

# The Anaesthetists' Travel Club: A Transformation of the Society of Clinical Surgery?

By Ronald A. MacKenzie, D.O.

Assistant Professor of Anesthesiology,

David P. Martin, M.D., Ph.D.

Assistant Professor of Anesthesiology  
and

Douglas R. Bacon, M.D., M.A.

Professor of Anesthesiology and the History of Medicine

Mayo Clinic College of Medicine

Rochester, Minnesota

*This article has been peer reviewed and accepted for publication in the Bulletin of Anesthesia History.*

*Support: The Department of Anesthesiology, Mayo Clinic, supported this work.*

**Summary Statement:** *There is a remarkable similarity between the purposes and formats of the Society of Clinical Surgery and the Anaesthetists' Travel Club. The Travel Club's founder, John Lundy, worked closely with two charter members of the Society of Clinical Surgery, William J. and Charles Mayo.*

Anesthesiology and surgery are inexorably linked. Surgery has been practiced since ancient times, limited until the late nineteenth century by the twin demons of infection and pain. By contrast, anesthesiology, the conqueror of surgically induced pain, is a young specialty. First publicly demonstrated on October 16, 1846, it has been practiced for less than two hundred years. However, there are certain parallels in the development of professional organizations between the two specialties.

After the introduction of anesthesia in the 1840s and asepsis in the 1870s, surgery as a therapeutic modality entered a golden age. The American Surgical Society became the place for senior surgeons to discuss their work and the politics of organized surgery in the late nineteenth and early twentieth centuries. A similar organization in anesthesiology lagged some thirty years behind. The Associated Anesthetists of America first met in 1913, and with a name change to the Associated Anesthetists of the United States and Canada in 1926, became the dominant national organization in anesthesiology. The established, senior clinicians of the field, dominated both the American Surgical Society and the Associated Anesthetists of the United States and Canada. Young, academically oriented physician anesthetists had no organizations responsive to their needs.

At the turn of the twentieth century, Albert Oschner, William J. Mayo, and Harvey Cushing, who were publically unknown surgeons at the time, decided to

form a society devoted to clinical innovation within surgical practice. The group was part of a political reaction against a more staid surgical society. Almost thirty years later, John Lundy, chair of the section on anesthesia at the Mayo Clinic created the Anaesthetists' Travel Club, which was devoted to new and innovative practices in anesthesiology. His group was also a reaction against the established political order in anesthesiology. The circumstances under which these two societies were formed are remarkably similar. Given Lundy's desire to establish the group, and his daily interreactions with charter members and others of the Society of Clinical Surgery, was the surgical society used as a template to form the Anaesthetists' Travel Club?

## Society of Clinical Surgery

In August of 1900, Albert Oschner, William Mayo, and Harvey Cushing were attending the Thirteenth International Medical Congress in Paris, France. Bored and tired, they had left the convention hall and were viewing the Seine River at the Pont d'Alexandre. They began discussing the meeting, and decided that "a succession of papers and polyglot we could ill understand" had tired them all. They further agreed that the best part of the Congress had been watching "that ambidextrous genius Dr. Doyen in his newly erected private hospital" do a complete mammary resection for cancer in seven minutes without regard for hemostasis. Cushing commented that it was his desire to "see others of our ilk in their true colors. Both of my companions confide this is just the sort of thing they had been doing."<sup>1</sup>

Consequently, the three of them decided that a new society should be organized that would allow surgeons to visit one another

and actually see what they were doing rather than simply giving and listening to lectures. William Mayo reiterated his earlier response – he had been doing this for years. In 1902, a visit by William Mayo and George W. Crile to Cushing brought the idea forward. Mayo and Crile were enthusiastic and this encouraged Cushing.<sup>1</sup>

