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THE HISTORY OF
ANAESTHESIA SOCIETY
PROCEEDINGS



Volume 22
Proceedings of the meeting in Leeds
14th February 1998

Includes membership and abridged constitution.

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Editorial

Leeds was a Society 'do it yourself' meeting, with no local committee or representative to see to all the arrangements. The burden, as usual, fell squarely on the willing shoulders of the Honorary Secretary. It is fitting, as Tony Bennett comes to the end of his period in office, to gratefully acknowledge not just his organisation of the Leeds meeting, but the years of cheerful toil he has given to the Society.

To allow a full afternoon in the magnificent Thackray Museum, the academic session was necessarily restricted. The space thus made available in the Proceedings has been used to provide the long-awaited Directory of Members. Earlier plans for a directory were more grandiose; a separate Handbook was envisaged, with information including each member's record of Society membership and special interests, as well as telephone/fax number, e-mail and postal address. The combination of a poor response to our questionnaire, rapidly changing information and incompatibility of Officers' word processors has meant this first Directory is of names and addresses only. An insert with Volume 21 gave members the opportunity to object to this data being held electronically and published in the directory. To date (June 1998) there have been no objections.

Space has also been taken to publish an abridged version of the Society's constitution. The deletions and simplifications are entirely my responsibility - severe word surgery performed in the hope that members will actually read the shortened version. Those who do will note that in two places the constitution makes clear the responsibility of members to keep the Society informed of changes of address. This is frequently not complied with, every mailing of the Proceedings resulting in some ten or more returns. Regrettably the Directory is sure to contain some unnecessarily wrong information.

The constitution limits the Honorary Editor's appointment to six years. Council has given no hint of enforcing the exact period, but I have served five, and it is time to find and elect an Assistant Honorary Editor. A younger member is required, who will be prepared to take over the editorship within the next year or so, and with some new ideas. The presentation of the Proceedings has improved along with the Society's finances, and with Abbotts' continuing generous sponsorship. The new gloss finish and professionally prepared cover have been generally approved; in this issue for the first time we have illustrations in colour. The editing is time-consuming, but enjoyable and rewarding. Confidential enquiries to myself or to one of the Officers will be welcomed.

AMB

HISTORY OF ANAESTHESIA SOCIETY

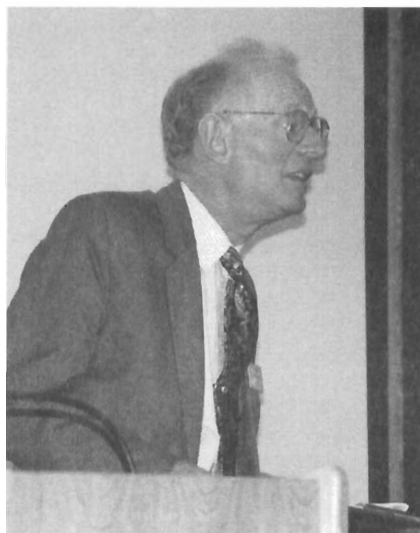
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Members and Guests attending

Dr Aileen K Adams	Cambridge	Dr Ann Naylor	Ingatstone
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Dr A Marshall Barr	Reading	Dr D A Nightingale	Liverpool
Mrs M Barr	Reading	Dr A Padfield	Sheffield
Miss S Barnes	Thackray Museum	Prof J P Payne	Wimbledon
Dr Moyna Barton	London	Mrs Alice Payne	Wimbledon
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Dr J W Blizzard	Chelmsford	Dr Pamela Portel	Hull
Dr T B Boulton	Berkshire	Dr G Jackson Rees	Liverpool
Dr A J Carter	Stoke on Trent	Dr N M Rose	Ledbury
Dr I D Conacher	Newcastle upon Tyne	Mrs Joan Rose	Ledbury
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Dr P Drury	Liverpool	Dr Anna-Maria Rollin	Epsom
Dr Anne Florence	Liverpool	Dr M A Skivington	Bournemouth
Dr Sally Garner	Leicester	Dr B H Smith	Birmingham
Dr M B Gough	Grimsby	Dr I Smith	Aberdeen
Dr P Goulden	Dewsbury	Mrs M Smith	Aberdeen
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Dr I McLellan	Leicester	Dr Marguerite Zimmer	Strasbourg



Dr Brian Moffat



Mr A J Carter



Dr C S Ward



Dr Alan Humphries

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THE SEEDS OF NARCOSIS IN MEDIEVAL MEDICINE

The prehistory of anaesthesia, in practice?

Dr Brian Moffat

Director, Soutra Archaeoethnopharmacological Research Project, Lothian

This paper concerns the recovery, analysis and interpretation of seed caches from the Soutra medieval hospital, situated 17 miles south-east of Edinburgh (Figure 1). Soutra was an important hospital similar in type to that illustrated in Figure 2, and documented as functioning from the 12th to the 17th century, taking care of the sick, the infirm, the poor and the aged, travellers and pilgrims. The Soutra excavation area, on the Anglo-Scottish *Via Regia* (Royal Road), is shown in Figure 3.

Identification of 'medical waste'

At Soutra, all archaeological deposits are screened for the presence of blood, lead (fluid waste being tainted by passing through lead plumbing) and specific plants known to have been used for medicinal purposes. When these are demonstrated, we infer we are dealing with 'medical waste' and examination and analysis intensifies. According to medieval medical manuals including the widely-used *De Viribus Herbarum - Concerning the Powers of Herbs*, attributed to Macer (Frisk 1949) maceration was a common method of pharmaceutical preparation. It is the consequence of maceration that seed-mixes are discarded as spent; should they be macerated together and remain *post facto* together, the precise recipe will be indicated. The unique method of painstaking recovery which we report here leads to the study of actual archaeo-medical practice.

In the Soutra investigations since 1986 (SHARP Practice 1 to 6), diverse assemblages of seeds have been recovered that are, in essence, artificial and unnatural. They were assembled in the Middle Ages (circa AD1300-1320+) in an organised manner from disparate sources. As Soutra stands at an altitude of 1,200 feet, most species are exotic. Figure 4 shows the Black Henbane growing within the Soutra excavations in the exceptionally good summer of 1996. The recognised altitudinal limit of this typically coastal plant in Great Britain is 500 feet.

Seeds from a medieval recipe

The key species are Black Henbane (*Hyoscyamus niger*), Opium Poppy (*Papaver somniferum*) and Hemlock (*Conium maculatum*) with counts respectively of 372: 108: 94 seeds. This characteristic mix (recovered in three distinct caches at Soutra with the last two having yet to be finally identified) matches some 16 extant medieval recipes and may be considered a candidate for the prehistory of anaesthesia. Claims for these recipes in the medieval surgical manuals are supported by modern pharmacologies. They were said to induce unconsciousness during major life-threatening surgery, to induce a pain-free state at the same time, and to lead to the patient's complete recovery. The type of surgery was rarely detailed other than to specify amputation of limbs. The maceration was given by mouth as a soporific draught with 'topping up', then used as a topical application and then directly applied to the stump. The seed-counts match a ratio on the basis of volume, verified by obtaining modern seeds (12 samples), counting these out and measuring the volume. The seed-counts never exceeded +5% of the volume as *per ratio*.

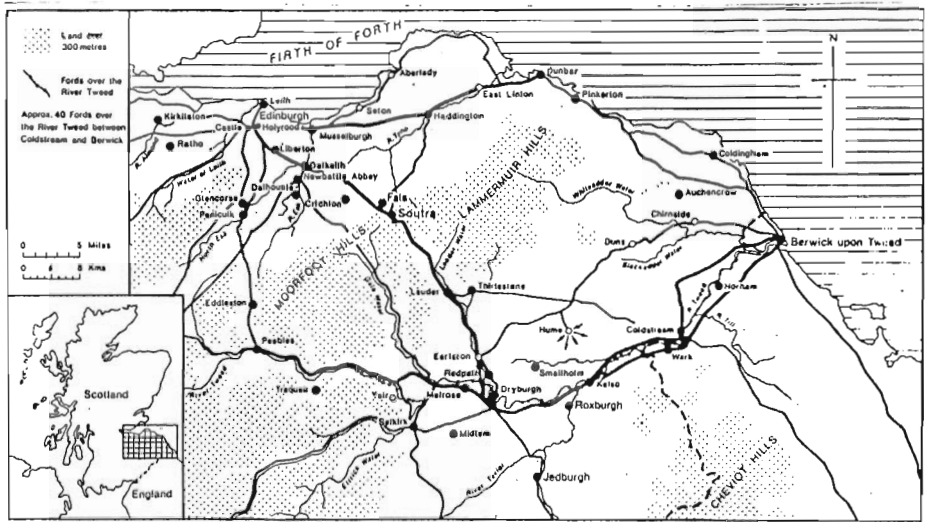


Figure 1 Position of Soutra Hospital, S-E of Edinburgh



Figure 2
A rare view of the interior of
the Medieval infirmary
(French School, c.1500)

Reproduced from 'Medicine and the Artist'
(Ars Medica) by permission of the
Philadelphia Museum of Art



Figure 3
Excavation Site. Note the extraordinary fertility
for an altitude of 1,200 ft in the Southern Uplands



Figure 4
Black henbane growing in the excavations

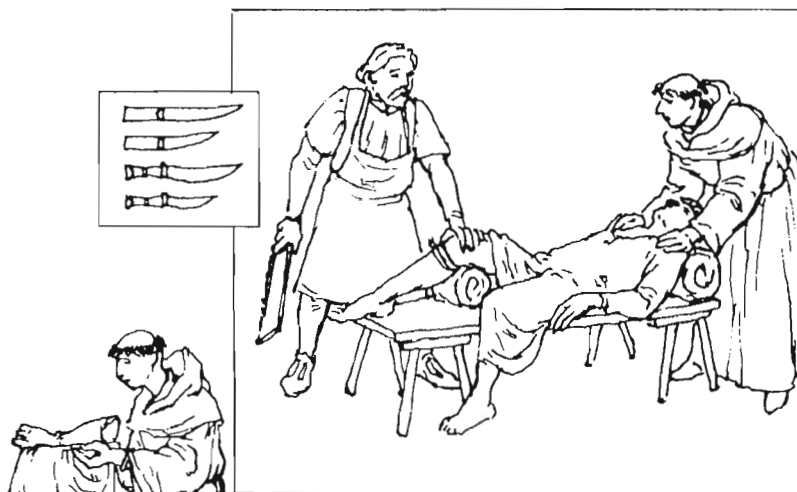


Figure 5
Preparation, use and efficacy of dwale
(based on 16 medieval accounts)

A composite illustration of the surgical procedures outlined in the 16 medieval recipes appears as Figure 5. It shows first the maceration of the three species of seeds in a ratio on the basis of volume - three parts Black Henbane: one part Opium Poppy: one part Hemlock. The soporific drink or dwale is taken, and later the maceration is applied to sites behind the ears, the armpits and around the groin. The surgeon amputates the leg of the unconscious patient, the limb is disposed of while the patient recovers and departs.

