual General Meeting.

#### NORTH-EAST OF SCOTLAND SOCIETY OF ANÆSTHETISTS Syllabus 1966-67

1966

Thursday, September 22—Aberdeen Intermittent Positive Pressure Respiration for the Neonate-Dr. M. E. Tunstall.

Thursday, October 20-Stracathro The Respiratory Intensive Care Unit - Dr. D. Campbell.

1967

Thursday, April 13- Dundee

The Value of Monitoring in Neuroanæsthesia- Dr. A. J. H. Hewer.

Thursday, May 25-Stracathro

Presidential Address-Dr. Norman McLeod. Annual General Meeting.

All details of these meetings may be had from the Hon. Secretary, Dr. Stuart W. McGowan, Dept. of Angesthetics, Royal Infirmary, Dundee. All meetings are at 8 p.m.

#### GLASGOW AND WEST OF SCOTLAND SOCIETY OF ANÆSTHETISTS

Syllabus 1966-67

1966

Tuesday, October 18

Lecture by Dr. A. Bracken. By courtesy of The British Osygen Com-

pany, Ltd. Saturday, October 29

Combined Meeting in Edinburgh with Edinburgh and East of Scotland Society of Anæsthetists.

Monday, December 5

The Therapeutic Uses of Artificial Ventilators-Prof. J. S. Robinson, Birmingham.

1967

Tuesday, January 10

Investigation in Anæsthesia Dr. D. Gordon McDowell, Glasgow.

Monday, February 12

Members' Night - Staff of Victoria Infirmary, Glasgow.

Monday, March 20

Presidential Address-Dr. M. Shaw.

Saturday, April 8 Visit to Dumfries and Galloway Royal Infirmary.

Thursday, April 20 Annual General Meeting.

With the exception of the Combined Meeting, all meetings are held in the Royal College of Physicians and Surgeons, 242 St. Vincent Street, Glasgow, at 7.45 for 8.15 p.m. The Hon. Secretary is Dr. W. E. Mathie at the above address.

Printed by
A. Learmonth & Son
9 King Street
Stirling