Cushing felt there was a need to bring young, dynamic surgeons together to discuss their newest cures. He put together a meeting in New York City on July 11, 1903. George Brewer, Crile, John Monroe, James Munford, Charles Frazier and William Mayo were invited. Unfortunately, Mayo was unable to attend, and Cushing could not come due to the pending birth of his first child. The assembled group decided that a new society was necessary. On November 12<sup>th</sup>, 1903 the organizers again met to formalize the rules of membership. The mission of the Society of Clinical Surgeons was clinical teaching and research. The organization would be a young men's club; the upper age limit was 55. As such, it was also a political reaction to the American Surgical Society, a group Cushing described as "a superannuated body exuding a faint aroma of carbolic acid and iodiform gauze." The American Surgical Association was the "blue ribbon" for surgeons, and its hierarchical nature enabled the senior members to present, time and time again, the same ideas they had presented in the past. This situation left little room for the younger generation of surgeons. Therefore, this newly formed group was to focus primarily on clinical topics and would not be based on scientific paper presentations.<sup>1</sup>

Rules of the meeting were established:

*Continued on Page 8*

## Travel Club. . . *Continued from Page 7*

1. Thou shalt not read a formal paper.
2. Thou shalt not publish anything presented at a meeting.
3. No minutes shall be read and the business meeting shall be only long enough to elect officers and decide upon the next meeting place.
4. The members shall go to the hospital where the surgeon who is to entertain the society operates, because the society wishes to see what the host is doing, to know what he believes in, and what he opposes.
5. Visiting fellows shall be free to ask questions at the meetings.
6. The host shall not provide any entertainment beyond the product of his head and hands.
7. The visiting fellows are to be provided a simple dinner; so simple as not to interfere with the surgical discussions; the cost will be prorated and billed to the members that participate.<sup>1</sup>

The group was indeed a young men's club. Of the original thirty-six members, seventeen (47 percent) were between the ages of 30 and 39, eighteen (50 percent) were between the ages of 40 and 49, and one was 51. The average age was 41. Eventually all went on to become members of the exclusive American Surgical Association, and fifteen of the original thirty-six became president of the American Surgical Association. The oldest member was Roswell Park at age 51. He was included because the organizers thought that between Park in Buffalo, New York, and Crile in Cleveland, Ohio, a two-city, three-day meeting could be easily arranged. The youngest member at 32 was John H. Gibbons, Sr.<sup>1</sup>

The first meeting of the society was held November 13, 1903, at Johns Hopkins University in Baltimore, Maryland, and in Philadelphia, the next day. At Hopkins, the group started with William Halstead's student teaching session. From there the group went to the operating room to see John Finney perform a pyloroplasty. The animal laboratory was the next stop, to observe students learning the art of surgery on small animals, followed by an explanation of the Hopkins course in surgical pathology by Joseph Colt Bloodgood. Neurosurgical patients were seen next, and the day ended with a demonstration of a perineal prostatectomy by the inventor of the procedure, Hugh Young. Unfortunately, no record exists of the Philadelphia

component of the meeting held the next day.<sup>1</sup>

Meetings of the Society of Clinical Surgery have continued to the present. Of note, Rochester Minnesota, and the Mayo Clinic, hosted the meeting on June 6 and 7, 1924, shortly after Lundy's arrival in March. On April 29 and 30, 1929 the society again met in Rochester.<sup>1</sup> Both times Lundy would have been well aware of what was going on as many visitors would have passed through the operating rooms, and although no record remains of the meeting, Lundy probably was asked to demonstrate his innovative anesthetic techniques.

### The Anaesthetists' Travel Club

On October 29, 1929, John Lundy invited seventeen prominent physician anesthetists to Rochester, Minnesota, for a clinical meeting.<sup>2</sup> The purpose of the meeting was for the leading anesthetists of the United States and Canada to spend a few days at the Mayo Clinic for an informal, yet thorough, discussion of some of the newer concepts of regional and general anesthesia. Laboratory demonstrations were planned.<sup>3</sup> Originally, Lundy had planned this as a two-city meeting with the second city being Madison, Wisconsin, and Ralph Waters being the other host, in a manner very similar to the first meeting of the Society of Clinical Surgery. However, Waters wrote to Lundy saying that he wanted to enjoy it (the initial meeting of the Travel Club) more as a traveler than as a host at the first meeting.<sup>4</sup>