Black Henbane is much the rarest of the three species in Britain today - in Stace's *New Flora of the British Isles* the other two species in the recipe are described as common. We have therefore compiled a map of the seed caches of Black Henbane that are of archaeological origin (Figure 6). Medical uses are suggested at Neuss, at Waltham (a Black Henbane/Hemlock mix) and of course at Soutra. Its location at Tintagel, on an 'altar', suggests some ritual use, while at Fyrkat burial ground either may be suggested - in the next world.

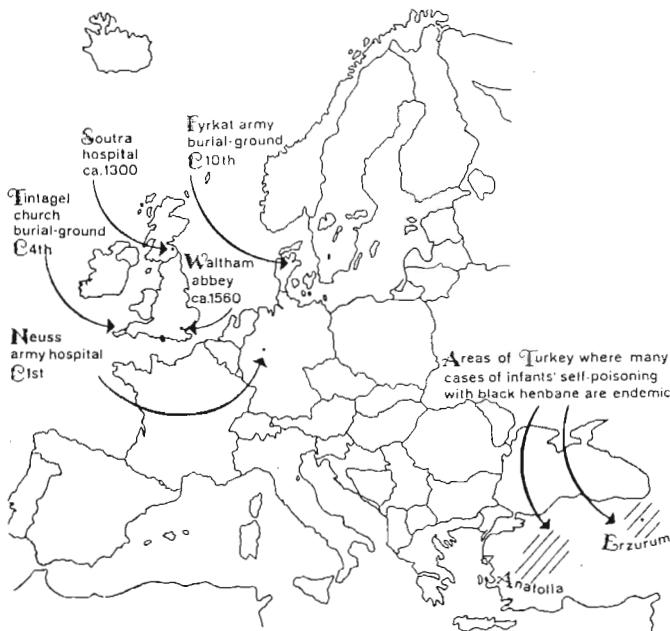


Figure 6
Sites of archaeological caches of black henbane

Perhaps twenty such archaeo-medical recipes - distinctive man-made seed mixes - have thus far been recovered intact in the Soutra investigations (SHARP Practice 4 to 6). The purpose we interpret corresponds well with nearby anatomical remains, which we term 'corroborative context'. If the remains postulated as a medication are without such a corroborative context we may only assume that the medication was made up and not used. The Black Henbane/Opium Poppy/Hemlock seed-mix lay 7.5 cm from a solitary human calcaneum, which we are advised is a most robust bone compared with others in the foot, least likely to be crushed into an unrecognisable form, and more likely to stand up to having a hospital demolished on top of it! Assorted surgical off-cuts are commonplace in the Soutra 'medical waste'.

Postscript

SHARP - the Soutra Hospital Archaeoethnopharmacological Research Project - is being reconstituted as a registered charity under the title Soutra Archaeo-Medicine.

Two pharmaceutical companies are currently examining the medieval recipe for potential application today.

Parties are shown round the Soutra hospital site by arrangement with SHARP (01875 833 248, late am).

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THE ANAESTHESIA OF ANTIQUITY

Dr A J Carter

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Towards the end of the last century, increasing concern about the safety of chloroform led many individuals to search, not only for new anaesthetic agents, but also for new ways of giving them, and in 1903 the German pharmacologist, Schneiderlin, announced the introduction of a new anaesthetic technique. Schneiderlin's technique consisted of administering a series of intramuscular injections of scopolamine pre-mixed with morphine at hourly intervals until anaesthesia adequate for surgery was achieved. Three injections, amounting to a total of 25mg of morphine and 1mg of scopolamine, were generally required and Schneiderlin had this to say about this new anaesthetic partnership:

'It possesses the advantage that, when properly adjusted, it is free from danger, an anaesthetist may be dispensed with, and physical shock, which is a regular and sometimes fatal accompaniment of anaesthesia by chloroform, is almost eliminated, and can be entirely avoided by the exercise of a little caution.¹'

In retrospect, Schneiderlin's enthusiasm for his new technique seems to have been a little premature. It never gained popularity but it did have a noble pedigree. References to not unrelated methods can be found in the diaries of Samuel Pepys, the plays of William Shakespeare and the tales of Geoffrey Chaucer, and their use can be traced back as far as ancient Rome. These techniques, all based on the combination of morphine or Opnopon, and scopolamine form the subject of this paper.

Ancient anodynes

Claims that the Romans practised a primitive form of surgical anaesthesia are generally based on the writings of the Greek physician, Pediacus Dioscorides, physician to Emperor Nero:

'The wine of the root of the mandrake shall be given to such as shall be cut or cauterised. They do not apprehend the pain because they are overcome with a dead sleep.'

De Universa Medicina AD60

Dioscorides was not the only one to have taken an interest in such matters. The writer Aurelius Celsus, however, had a different approach:

'There is another, more efficacious way for producing sleep. It is made from mandrake with opium seed and seed of henbane bruised up with wine.'

AD30 De re Medicina²

It is frequently forgotten that until comparatively recently virtually all our medicines were obtained from plants. Whilst the opium poppy (*Papaver somniferum*) needs no introduction, the other two plants mentioned by Celsus - mandrake (*Mandragora officinarum*) and henbane (*Hyoscyamus niger*) - may be less familiar.

Of these plants, mandrake, or mandragora, is by far the best known today. It is also the most misunderstood, a misunderstanding which springs, not from the plant's sedative power which lies in its root, but rather from the resemblance which that root bears to the shape of a man. As far back as old testament times, our ancestors associated the mandrake with fertility. Mandrake roots were much sought after, and those who made a living from gathering them tried to frighten others from doing so by crediting the plant with a dangerous and life-threatening magic power. Over the centuries, the plant's supposedly magic power has so totally obscured its reality as to lead one anaesthetic writer to state that: 'no such plant as the mandrake exists or ever did exist'. A visit to the Chelsea Physic Garden will correct any such misapprehension.

Equally real, but less familiar, is the other sleep inducing plant referred to by Celsus, henbane (*Hyoscyamus niger*). Both henbane and mandrake are members of a large botanical order, the *Solanaceae*, several members of which possess the ability to induce a profound and lasting sleep. Henbane, however, differs from mandrake in two important regards - firstly, its sedative power lies above the ground and, secondly, it grows freely in this country, where it has traditionally been known as 'the poor man's opium'.

The reason for the sedative power of these two solanaceous plants long remained a mystery and one that was only solved a little over a century ago when their active component was finally isolated from a third solanaceous plant, *Scopolia carniolica*, and named after it. It was, of course, scopolamine, also known today as hyoscine. So the combination of opium and henbane, recommended by Celsus in AD30 was Omnopon and scopolamine, exactly the same combination as the one introduced by Schneiderlin in 1903, and the one which today adorns the Arms of our Association.

It is largely thanks to monks in the early Christian monasteries that our knowledge of Roman medicine survived the collapse of its Empire. Early this century a tantalising link was found in one such monastery, between the medicine of Ancient Rome and that of Renaissance Italy. It consisted of a 9th century manuscript giving instructions for the use of a 'soporific sponge'. According to the manuscript, the sponge was to be:

'... steeped in a mixture of opium, hyoscyamus, mulberry juice, lettuce, hemlock, mandragora and ivy. When the sponge was moistened, the vapour it produced was ready to be inhaled by the patient.'

Manuscripts such as this one provided much of the inspiration for the first Western medical school which opened its doors at Salerno in southern Italy in 1096. Here, once again, recipes have been found for inducing surgical anaesthesia, such as this one attributed to an Englishman, Nicholas Scot, who studied at Salerno during the 12th century:

'Take of opium, mandragora and henbane in equal parts. Pound and mix them with water. When you want to saw or cut a man, dip a rag in this and put it to his nostrils. He will soon sleep so deep that you may do what you wish.'³

This description, and others which refer to the use of a soporific sponge or other similar material, appear to describe an early form of inhalation anaesthesia. It is however worth pointing out that when the Bible refers to the soporific sponge (particularly in connection

with Christ's crucifixion), it clearly states that the contents are intended not to be inhaled, but to be sucked.

A drynke called dwale

There is thus considerable evidence for the existence and use of primitive anaesthetic techniques in southern Europe during the first ten centuries AD. Although no evidence exists for the use of such methods within the British Isles, a large number of anaesthetic recipes have been identified in medieval manuscripts dating from the 14th to the 15th centuries. These are for an anaesthetic drink that was known as 'dwale'.

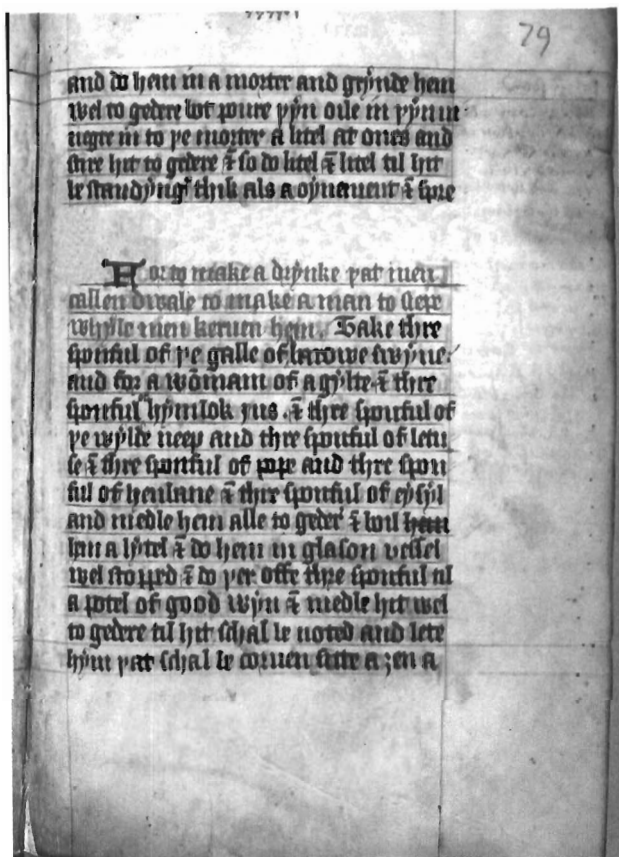
Dwale was the anglo-saxon word for *Atropa belladonna*, a solanaceous plant which needs no introduction to anaesthetists. It did, however, have another meaning, referring to a drink for inducing anaesthesia. Over forty similar recipes for dwale have been identified in medieval manuscripts to date, and although they vary in detail, the one reproduced here in modernised English,⁴ is typical:

'Take three spoonfuls of the gall of a barrow swine (boar) for a man, and for a woman of a gilt (sow), three spoonfuls of hemlock juice, three spoonfuls of wild neep, three spoonfuls of lettuce, three spoonfuls of opium, three spoonfuls of henbane and three spoonfuls of vinegar, and mix them all together and boil them a little and put them in a glass vessel well stopped and put thereof three spoonfuls into a potel of good wine and mix it well together.

'When it is needed, let him that shall be cut sit against a good fire and make him drink thereof until he fall asleep and then you may safely cut him, and when you have done your cure and will have him awake, take vinegar and salt and wash well his temples and his cheekbones and he shall awake from rest'.

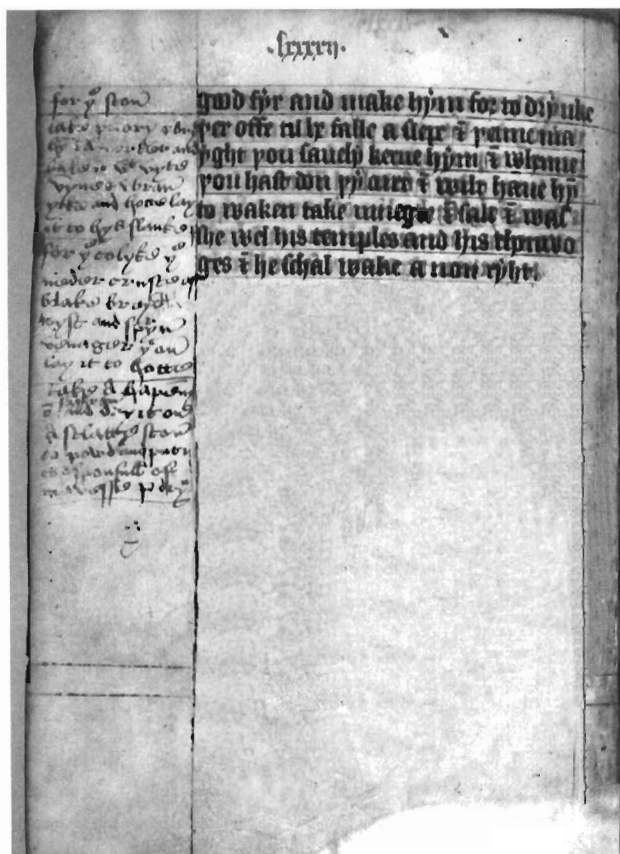
The ingredients in this recipe would, on the surface, appear to differ in a number of respects from those originating in southern Europe, and perhaps the most striking difference is the inclusion here of animal matter, that is to say, of bile from the gall bladder of a pig. Although it has been suggested that this might have been intended to aid the absorption of other ingredients, this seems unlikely and perhaps serves best to remind us that methods such as these date from an age before science, an age of witchcraft, superstition and magic.

Other differences from the southern European methods are the absence from dwale of mandrake root and the presence instead of the wild neep, or bryony (*Bryonia dioica*), a native plant of the English hedgerow. Although the mandrake does not grow naturally in northern Europe, legends relating to its magic powers were nonetheless well established here. Mandrake roots were consequently in great demand, particularly as aids to fertility, and artificial mandrakes or mannikins, were carved from the tuberous root of our native bryony and sold to the gullible. One such specimen was for many years displayed in the Hunterian Museum of the Royal College of Surgeons. Bryony, or wild neep, became known as the English, or False mandrake⁵. It possessed the same association with magic⁶ and was undoubtedly included in dwale as a substitute for the real thing.



Translation:

For to make a
 drink that men
 call dwale to make a man sleep
 while men carve him. Take three
 spoonfuls of the gall of a barrow swyne
 and for a woman of a gylte, three
 spoonfuls of hemlock juice, three spoonfuls of
 ye wild neep, three spoonfuls of letu-
 ce, three spoonfuls of pape (opium), three spoon-
 fuls of henbane, and three spoonfuls of eysyl (vinegar)
 and mix them all together and boil
 them a little and put them in a glass vessel



well stopped and put thereof three spoonfuls into
 a potel of good wine and mix it well
 together. When it is needed, let
 him that shall be carved sit against a
 good fire and make him to drink
 thereof until he fall asleep and then may
 right you safely carve him, and when
 you have done the cure and would have him
 to awaken, take vinegar and salt and wa-
 sh well his temples and his cheekbones
 and he shall awake from rest

The four other plants in the dwale recipe are all commonly found in Mediterranean anaesthetic recipes. The wild lettuce (*Lactuca virosa*) has been associated with a mild sedative action for centuries and is still included in herbal sedatives today. However, as in the case of hemlock, *Conium maculatum*, any such sedative action is very mild. With the exception of alcohol, the 'potel of good wine' to which the other ingredients are added, the only ingredients in the dwale recipe of known anaesthetic power are once again the extracts of the opium poppy and henbane - that is, in modern technology, Omnopon and scopolamine.

Decline and fall

It is now necessary to consider whether dwale was actually used as an anaesthetic and, if so, where. The image of the monk, in his monastic garden, is a familiar one to us today, and before the establishment of hospitals it was here that the sick and wounded turned for help. The monastery is consequently the likeliest site for the use of dwale, although it is puzzling that all of the recipes for it are written in medieval English rather than in Latin, which was the language of the monastery. Whilst any attempt to estimate the extent of dwale's use can be little more than a guess, it was sufficiently well known during the 14th century to be referred to by Geoffrey Chaucer in the *Canterbury Tales*:

'To bedde went the daughter right anon,
To bedde goth Aleyn and also John
They nas na moore - hem needed no dwale.'⁴

With the dissolution of the monasteries, beginning around 1536, the healing role of the monk in his medicinal garden was replaced by that of the apothecary in his physic garden, and by the physician. The Elizabethan period brought an increase in the availability of genuine imported mandrake roots, and in the *New Herbal* of Dr William Turner, published in 1568, and dedicated to 'the most noble and learned princess of all kinds of good learning, Queen Elizabeth', we read:

'Some - take the rootes and set them in wine and give to them that are in great payn and to such as must be burned or cut in some place that they should not fele the burning or cuttyng. If they drink thys drinke they shall fele no payne but they shall fall into a forgetful and sleepishe drowsiness.'⁷

Whereas the poets of Chaucer's age had once praised the effectiveness of dwale, those of the Elizabethan era now sang the praises of opium and mandragora:

'Lay hold upon thy sense,
As thou hadst snuffed up hemlock, or ta'en down
The juice of poppy and of mandrakes. Sleep,
Voluptuous Caesar.'

Ben Jonson: *Sejanus* (1603)

'I drank of poppy and cold mandrake juice
And being asleep, belike they thought me dead.'

Christopher Marlowe: *The Jew of Malta* (1633)

And finally:

'Not poppy, nor mandragora,
Nor all the drowsy syrups of the world,
Shall ever medicine thee to that sweet sleep
Which thou owed'st yesterday.

William Shakespeare: *Othello* (1604)⁸

Whilst none of these quotations refers to the use of opium and mandragora to induce surgical anaesthesia, it is surely hard to believe that their authors were totally unaware of its use for this purpose. The use of these methods had, however, by now long been in decline, with surgeons only writing of them to warn of their dangers and, in a play written shortly after Shakespeare's death, we find:

'I imitate the pities of old surgeons
To this lost limb, who ere they show their art,
Cast one asleep, then cut the diseased part.'

Thomas Middleton: *Women beware Women* (1620)

It is not hard to find examples of their occasional use, and one of the most intriguing examples is to be found in the diary of Samuel Pepys. In his entry for 2 February 1667 we read:

'Up, and to the office. This day I hear that Prince Rupert is to be trepanned - God give good issue to it.'