The person other than Lundy who was most responsible for the Anaesthetists' Travels Club was its oldest member, Lincoln Sise. Sise had visited the Mayo Clinic in June of 1928, after the Associated Anesthetists of the United States and Canada meeting in Minneapolis and this visit deepened his friendship with Lundy. Sise agreed with Lundy that the members of the new group should be the leading young anesthetists of the United States and Canada. They both felt that continuing education was important to this group.<sup>5</sup> Lundy commented to Sise, with reference to the concept of an anesthetist's club, that "I am making some inquiries at the present time of the various men here [Mayo Clinic] who have had a hand in organizing such clubs."<sup>6</sup> Lundy communicated frequently with William and Charles Mayo, founding members of the Society of Clinical Surgery, as well as the other six Mayo Clinic surgeons who were members by 1929. (Charles Mayo, William J. Mayo, Edward Judd, Donald Balfour, Walter Sistrunk, Carl Hedblom, John dePemberton, and

Waltman Walters).<sup>1</sup> Given the large number of surgeons in the society at the Mayo Clinic, Lundy's contact with them in the operating rooms, and the recent meetings of the society at Mayo, we may presume that Lundy modeled the Anesthetists' Travel Club after its surgical cousin.

### Whom to Invite?

Who were the physicians that Lundy invited to come to the first meeting? He asked Royal Adams, John Bleazard, Wesley Bourne, W. Eason Brown, Ansel Caine, David Freeze, Arthur Guedel, Robert Hammond, Charles LaRoque, Charles Robson, Henry Ruth, Harry Shields, Lincoln Sise, Charles Stewart, Brian Sword, Evert Tyler and Ralph Waters. Charles McCuskey, Lundy's "partner" at the Mayo Clinic served as co-host. Ralph Tovell was the anesthesia resident at the time, and played an integral role during the clinical demonstrations at the meeting. Interestingly, eight of the seventeen were Canadians: Bleazard, Bourne, Brown, Freeze, LaRoque, Robson, Shields, and Stewart. They bridged Canada from Vancouver to Montreal.<sup>7</sup>

Significantly, there was also a group of well known anesthetists who were missing from this meeting. They included John Evans, who at the time was the president of the Board of Governors at the International Anesthesia Research Society; Adolph Erdmann, who had founded the Long Island Society of Anesthetists and had long been active in organized anesthesia in the New York City area; Paluel Flagg, who was noted for the Flagg ether can and forming the Society for Prevention of Asphyxial Death; Charles Wells, a long-time physician anesthetist and organizer in the McMechan organizations<sup>8</sup> especially on the East Coast; Eleanor Seymour,<sup>9</sup> who was running the Pacific Coast Association of Anesthetists when Lundy left Seattle to come to the Mayo Clinic and who corresponded with Lundy well after his departure; and Gaston Labat.<sup>10</sup> Perhaps the most interesting exclusion was Francis Hoeffler McMechan, although he had been informed of the group's meeting.<sup>11</sup> Many of these physicians were older, more established and were very prominent in 1929, or just before that date, in the McMechan organizations.

Of the original seventeen invited, twelve came. The five who did not were Royal Adams, who died in 1935 and never joined the organization; David Freeze, who never joined the organization; Wesley Bourne and Charles LaRoque, who both joined in 1931 and were hosts for the combined Toronto-



Fig. 1 Photographs of Lundy and Waters by permission of Mayo Historical Unit, Mayo Foundation, Rochester, Minnesota, all other photographs by permission the Wood Library-Museum, Park Ridge, Illinois.

Montreal meeting; and Evert Tyler, who joined in 1932 and was a host at the meeting in Philadelphia that same year.<sup>2</sup>

Present for the initial Travel Club meeting in December 1929 (Figure 1) at the Mayo Clinic were John Blezard, W. Easson Brown, Ansel Caine, Arthur Guedel, Robert Hammond, Charles Robson, Henry Ruth, Harry Shields, Lincoln Sise, Charles Stewart, Brian Sword, and Ralph Waters. Hosts for the initial meeting were John Lundy, Charles McCuskey, and Ralph Tovell. The average age of the group was 41.<sup>12</sup> The youngest was Tovell at age 28, second was Henry Ruth at 30, with John Lundy third at age 35, and the oldest was Lincoln Sise at age 55. Thus, these gentlemen were indeed the young men of anesthesiology.

#### Analysis

Was the Travel Club a political reaction to the existing 1929 hierarchy in organized anesthesia? Only six (35%) of the seventeen invited held offices in national

or regional societies. The highest office holders were Ansel Caine who was president of the Associated Anesthetists of the United States and Canada, and Harry Shields who was first vice-president. Interestingly, Lundy did not hold any office. Waters was on the Council on Teaching and Hospital Service of the Associated Anesthetists of the United States and Canada, and Sword was president-elect of the Eastern Society of Anaesthetists.<sup>13</sup> Lundy, in writing to Sise in January of 1929, stated that the purpose of the new organization was "so that in the years to come, the organization would become very useful even though not large, and ultimately would hope to see its opinion respected by both the American Medical Association and the College of Surgeons. This you know is not the case at the present time."<sup>14</sup>

The program of the first meeting of the Anaesthetists' Travels Club cannot be easily reconstructed. Lundy asked each participant to request what he wished to see

while at the Mayo Clinic. Through correspondence with the various attendees, a list of thirty-one subjects was developed. Some were vague, such as "practical work" suggested by Easson Brown, whereas others were quite specific like Ralph Waters' desire to see "Laboratory or clinical evidence pointing toward the explanation of fundamental cause of circulatory depression accompanying anesthesia either block or general. That is, proof that drop in blood pressure accompanying spinal is due to sympathetic paralysis."<sup>15</sup>

The program lasted a full week; mornings were spent in the hospitals, with an emphasis on observing regional anesthesia, as many of the invitees had questions about Lundy's methods and how he obtained the results that he did. Afternoons were laboratory sessions. For example, on Monday, December 16, the group saw a Dr. Markowitz demonstrate a perfused isolated dog heart and the action of a substance released by the stimulated vagus in

*Continued on Page 10*

## Travel Club. . . *Continued from Page 9*

another dog that stopped the heart. Dr. Boothby's metabolism lab was also prominent in the first program of the Anaesthetists' Travel Club, with a visit on Tuesday afternoon. On Thursday morning at St. Mary's hospital, the visitors observed Lundy doing spinal anesthesia with a tray specifically made up for this procedure. Lundy discussed the management of blood pressure and position during and after spinal anesthesia. There was a tour of the newly opened Plummer Building. Evenings were devoted to dinners and conversation, in a manner that mimicked the original premise of the Society of Clinical Surgery.<sup>16</sup>

Wednesday night, December 18, was an exception. The group was invited to attend the weekly Mayo Clinic staff meeting. Both William and Charles Mayo spoke at the meeting, welcoming the visitors and describing the advances in anesthesia that they had witnessed over their careers. As an introduction to the night's papers, Charles Mayo spoke first, and gave a brief although well reasoned account of the history of anesthesia.<sup>17</sup> William Boothby spoke on oxygen therapy,<sup>18</sup> while W. C. Foster spoke about "Certain Anatomic Aspects of Spinal and Sacral Anesthesia."<sup>19</sup> H.L. Parker discussed post dural puncture headache,<sup>20</sup> and J. L. Bollman presented a paper on "The effect of anesthetics agents on the liver."<sup>21</sup> John Lundy addressed the group three times, presenting a review of the intravenous and rectal use of Avertin<sup>22</sup> and along with R. M. Isenberger presented "A study of the minute volume of respiration in experimental anesthesia: the effects of combinations of procaine, sodium iso-amyl-ethyl barbituric acid, morphine, scopolamine, ether and carbon dioxide."<sup>23</sup> Lundy's last presentation, with A. E. Osterberg, was a review of the literature on the derivatives of barbituric acid.<sup>24</sup> Dr. William J. Mayo closed the evening's discussions by relating the account of how John Lundy was recruited to the Mayo Clinic some six years prior to the meeting.<sup>25</sup> The presentations and discussion were published in two special supplements to the *Proceedings of the Staff Meetings of the Mayo Clinic* for 1929.