Prince Rupert was the dashing and romantic cavalier who, twenty years previously, had led the Royalist forces of Charles I against Cromwell during the English Civil War. The prince had long suffered from a head wound, sustained in battle.

Later:

'I with others to the House (of Commons) and there hear that the work is done on the Prince in a few minutes without any pain at all to him, he not knowing when it was done.'

In his retirement, Prince Rupert had developed an interest in the use of medicinal herbs. He was in the habit of making up herbal preparations for himself and others and Pepys' comment raises the possibility that he might have done so on this occasion. Whether he actually did, and what he might have taken, we shall never know.⁹

Pepys' own experiences of the knife would have been more usual. When, nine years previously, he underwent an operation for the removal of a stone 'the size of a tennis ball' from his bladder, he was denied the benefit of any sedative or pain killing drugs. Although the anaesthesia of antiquity was fast fading into obscurity, the age of modern anaesthesia was still two centuries away.

Postscript

Schneiderlin's introduction of morphine and scopolamine as an alternative to chloroform anaesthesia never gained acceptance but, in 1910, the anaesthetist D W Buxton wrote:

'A terrified patient after a sleepless night is in the worst condition for an anaesthetic and an operation. In such patients I am convinced that the use of scopolamine and morphine injections before a general anaesthetic is valuable.'

In many centres, the use of Omnopon and scopolamine prior to major surgery became almost routine, and remained so until, in 1991, a report in the journal *Mutagenesis* suggested that noscapine, a constituent of Omnopon, could possibly cause genetic damage to the fetus.¹⁰ Two years later, Omnopon was withdrawn from the *British National Formulary*, and the age-old partnership of Omnopon and scopolamine finally became history. Surprisingly, no journal, by letter or editorial, mourned its passing.

We should perhaps not be too sorry to see the end of this ancient partnership for we do have much better ways of doing things today. And yet Omnopon and scopolamine was in its day a partnership without equal. There remains, if nothing else, a twinge of regret that with its loss our specialty has lost just a little of its magic.

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THE BELOVED MOTORBIKE AND SIDECAR

E I McKesson and his apparatus

Dr C S Ward

Honorary Member, History of Anaesthesia Society

The intermittent flow anaesthetic machine virtually disappeared from UK hospital practice several decades ago. We therefore have now a generation of anaesthetists who have never seen, let alone used one. When it comes to dental chair anaesthesia, they do not know what they are missing. The intermittent flow machines which are still in use are the Walton (now Mark Five), the A.E. and the McKesson models J and K. All are excellent for dental chair anaesthesia. But Ohmeda have abandoned the Walton and the A.E. and this presentation mainly concerns the McKesson. There were also the upright Magill, which I have not used since 1950, and the Devoneast and Portanest, to be seen in the Thackray Museum Reserve Collection.

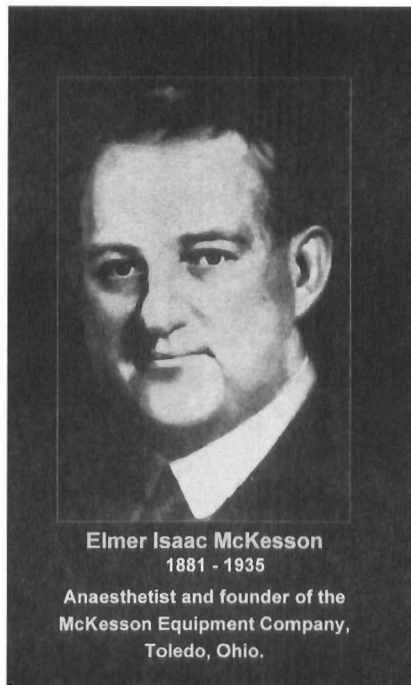
Principle of operation

The principle by which these machines operate is derived from the demand flow valve. Figure 1 shows a reservoir (R) which is filled with gas delivered through a rubber supply tube. At rest, gas is retained in the reservoir by the gravity valve (D). When R is full it presses on a plate which works a lever which nips the supply tube, cutting off further flow. It remains ready until the patient makes an inspiratory effort. D is so balanced that even the slightest inspiratory effort causes gas to flow. Figure 2 shows the addition of a screw and spring which apply force to the plate opposed to that of the reservoir. When the screw is turned 'up' the pressure within R increases and now lifts the valve D, permitting gas to flow even without the patient's effort. If he makes an inspiratory effort the flow increases; if he opposes it by exhalation, or if there is some other resistance, the flow diminishes and may even cease. So now we have a *varying flow* device. Two demand valves, one for nitrous oxide and one for oxygen, feed into a mixing chamber which has a rotating drum, the outlet of which contains the gravity valve. A single spring and screw are common to the two sides so as to give a balance between them whatever mixture of gases is selected.

The McKesson series

McKesson himself pointed out that the maintenance of a constant pressure assured the gases would flow when the patient needed them, and at other times the flow would cease and so avoid wastage. He also said that by maintaining the pressure, regardless of flow rate, the ingress of air is prevented. He pointed out that admission of air to the gas mixture would be an important cause of failure.

I have reason to believe that Figure 3 shows the McKesson Model A developed in 1910. Unfortunately I have not found any example of this as you might say, in the flesh. I have found no evidence of any models B, C, D, E or F. However, in the Thackray Museum gallery is our McKesson Model G which I believe to be the earliest model still in captivity. The ether vaporiser with the rebreather is in very good condition, but the reservoir bags have been taken away for safe storage (it is atmospheric oxygen plus ultraviolet light which promote perishing of rubber, hence every window and fluorescent light in the museum is fitted with a UV filter).



The mechanism of the Model G is shown in Figure 4. The catalogue I have for the Model G, published in Toledo, USA, states copyright 1929, but it must have been developed earlier than this, probably in 1918. A catalogue for the Simplor and Simplograf (the next development, the Models J and K which have the McKesson Head, as we now know it) says it was developed in 1929. So with only minor changes this has been in use for nearly 70 years. Many Simplors are still used and are maintained by the McKesson Company of Great Britain.

The McKesson G, the upright Magill and the early Waltons had mixing chambers which could not only mix nitrous oxide with oxygen, but also with air. The air mixture could be used only on demand. In the later models, J and K, there is no facility for admixture with air (with one possible exception to be described shortly). If the pressure is turned up it becomes possible to use a reservoir bag in a breathing system in the Mapleson A configuration, albeit preferably with a non return valve downstream to prevent rebreathing.

Figure 5 illustrates the action of the Simplor. To understand its use better one must remember that in the days of ether anaesthesia it was common either to add CO₂ or to let the patient's own CO₂ build up by rebreathing. This was to compel the patient to breathe the rather unpalatable ether vapour as quickly as possible, and thereby shorten the period of unconscious excitement. I would inform the uninitiated that this could be exciting indeed, and not only for the patient. So there is, attached to the rear of the mixing chamber, either a simple bag mounted on an on-off tap (Figure 6), or a concertina bellows (Figure 7). The bellows is enclosed in a casing which limits its capacity and also varies its resistance to filling. In other words, one can adjust both the volume and the pressure of rebreathing

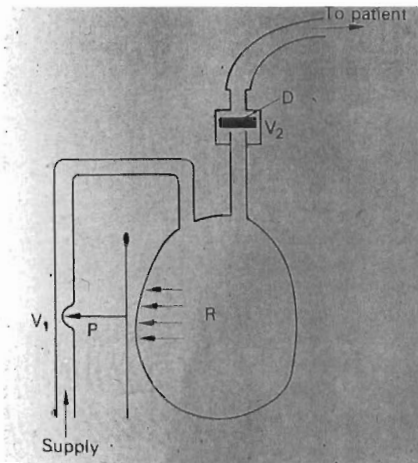


Figure 1

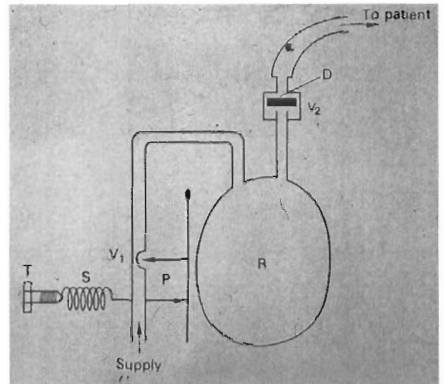
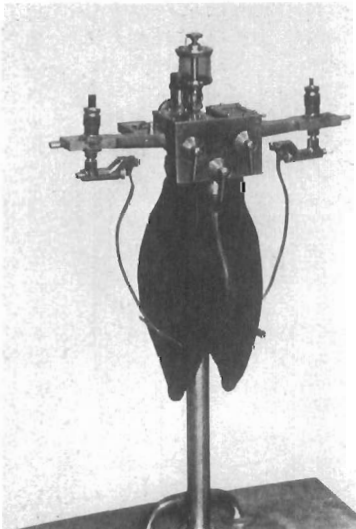
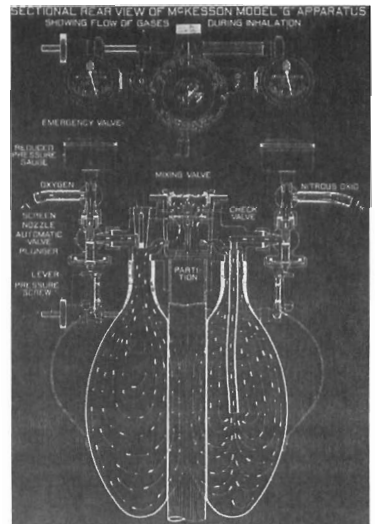


Figure 2

Figure 3
McKesson Model AFigure 4
McKesson Model G

(Figure 8). With the 'Simplic' bag, the machine is a Simplor; with the bellows it is a Simplograf or Nargraf. The common gas outlet has a screwed connection for a vaporiser or a male tapered connection for the corrugated hose or reservoir bag. In both models there is a fine adjustment control for the mixture, the knob being graduated from 0-50%. It does two full turns for 100%. All models, including the G, have an emergency oxygen flush.

Intermittent flow, nowadays used always with the pressure turned up a bit, acting as varying flow, has the advantage that rapid and accurate changes in both flow rate and composition of the gas mixture can be made independently of each other, and by a few quick movements of the hand. Gaseous induction with a nasal inhaler needs far more dexterity than with a full facepiece, let alone an iv injection.

Refinements

In modern anaesthesia rebreathing is avoided, the bag or bellows being turned off or even replaced by a blanking plate. From 1949 onwards, the head has been made in one single casting rather than built up from components bolted together. Behind the inlet for the nitrous oxide delivery tube there may be a second port for ethylene; behind the oxygen port there may be another for either a CO₂ or possibly a cyclopropane flowmeter, or as an oxygen outlet for resuscitation or to power a small sucker. An ether vaporiser and a circle absorber system could be added (Figures 9 and 10). There were two configurations: cyclo or CO₂ could be fed in through flowmeters into the McKesson head itself or into the absorber. There have been modifications to make the Simplor comply with the latest regulations, such as a minimum 30% oxygen, an O₂ failure warning device and an emergency air inlet valve. So when it is dolled up in all its finery, the simple McKesson becomes quite a comprehensive affair.

We know a little of the early history of McKessons as seen from the British viewpoint. The Model A began in 1910, followed by McKesson's paper in 1911. The Model G was probably first used in the USA in 1918. Mr A Charles King imported the first into Britain in the 1920s for Dr De Caux, who used it for years. The second was probably that imported by Dr Wilson of Manchester who lectured with it also in the 1920s. Dr E J Chambers, Honorary Anaesthetist to Doncaster Royal Infirmary, bought a Model G in 1926; he described his fact-finding experiences in the US and Canada in 1928. For the scientifically minded anaesthetist, a Simplograf Model H was made in 1928. It had a recorder giving complete data of the anaesthetic, blood pressure etc. (Figure 11). One was installed at the Doncaster Royal Infirmary in 1930, no doubt at Dr Chambers' instigation. I believe there are one or two of these still about, but we do not have an example in the Thackray Museum.

Recently I found another variant of the Simplor. This is Serial No.1189, kindly sent by Gerry Swann for the meeting in Leeds. It was delivered by McKesson GB to Messrs Wright Dental of Dundee on 12 March 1947, and is an example of the pre-single-casting head. I was surprised to see that it had neither a rebreathing bag nor a Nargraf bellows. Instead, at the back of the mixing chamber there was an aperture leading to a port in the mixing chamber *below the gravity valve*. It began to open at a dial setting of 40% oxygen, was two thirds open at 0% oxygen (ie 100% NO₂), and was fully open when the fine adjustment dial had gone further round to 34%. I do not know whether it was intended to admit air on demand, or to allow the escape of gas if the pressure was too high. I think it must have been the former, but

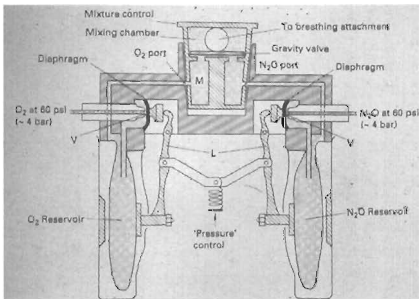


Figure 5
Model J (Simplor)

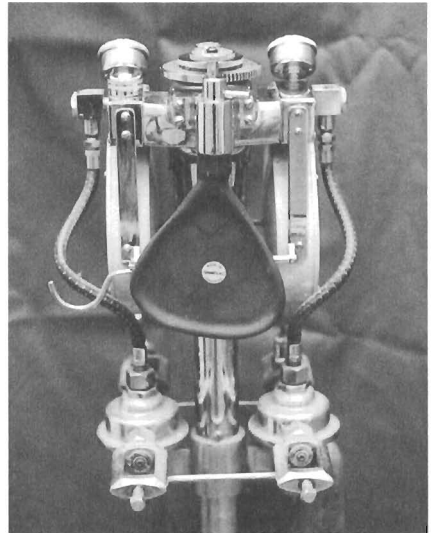


Figure 6
Simplor

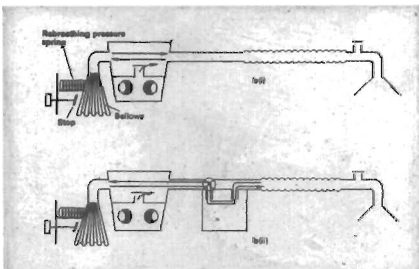


Figure 7
Simplotraf

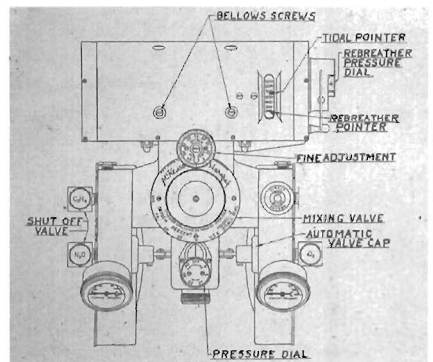


Figure 8
Simplotraf

I do not understand it. No.1102 in the Reserve Collection has the same configuration. It was sold to Mr Fisher of Pontefract in May 1946.

Continuous flow model

When using the circle absorption system, possibly with cyclopropane or ether, a continuous flow machine is of course easier to use. The Model N (Figure 12) had a circle absorber with an integral ether vaporiser, the unit being called the Absorberizer. This was different from the Type 620 absorber seen earlier. It could be fitted with up to 5 flowmeters, some of which were the twin tube type (one for up to 1 litre/min and the other for higher flows). There was a single fine adjustment valve for the two tubes. A choice was available of any five of six gases - nitrous oxide, oxygen, ethylene, cyclopropane, carbon dioxide and helium. It was rather like ordering a Chinese takeaway.

Patient controlled analgesia

In the early days, dentists gave a mixture of nitrous oxide with oxygen or air and having set the machine, left the patient to it. But self-administration needs a little more mystique, so the patient control valve was devised and appears in the 1954 catalogue (Figure 13). The description reads: 'This valve is attached to the McKesson anaesthetic apparatus and is controlled by the patient by means of a hand bulb when it is desired to use analgesia. When the patient requires a stronger mixture of gases, the bulb is squeezed, cutting off the air supply, and permitting a stronger mixture of gases to flow thus controlling the depth of analgesia'. From the illustration I can only surmise that it was mounted on the outlet of the machine and simply cut off the supply of additional air which would otherwise have diluted the mixture from the machine.

Finally, I come to what I consider to be the jewel in the crown of the McKesson collection. It is the Model M or Easor (Figures 14 and 15). Intended for self-administered analgesia only, this smaller version of the 'motorbike and sidecar' is very rare. I have been told there is one other in captivity, in Chicago. As with the previous model it is controlled by a hand bulb.

In the last few decades, although the number of GAs for extractions has dramatically and mercifully diminished, the call for inhalation analgesia has increased. This, with the increasing demand for flowmeters has led McKesson GB to develop an entirely new series of machines for both general anaesthesia and relative analgesia, culminating in the MC2 and MC1 (Figure 16). These combine flowmeters and continuous flow, but still with controls for mixture and for flow rate.

Acknowledgements

Much of this information, including catalogues dated 1929, 1949, 1954 and 1961 was supplied by Mr Gerry Swann of the McKesson Equipment Company, Anaesthetic Division of Cestrudent Ltd, Chesterfield, who apologised for being unable to attend the meeting. Alan Humphries of the Thackray Museum provided many of the illustrations, and Tony Bennett provided the portrait of McKesson.

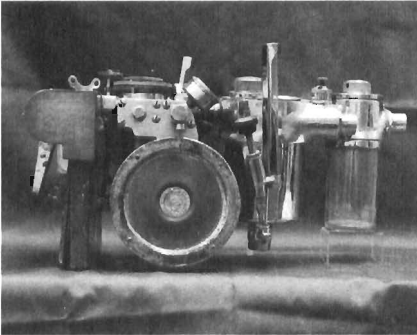


Figure 9
Simplograf plus circle and vaporiser

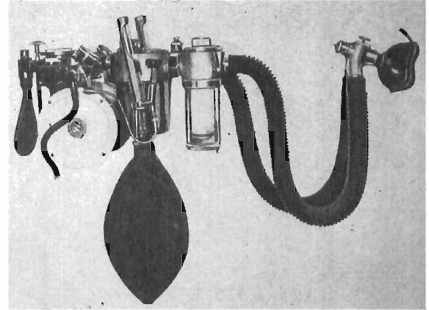


Figure 10
Simplograf plus circle and vaporiser

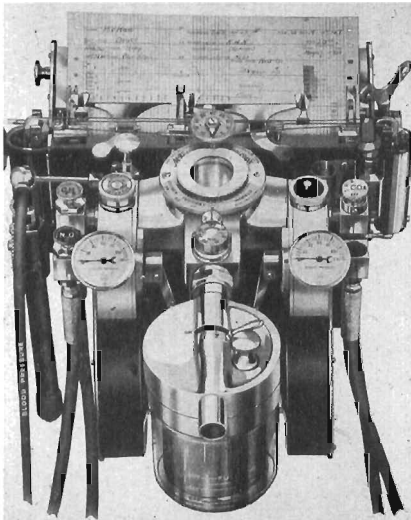


Figure 11
Simplograf Model H

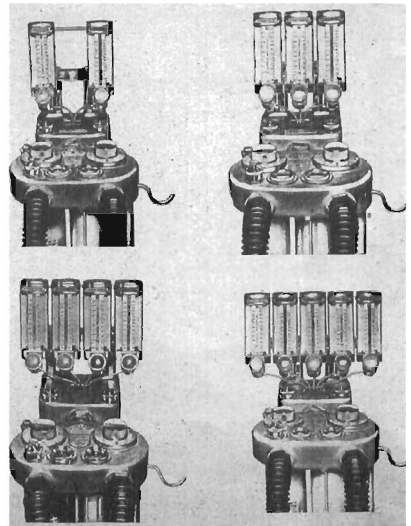


Figure 12
Continuous flow Model N

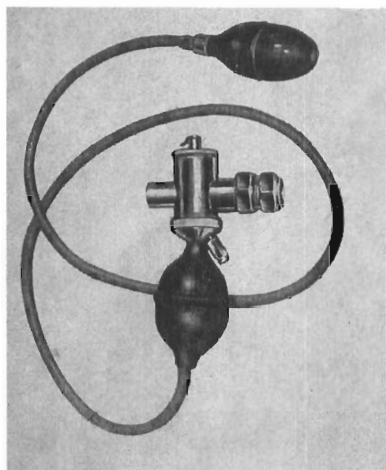


Figure 13
Patient-control hand bulb



Figure 14
Model M (Easor)