## Conclusions

There are many similarities between the Society of Clinical Surgery and the Anaesthetists' Travel Club. John Lundy interacted frequently in the Mayo Clinic's operating rooms with two of the founding members of the surgical group, William

and Charles Mayo, and by 1929 he had also worked with the six additional members of the surgical society who were at the Mayo Clinic. They probably discussed the purposes and organization of the surgical group. The program content, membership age, and even the political "agenda" have remarkable similarities between the two groups. Both of these organizations emphasized the value of small group discussion and demonstrations. From the beginning, these groups were designed to remain small, so that personal interaction and live clinical demonstrations would be facilitated. In addition, Lundy was most likely involved in the 1929 Society of Clinical Surgery Meeting held in Rochester, and probably also the earlier meeting in 1924.

While it may be impossible to tell with certainty if Lundy used the Society of Clinical Surgeons as his model in creating the Anaesthetists' Travel Club, he did create an organization that continues to thrive today as the Academy of Anesthesiology. Did Lundy succeed in his other goal, to have a group that was an effective "voice" for anesthesia in the world of organized medicine? Original members of the Anaesthetists' Travel Club, especially Lundy and Waters, formed the nidus, along with Paul Wood (who would become a member in the early 1930s) for the creation of the American Board of Anesthesiology.<sup>26</sup> Six of the original travel club attendees (Ruth, Sword, Waters, Lundy, McCuskey, Tovell) would become President of the American Society of Anesthesiologists. When the journal *Anesthesiology* premiered in July 1940, Ruth was editor-in-chief and Tovell, Lundy, Guedel, McCuskey, Waters and Shields were on the editorial board.<sup>27</sup> Five of those at the Rochester meeting would win the Distinguished Service Award (Waters, Guedel, Lundy, McCuskey, Tovell) of the American Society of Anesthesiologists. Thus, the original members had a significant impact on organized anesthesia, and helped create the infrastructure that modern anesthesiology enjoys.

## References

- <sup>1</sup>Shumacker HB. History of the Society of Clinical Surgery. Indianapolis, IN, Benham Press 1977;1-100.
- <sup>2</sup>Stephen CR. Anaesthetists Travel Club 1929-1952 An Historical Review. [Privately Published by the Academy of Anesthesiology]. Wood Library-Museum of Anesthesiology Collection, Park Ridge, IL; 1-5, 29-59.
- <sup>3</sup>Letter from John S. Lundy, M.D., to R. Stuart Adams, M.D., October 28, 1929. The Collected Papers of John S. Lundy, M.D., Mayo Foundation Archive, Rochester, MN.
- <sup>4</sup>Letter from Ralph Waters, M.D., to John Lundy, M.D., March 9, 1929. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>5</sup>Letter from John Lundy, M.D., to Lincoln Sise, M.D., November 5, 1928. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>6</sup>Letter from John Lundy, M.D., to Lincoln Sise, M.D., November 18, 1928. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN. This is the closest reference in the material in the Lundy Papers at the Mayo Foundation Archive that suggest the Society of Clinical Surgery was in fact the model for the Anaesthetists Travel Club. It is most likely that the communication occurred in the operating room or areas near the operating rooms, was oral in nature, and therefore no written record remains.

<sup>7</sup>List attached to letter from John Lundy, M.D., to R. Stuart Adams, M.D., October 28, 1929. The Collected Papers of John S. Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>8</sup>Francis Hoffer McMechan "created" organized anesthesiology in the first three decades of the twentieth century. By 1930, the organization had an international society, the International Anesthesia Research Society, a national society, the Associated Anesthetists of the United States and Canada and several smaller regional societies such as the Canadian Society of Anesthetists, the Eastern Society, the Mid Western Society, the Southern Association and the Pacific Coast Association. *Current Researches in Anesthesia and Analgesia*, which began publication in 1922, was the only American journal devoted to anesthesiology at the time, with McMechan as editor.