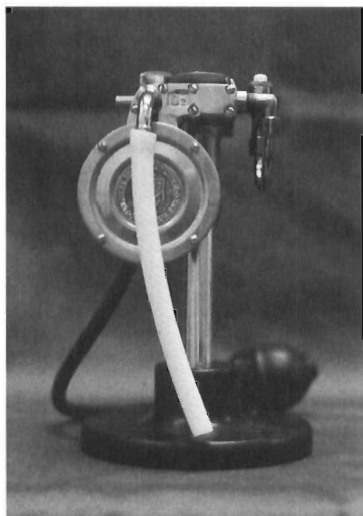


Figure 15
Side view Model M



Figure 16
McKesson MC1

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THE THACKRAY LEGACY

This was a combined presentation on the history, the philosophy and the holdings of the Thackray Medical Museum, given by Chief Executive Mike Cooper, and Librarian Alan Humphries who is a Member of the History of Anaesthesia Society.

When the family-owned Thackray company was sold in 1990, its small museum on the history of products it had marketed passed to the Thackray Medical Research Trust. The Trust began looking for a site to transform this into a major medical museum. Developments at the St James's University Hospital meant that by the mid-nineties the old Workhouse, built in 1861, had become redundant. A deal was struck whereby this Grade 2 listed building was leased at a peppercorn rent. The Museum was responsible for completely renovating the building and the creation of a large car park and herb garden. With generous assistance from the Heritage Lottery Fund, the Thackray Medical Museum opened in 1997 with over 30,000 items in the collection. The Museum must attract many visitors to pay its way. Story lines in the public galleries are all based on the National Curriculum, and aimed at giving everyone a feeling of personal experience of the conditions and of the times. Nearly a quarter of the museum visitors are school children, who come from all over the country.

The museum collection covers all fields of health care, including pharmacy and veterinary medicine. Not surprisingly there is an emphasis on historical surgical instruments. Anaesthesia is well represented by the collections of Dr Crispian Ward from Halifax, and that of the Leeds Medical School. One of the prime interests is the relationship between commerce and medicine. The rapidly expanding Library limits texts to those having some involvement with equipment, and has the world's largest collection of medical trade literature.

Following the introductory presentation, all delegates at the meeting had the great privilege of an unhurried guided tour through the Library and Reserve Collection, and the splendidly presented Museum Galleries. Most will wish to return; a single visit is certainly insufficient to fully appreciate the treasures of the Thackray Medical Museum.

Editor

SOCIETY AND DEPARTMENT HISTORIES

In this, the 50th year of the National Health Service, we invited brief histories of Anaesthetic Departments and Societies which have reached or passed their 50th year. The early response has been encouraging. This feature will continue in future Proceedings when space is available, and while reports continue to be received.

The South African Society of Anaesthesiologists

During the second world war, the requirement for rapid anaesthetic training of volunteers to the South African Medical Corps brought together the few doctors with an interest in anaesthesia. They began to meet informally at each other's homes about once a month, often inviting guest speakers. It was at one of these meetings that the idea was mooted to form an anaesthetic society. The South African Society of Anaesthetists was inaugurated on 1 August 1943 in Johannesburg. The South African Medical and Dental Register of that year listed 3444 medical practitioners, of whom 26 were recorded as anaesthetists. It is remarkable that of these, 25 joined to form the new society - the first anaesthetic society in Africa and ninth in the world.

The objects of the Society were:

- a) the promotion of the science of anaesthesia;
- b) the correlation of the interests of all practising anaesthetists in South Africa and the determining of the relationship which should exist between anaesthetists, and between anaesthetists and hospitals, private and public institutions, government authorities, the public and the medical profession in general;
- c) to represent and further the interests of anaesthetists.

In 1955, with Dr Bobby Roberts as the official South African delegate, the South African Society of Anaesthetists became a founder member of the World Federation of Societies of Anaesthesiologists.

Our first newsletter was published in 1947, succeeded many years later by the quarterly publication *Pipeline*. From 1947, the Society asked for the establishment of Chairs in Anaesthesia and a university DA examination. Success was achieved with the offering of a DA course at the University of the Witwatersrand in 1949, and eventually, in 1959, the establishment of the first Chair of Anaesthesia. This was at the University of Pretoria, with Professor OVS Kok as its incumbent.

In 1950, the SA Society of Anaesthetists was the first specialty body to ask for a separate Faculty of Anaesthetists within a College of Physicians or Surgeons - akin to the colleges in Britain. This was finally achieved in 1996. By now branches of the Society were formed in all the provinces of the country (including members in Namibia). Issues dealt with over the years included the Inquest Act, training of interns and anaesthetic nurse assistants, the Society's history, minimal anaesthetic requirements for hospitals, nursing homes and unattached theatres, hosting a biennial and subsequently an annual National Anaesthetic Congress, peer review, tariff and medical-aid related matters, guidelines for safe anaesthesia, care and

management of the disabled or impaired physician, continuing medical education and our role on the African continent.

In April 1993, the South African Society of Anaesthetists celebrated its 50th anniversary with the publication of its history: *Five Decades - The South African Society of Anaesthetists 1943-93* by Nagin Parbhoo.* In keeping with international terminology we constituted a change of name to The South African Society of Anaesthesiologists.

Our desire to share skills with the rest of Africa has been made easier with the change in political status in South Africa. Having co-organised the 1st All-Africa Congress in Harare in April 1997, the SA Society of Anaesthesiologists is now a founder member of the newly constituted Africa Regional Council of the WFSA. We have been accorded the honour of hosting the 14th World Congress of Anaesthesiologists in Durban in 2008. The Society's problems have not been unique to our part of Africa, but many obstacles have been overcome. Our organisation currently has some 700 members.

Contributed by Nagin Parbhoo, Hon Archivist, SASA

* *Five Decades* is available from Dr Nagin Parbhoo, Fairly Lodge, 9 Portadown Road, Bergvliet 7945, South Africa, at a cost of £20 sterling, p&p inclusive, bank drafts in favour of The SA Society of Anaesthesiologists.

Birmingham - Birmingham Children's Hospital (Birmingham and Midland Counties Hospital for Sick Children)

In June 1871 the management committee resolved that one of the extra acting physicians should be appointed Director of Anaesthetics, in order 'to improve the manner of the administration of anaesthetic agents; to diminish the dangers arising from their employment by inexperienced persons; and to prevent the house surgeon being diverted from his proper work, as an assistant to the surgeon operating'. Dr Edward Mackey was appointed to this position. In October 1871 he proposed the purchase of an apparatus for the inhalation of nitrous oxide gas. It had several advantages over chloroform, he claimed. It acted more rapidly, was less dangerous, and should be useful in shorter operations such as straightening joints and cutting for squint. Mackey added: 'An additional reason for introducing it at the Children's Hospital is that being comparatively new the results obtained here will help to fix its scientific value'. Mackey resigned from the Children's Hospital in 1875 when he was appointed Physician to the Queen's Hospital, Birmingham. He also held the post of Professor of Materia Medica and Therapeutics at Queen's College, Birmingham.

Birmingham Dental Hospital

Appointed six 'Administrators of Anaesthetics' in 1892.

General Hospital Birmingham

Appointed two anaesthetists in 1896-7 as officers of the hospital. They prepared an annual report of the anaesthetics administered, which was published with the reports of the physicians and surgeons in the Annual Report of the General Hospital.

Contributed by Eddie Mathews

The Department of Anaesthetics in Cardiff

For several years before the second World War the Coroner of Cardiff had been expressing concern about the high mortality following surgery in the city's hospitals. A Committee was formed, with representatives of the hospitals, and of the Welsh National School of Medicine. Their work was delayed because of the War, but in 1946 they recommended the creation of a Department of Anaesthetics, under the supervision of the Welsh National School of Medicine. It would be headed by a Lecturer in Anaesthetics who would also be Director of Anaesthetics in the clinical institutions of the School.

The post was filled by the then First Assistant in the Nuffield Department at Oxford. William Woolf Mushin was to create, as well as an efficient clinical service, one of the leading research and teaching institutions in the anaesthetics world. His policy was that the whole of the service to the Cardiff hospitals should come from a single integrated team of all grades. By 1948 the Department had been reformed and research projects were under way. In the next 21 years Departmental staff were to publish nine textbooks and nearly 200 papers, many of them now the basis of everyday practice. In 1952 Bill Mapleson took up the first non-medical academic post in the Welsh National School of Medicine.