<sup>9</sup>Letters to Eleanor Seymour through 1932. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>10</sup>Letters between Gaston Labat, M.D., and John Lundy, M.D., from 1924 through Labat's death in 1934. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>11</sup>Letter from John S. Lundy, M.D. to F. H. McMechan, M.D., April 12, 1929. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>12</sup>It is interesting to note that the average age of the Anaesthetists' Travel Club and the Society of Clinical Surgery were the same!

<sup>13</sup>Letter from the Officers of the Eighth Annual Congress of Anesthetists, 1929. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>14</sup>Letter from John Lundy, M.D., to Lincoln Sise, M.D., January 24, 1929. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>15</sup>Topics of Interest, First Meeting of the Travel Club. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>16</sup>Notes on the first Anesthetists' Travel Club Meeting. The Collected Papers of John Lundy, M.D., Mayo Foundation Archive, Rochester, MN.

<sup>17</sup>Mayo CH. Remarks on anesthesia. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:365-366.

<sup>18</sup>Boothby WM. Note on treatment by oxygen. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:366.

<sup>19</sup>Foster WC. Certain anatomic aspects of spinal and sacral anesthesia. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:366-369.

<sup>20</sup>Parker HL. Headache following diagnostic spinal puncture. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:369.

<sup>21</sup>Bollman JL. The effect of anesthetic agents on the liver. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:369-370.

<sup>22</sup>Lundy JS. The general anesthetic tribromoethyl alcohol (avertin; E-107): review of the literature on its rectal and intravenous use. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:370-380.

**Travel Club. . .** *Continued from Page 10*

<sup>23</sup>Isenberger RM. A study of the minute volume of respiration in experimental anesthesia; the effects of combinations of procaine, sodium iso-amylethyl barbituric acid, morphine, scopolamine, ether and carbon dioxide. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:382-385.

<sup>24</sup>Lundy JS, Osterberg AE. Review of the literature on the derivatives of barbituric acid. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:386-416.

<sup>25</sup>Mayo WJ. Remarks on anesthesia. *Proceedings of the Staff Meetings of the Mayo Clinic* 1929;4:381.

<sup>26</sup>Bacon DR. The great triumvirate: Waters, Wood, and Lundy and the formation of the American Board of Anesthesiology. *Bulletin Anesthesia History* 1995;13:1-5.

<sup>27</sup>Anon. *Anesthesiology* 1940;1:Frontispiece.

**MedNuggets. . .** *Continued from Page 18*

the wisdom, nay, the urgency, of including instruction in both the practice and the principles of anesthesia as an essential part of the medical curriculum.

—Editorial

*Journal of the American Medical Association* 37:765, 1901

**From the Lit. . .** *Continued from Page 19*

I" painting]

Leroy D. Vandam, M.D.: 1914-2004. *ASA Newsletter* 68(6):28, June 2004 [brief obituary; 1 portrait; back cover reproduces Dr. Vandam's "Morton House I" painting]

Martin LVH. Another look at Dumfries. *Anaesthesia* 59:180-187, 2004 [4 illus., 13 refs.]

McKenzie A. Historical books and pamphlets on anaesthesia 1847-1900. *Hist Anaesth Proc* 31:36, 2002

Neal JM. Introduction: a truly special article [see Harrington BE]. *Reg Anesth Pain Med* 29(2): 135, March-April 2004

Nelson R. Blood on demand. Transfusions used to be a bloody mess. A few dedicated doctors know there had to be a better way. *Am Herit Invent Technol* 19(4):24-31, spring 2004

Oransky I. Gertie Florentine Marx. *Lancet* 363:1241, 10 April 2004 [illus.]

Parks D. The spoils of war: Civil War gave

**Burned. . .** *Continued from Page 14*

16. Baschwitz K. Hexen und Hexenprozesse. München, Ritter & Lünning, 1963:171-177.

17. Anglo S. Evident Authority and Authoritative Evidence. In: *The Damned Art* (Edit: S. Anglo). London, Routledge & Keegan, 1977:1-31.