A major impact on the Department was the opening of the University Hospital of Wales in 1971, with the academic department getting a very large proportion of the limited space available to the department as a whole. The authoritarian leadership began gradually to change; other major figures were emerging on to the international scene and there were increased pressures on clinical commitments. The emphasis in research and development gradually moved from the hardware and physical sciences of anaesthesia to more clinically based interests. Michael Rosen led a whole range of analgesia-related projects, and pain control in all its forms remains a special interest of the new leader, Professor Michael Harmer.

Today clinical anaesthetic research is poorly funded, and the service is dominated by modern hospital management. But recruitment at all levels is encouraging, and there is a willingness among recently appointed consultants to advance the specialty and the Department. Despite all the pressures, the staff aim to match the spirit of loyalty and the insistence on excellence which have been bywords of the Cardiff Department in its first fifty years.

Contributed by Dr JN Horton

Groningen - The Anaesthesia Department of Groningen University Hospital 1947-1997

This Department was born on 1 September 1947 when Dr C R Ritsema van Eck¹ was appointed its first Chief. Previously, as was the custom throughout the Continent, anaesthesia

was administered by a junior surgical assistant or a theatre nurse. The chief of surgery from 1938, Professor Eerland, realised the importance of modern anaesthesia in his own work, especially thoracic surgery, and he actively promoted the development of a professional anaesthetic department. Ritsema van Eck was born in 1905 to a Dutch East Indian family. He graduated MD from Utrecht in 1930, wrote his thesis on tropical hygiene in 1931, and trained in surgery and obstetrics. After working in Surinam and the Dutch East Indies as a military surgeon, he became a prisoner of war of the Japanese. Eerland knew him from the colonial service period, and persuaded him to train in anaesthesia and to begin the new Department. He became very active. Nationally, he set up the Dutch Anaesthetists' Society and he was a founder of the WFSA. He was appointed full professor in 1960.

The department worked closely with the thoracic surgeons and the departments of physiology and pharmacology. Locally developed instruments were used to measure expired oxygen and carbon dioxide and from 1955 artificial respiration was provided for medical and surgical patients. Organisation of the work load was difficult because each department had its own building with its own theatres. During the 1960s the staff was chronically overworked resulting in severe difficulties in coping with the clinical load and finding a head of department. J C Dorlas (1971-75), D H H Langrehr (1977-88) and P J Hennis (1989-97) undertook the arduous task of slowly building a modern department to provide quality training, state of the art patient care and productive research. From 1978 under the dynamic leadership of S Agoston, the Research Group for Experimental Anaesthesia and Clinical Pharmacology earned a prominent place in research, notably on muscle relaxants.

In December 1997 present and past members of the Department celebrated its 50th Anniversary at a memorable meeting: *In somno securitas*.²

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Contributed by R ter Sluis, historian and M van Wijhe, anaesthetist

The Society of Anaesthetists of the South Western Region

This society was formed in November 1947 'to promote the furtherance of the knowledge and art of anaesthesia in the South West region by means of lectures, discussions, practical demonstrations and films, and in doing so to encourage co-operation and friendship between anaesthetists of this region'. The first meeting was held in the Grand Hotel, Bristol and was attended by 41 of the 48 senior anaesthetists circulated. Dr E G Bradbeer became President, Dr G L Feneley Honorary Secretary and Dr R Woolmer Honorary Treasurer. After dinner, Professor R R Macintosh gave the first address to the Society, on 'Anaesthesia for Research Purposes'.

The second meeting was held in Cheltenham in April 1948. From then on the Autumn Meetings were held in Bristol whilst the Spring Meetings rotated around other centres in the region. The twice-yearly meetings have a scientific and social programme for members, and a programme for non-anaesthetic partners. The original format of the scientific sessions was

based around in-theatre demonstrations, but with the rapid growth of the Society (121 members by 1952 and 201 by 1969) the current arrangement was soon instituted of lectures on a Friday and Saturday with an interwoven social programme including a formal dinner.

The first meeting outside the region was held at Oxford in 1956 at the invitation of Sir Robert Macintosh who was then President. During his term of office the Presidential badge was commissioned as a gift from the first ten presidents. It was presented for the first time by Dr Bradbeer to Dr A Tom, President for that year at the Spring Meeting in Gloucester in 1957. The Registrar's Prize was introduced in 1967 when the award was worth 25 guineas. It has now risen to £250 and there are prizes as well for Operating Department Assistants and anaesthetic nurses. The Society's twice-yearly journal *Anaesthesia Points West* was first published in October 1968, edited by Dr J Pelmore.

In 1975 the Society held its Spring Meeting in Bruges, since when overseas meetings have taken place every third year, with visits to Amsterdam, Cork, Berlin, Copenhagen, Oporto, Strasbourg and Bordeaux. The 1998 meeting will be held in Malta. In 1983 an Academic Foundation was established, which has supported overseas lectures and other projects by members of the Society. July 1997 saw a new venture with a trainees' meeting, held at Taunton and attended by 29 junior members. This will now become an annual event.

The Golden Jubilee Meeting was held in Bristol in November 1997, with many distinguished visitors. In addition to the lecture programme, visits to the Simulation Centre to see simulated anaesthetic problems were reminiscent of the in-theatre sessions of the early meetings. The Jubilee was also celebrated by the inauguration of the Sir Humphry Davy Lecture of the Society and the publication of a collection of poems and an updated history of the Society.

Contributed by Dr J A Carter, Honorary Secretary, SASWR

SANTIAGO DE COMPOSTELA ON THE HORIZON

Dr J Ruprecht
Erasmus University, Rotterdam

The Fifth International Symposium on the History of Anaesthesia (ISHA) is being organised by the Department of Anaesthesia at the University of Santiago de Compostela. This department is well known for many studies on the history of anaesthesia, locally and beyond the Spanish borders, and Santiago houses the Spanish National Museum of Anaesthesiology. The decision to stage the Fifth ISHA in Santiago in 2001 was taken during the Fourth ISHA at Hamburg. There was fierce competition from Jerusalem and Prague. Members of the ISHA Venue Committee consist of one organiser from each of the previous four symposia, and one representative each from the HAS, the AHA and the Australian Society's Section on the History of Anaesthesia. All three bids were attractive, but the Committee unanimously decided on Santiago. The outstanding credentials in the field of the history of anaesthesia were the decisive factor.

The Apostles' City

Santiago de Compostela is one of the western-most places of Europe, lying far to the west of Greenwich. It runs, however, on Central European Time, so mornings are early and evenings are short. In contrast to most of the Iberian Peninsula, Galicia is a very green country, with old granite hillsides intersected by rivers. Mass tourism has not yet changed the enchanting Atlantic coastline.

Santiago has for many centuries been one of the holiest destinations in the Christian world, like Rome and Jerusalem. Countless millions of pilgrims have travelled the famous routes to this remote land to worship at St Jacob's grave. The drive from the contemporary airport is along the last part of the French route; one ascends a hill and beholds in the distance the towers of the famed Cathedral. That spot is called *The Hill of Joy*. Three other pilgrim routes converge into the Old City and towards the Cathedral. The Old Santiago has been preserved in superb condition, architectural structures are like a symphony in Galician granite telling about the bygone centuries. This venerable city of 100,000 inhabitants is very much young and alive thanks to some 30,000 students who crowd the attractive streets and keep busy the hospitable inns where most excellent food and beverages are served - no McDonalds in the Old City!

Rural landscapes outside the city and the urban scenery of Santiago flow one into the other, resulting in a highly cultured and harmonious environment. The extraordinary central square is flanked by the Spanish baroque façade of the Cathedral, by the neo-classical Town Hall, the superb front of the old University and the venerable Hostel de los Re Catolicos. The Hostel used to be a hospice and a kind of hospital for the medieval pilgrims. It is now a leading hotel worth visiting for its exceptional beauty.

The venue of the 5th International Symposium, 2001.

A beautifully stone-paved street connects the Cathedral Square and the Franciscan Monastery. Leaving on the right the Archbishop's Palace one comes within 100m on the left, to the

neo-classical palace of the Medical Faculty. The interior is spacious; unpretentious scholarly corridors connect the lecture halls. The major hall and several others of sufficient capacity will be available for the Anaesthesia History Symposium. Meals will be organised either in the Medical Faculty or in the beautiful refectories of the adjacent Franciscan Hostel. The Medical Faculty houses also the Spanish National Museum of Anaesthesia.

The Organising Team

A surprising number of Professor Alvarez's Department of Anaesthesia in Santiago are actively involved in the study of anaesthetic history and in running the National Museum of Anaesthesia. Professor Franco is their doyen and his new book on the history of anaesthesia is eagerly awaited. The Santiago group have been active participants in anaesthesia history meetings abroad. The recent Congress in Santiago 'Anaesthesiology's Way from the 19th to the 21st Century' started with a major historical session. The fame of foreign guests contributing to this meeting indicates the enviable attraction of the Santiago department among anaesthesiologists world-wide. A major cultural event of this Congress was a guided tour through the Cathedral which culminated in the unique show of *botafumeiros*. An immensely heavy incense burner suspended from the dome is lighted and swung in a great arc through the transept while music from the organ of more than one thousand pipes enhances the medieval enchantment.

Prepare now for 2001!

The Fifth International Symposium has great potential to become a very memorable one. The team and the venue are excellent. Bear in mind, though, that quality papers finalised in time are the decisive factors for success and for producing Proceedings. In olden days pilgrims were expected to transport stones to Santiago. We shall not be asked to do that, but to toil on contributions and to apply early.

SIMPSON HOUSE: 'DISCOVERY ROOM' EXHIBITION

On Tuesday 4 November 1997 an exhibition was held at 52 Queen Street, Edinburgh, to commemorate the exact 150th anniversary of J Y Simpson's discovery of the anaesthetic qualities of chloroform. This exhibition was hosted by Mr Dougie Paterson, Manager of Simpson House, Drugs Counselling and Related Services, under the auspices of The Church of Scotland.

The exhibition was officially opened by Barbara Simpson (from Herefordshire) who is a great-grandniece of James Young Simpson. The occasion was also attended by about 12 other members of the Simpson family, including Myrtle Simpson, author of the book *Simpson The Obstetrician*. Interestingly, Barbara Simpson had never before met the other living members of the Simpson family.

There was an air of nostalgia in the room where 150 years before James and Mrs Simpson, Miss Grindley (her sister), Miss Petrie (her niece), Captain Petrie (his brother-in-law) and Dr George Keith and Dr Matthews Duncan had inhaled chloroform from tumblers. Some original furnishings are preserved and the exhibition includes a fine collection of posters, photographs and memorabilia, plus the video first shown at the Chloroform Sesquicentenary Meeting of the European Academy of Anaesthesiology in Edinburgh in September.

Besides commemorating the Chloroform Sesquicentenary, the exhibition is designed to chart the history of Simpson House, and to highlight its current activity, namely, counselling, family and group work, outreach work to prisons and education for young people.

It is the intention of Simpson House to make the exhibition open to the public, probably on a Thursday morning, in the summer months. Meantime, interested people are welcome to write to: 52 Queen Street, Edinburgh EH2 3NS, or telephone: 0131 224 6028, to arrange a visit. Members of the History of Anaesthesia Society would be particularly welcome.



Correspondence

The Editor, Sir,

A letter which I received 22 years ago has recently come to light. This was from University Microfilms Ltd regretting that the title 'Bibliography of Anaesthesia' was no longer in their programme and could not be supplied. In the early 70s I bought the book for our Department. It is a thesis submitted for Fellowship of the Library Association which listed all publications about anaesthesia up to 1946, I think. Someone borrowed, mislaid or stole our copy. It must be a useful and important reference, although no one seems to have seen it except me. Does anyone know where a copy may be found?

Adrian Padfield

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A Collector's item reprinted

Anaesthesia: Essays on its history comprises meticulously edited versions of three-quarters of the papers read during the First International Symposium on the History of Modern Anaesthesia, Rotterdam, 1982. The book appeared in 1985 and has become a collector's item. It contains many original essays and is a valuable and a scientifically reliable source of reference. All references were checked by the science team of Springer-Verlag.

The Department of Anaesthesiology at Erasmus University of Rotterdam decided to sponsor the second print in response to steadily increasing interest from various quarters. The price will be maximally DM 120, but may become as low as DM 95, depending on the number of subscribers. The *Essays* are due to reappear before June 1998.

Bibliographical data: *Anaesthesia: Essays on its History*. Edited by J Rupreht, M J van Lieburg, J A Lee, W Erdmann. With 76 figures and 28 tables. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo 1985. 409 + XV pages, 2nd print, 1998.

Those wishing to purchase the book should write to:

Dr Joseph Rupreht, Ph D
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Anaesthesia - Essays on its History traces the development of anaesthesia into a significant, inter-disciplinary medical specialty. Its authors - most of them pioneers in the field or major contributors to its public and scientific acceptance - provide a wealth of first-hand information in highly readable form. They cover not only the technical advances that were necessary for successful anaesthetic practice, but especially the humanism underlying anaesthesia's historical and professional tradition.

Since 1982 the history of anaesthesia has become not only fashionable but a required part of scientific activity within our profession. It is hoped that the second print of the *Essays* will add to the momentum of the ever-increasing wave of interest in the history of anaesthesia.

J Rupreht

ABRIDGED CONSTITUTION OF HISTORY OF ANAESTHESIA SOCIETY

(The full constitution is available from the Hon Secretary)

AIMS AND OBJECTS

To promote the study of the history of anaesthesia and related disciplines, and provide a forum and social ambience for discussions amongst members.

MEMBERSHIP

Ordinary Members: Anyone over 18 who is interested in the study of the history of anaesthesia is eligible to be nominated.

Honorary Members are elected from amongst eminent persons.

Retired Members are elected from amongst ordinary members who are over 70, or over 65 and have paid at least five annual subscriptions.

ELECTION of Ordinary Members

Candidates shall be nominated by one member in writing to an Officer of the Society.

Nomination to be approved by Council.

Honorary Members elected at the Annual General Meeting on the nomination of Council.

Retired Members elected by Council following personal application.

ANNUAL GENERAL MEETING

To be held in each financial year. Notice to members at least one month in advance.

Ten ordinary members in addition to any Officers present shall constitute a quorum.

The following business shall be conducted at each AGM:

- a. Elect Officers and other members of Council.
- b. Receive report of Hon Treasurer.
- c. Elect auditors.
- d. Receive the report of Council.
- e. Choose date and place for next AGM.
- f. Such other business as Council may decide.

Decisions shall be taken by a majority of those casting their vote unless the meeting determines otherwise by resolution. The Chairman of the meeting shall have a casting vote.

NOTICE OF BUSINESS

Any member wishing to move a Resolution at the AGM shall give notice thereof in writing to reach the Secretary not less than six weeks before the date of that meeting.

SPECIAL GENERAL MEETING

Special General Meetings may be called from time to time by Council. Also the Secretary shall call a Special General Meeting within six weeks of receipt of a requisition signed by at least ten members stating the purpose for which the meeting is to be called. At a meeting called by requisition no other business shall be considered beyond that referred to in the requisition.

SUBSCRIPTIONS

The annual subscription shall be payable in advance and become due on 1st July each year. The subscriptions for ordinary members and for retired members for the next year shall be determined by resolution at each AGM. Honorary members will not pay any subscription.

New members shall pay that year's annual subscription on election and sign a Bankers Order for future payment of subscription. The Hon Treasurer may make other arrangements at his discretion for overseas members. The period for which subscriptions should be paid in advance must not exceed ten years.

An Ordinary Member whose subscription is 12 months in arrears, and who has been duly notified by 'recorded delivery', shall cease to be a member of the Society. He may be reinstated on payment of arrears with the consent of Council. It shall be the duty of the members to notify the Secretary in writing of any change of address.

OFFICERS

The Officers of the Society shall normally consist of a President, a Vice President who shall normally be President-Elect, an Hon Treasurer and Membership Secretary, and an Hon Secretary. An Assistant Hon Treasurer, an Assistant Hon Secretary and an Editor may also be elected.

ELECTION OF OFFICERS

The President shall normally be proposed for election as Vice President from among Ordinary Members of the Society on the nomination of Council, at the AGM next but one (two working years) before the AGM at which he is due to be installed as President. The President shall hold office for two years and sit on the Council for one year after, as Immediate Past President. If the Vice President is unable or unwilling to assume the office of President, Council shall propose a suitable person from amongst the Ordinary Members for election as President.

The Hon Treasurer and Membership Secretary shall be proposed for election from amongst the Ordinary Members on the nomination of Council. He shall hold office for one year and be eligible for re-election for up to six years.

The Hon Secretary shall be proposed for election from amongst the Ordinary Members on the nomination of Council. He shall hold office for one year and be eligible for re-election for up to six years.

The Hon Editor shall be proposed for election from amongst the Ordinary Members by Council as occasion demands. He shall hold office for one year and be eligible for re-election for up to six years.

The Assistant Hon Treasurer and the Assistant Hon Secretary shall be proposed for election from amongst the Ordinary Members by Council as occasion demands. They shall hold office for one year and be eligible for re-election for up to three years.

The names of persons nominated as Officers shall be circulated with the agenda of the AGM.

COUNCIL

The business of the Society shall be conducted by a Council consisting of the President, Vice President, Hon Treasurer, Hon Secretary, and such Officers as may be elected by the AGM, and a number of Ordinary members.

Sufficient numbers of Ordinary Members of Council shall be elected to ensure that their numbers exceed the number of Officers by one.

Candidates for election at AGMs must be nominated by an Ordinary or Retired Member and seconded by a second such member, in writing at least six weeks before the AGM. A list of nominees will be circulated with the agenda. Election will be by the Ordinary and Retired Members at that meeting either by a show of hands or by ballot.

Ordinary Members of Council shall hold office for three years and shall not be eligible for re-election for one year after completing their term of office.

Council shall have the power to co-opt as members, or invite as observers, persons whose advice would be likely to assist the deliberations of Council.

Council may act notwithstanding vacancies on its body.

The Society may from time to time vary the number of council members by resolution at an AGM.

COUNCIL MEETINGS

Four members of Council including at least one Officer shall constitute a quorum.

Ordinary Meetings of Council shall, unless the President otherwise directs, be held twice each year.

Special Meetings may be convened by a requisition in writing from two Council Members.

EXPENSES AND REMUNERATION

Council shall have the power to reimburse members for expenses incurred in the services of the Society or to remunerate other persons who assist Council from time to time.

AUDIT OF ACCOUNTS

The accounts shall as soon as practicable after the end of each financial year be audited by auditors appointed by the AGM. The audit must be completed not less than thirty days before the AGM.

AMENDMENTS TO THE RULES

These rules may be added to, amended or repealed by Resolution at any AGM, with a majority of at least two-thirds of the members voting thereon. Notice of any such proposal must be sent to the Hon Secretary in writing at least six weeks before the AGM.

DIRECTORY OF MEMBERS

A Directory of members shall be kept by the Hon Treasurer and Membership Secretary by whatever means shall be most convenient to the Society, not excluding electronic data processing. It is incumbent on each member to ascertain that his name and address and other particulars are correctly entered therein.

**Abridged by AMB
February 1998**

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