18. Seth R. In the Name of the Devil. New York, Walker & Co, 1969:24-44.

19. Ewen CL. Witch Hunting and Witch Trials. London, Keegan, Trench & Trubner, 1929:26-28, 60-69

20. Levack BP. *The Witch Hunt in Early Modern Europe* (2<sup>nd</sup> Edition). London, New York, Longman, 1995:68-124, 201-203

21. Pitcairn R. Ancient Criminal Trials in Scotland. Edinburgh, Bannatyne Club, 1833: 1 (Part 3):230-257.

22. Brodie-Innis JW. *Scottish Witchcraft Trials*. London, Chiswick Press, 1891:9-44.

23. Bain J (Editor). *The Border Papers*. Edinburgh, General Registrar Office (Scotland), 1894(1):462-464, 486-487, 501-502.

24. Boyd WK, Meikle HW. *Calendars of Scot Papers* (1) (1589-1593). Edinburgh, MHSO, 1936.

25. Anonymous. *News from Scotland*. London, W. Wright, 1591.

26. Dunlap R. King James and some witches:

rise to U.S. pharmaceutical industry, addiction. *Birmingham News* 28 March 2004, 23A, 26A [interviews with Michael Flannery and Maurice S. Albin of the Univ. of Alabama at Birmingham about their research; article also appeared in *Seattle Times* 4 April 2004, *New Orleans Times-Picayune* 4 April 2004, Huntsville (Alabama) *Times* 13 April 2004 and probably other papers subscribing to the Newhouse News Service]

Payne J. Norman Bethune, the stormy petrel. *Hist Anaesth Soc* 31:62-64, 2002

Pearce J. Dr. Gertie F. Marx, a pioneer in her specialty, dies at 91. *New York Times* 29 January 2004

Pring J. Aspects of pre-1950's anaesthesia before the first designer anaesthetic. *Hist Anaesth Proc* 31:53-56, 2002

Pioreschi P. Medieval anesthesia—the *spongia somnifera*. *Med Hypotheses* 61(2):213-219, 2003 [52 footnotes]

Rudavsky S. Leroy Vandam, 90, pioneer in

The date and text of the *Daemnologie*. *Philological Quart*, 1975;54:40-46.

27. Daylell JG. *The Darker Superstitions of Scotland*. Edinburgh, Waugh & Innes, 1834:24-667.

28. Spottiswood J. *History of the Church of Scotland*. Edinburgh, Bannatyne Club, 1850(2):411-412.

29. Calderwood D. *The History of the Kirk of Scotland*. Edinburgh, Wodrow Society, 1849(5): 115-156.

30. Clark S. *Thinking with Demons*. Oxford, Clarendon Press, 1977:549-571, 619-667.

31. Kors AC. *The Persecution in Scotland*. In: *Witchcraft in Europe* (1100-1170) (Edit: Kors AC, Peters E) Philadelphia, U. Pennsylvania Press, 1972:223-228.

32. Forbes TR. *The Midwife and the Witch*. New Haven, CT, Yale U. Press, 1966:112-132.

33. Clark S. King's James' *Daemnologie*. In: *The Damned Art* (Edit S. Anglo). London, Routledge & Keegan, 1977:156-181.

34. Eccles A. *Obstetrics and Gynecology in Tudor and Stewart England*. Kent, OH, Kent State U. Press, 1982:88, 102-103.

35. Eccles A. Pain in childbirth before Simpson: Perceptions and responses. *Hist Anaesth Soc Proc* 1990;8:36-41.

anesthesia. *Boston Globe* 26 May 2004

Sandin RH. Awareness 1960-2002, explicit recall of events during general anaesthesia. *Adv Exp Med Biol* 523:135-147, 2003 [73 refs.]

Severinghaus JW. Fire-air and dephlogistication: revisionisms of oxygen's discovery. *Adv Exp Med Biol* 543: 7-10, 2003 [6 illus., 5 refs.]

Shklar G, Chernin DA. *A Sourcebook of Dental Medicine: Being a Documentary History of Dentistry and Stomatology from the Earliest Times to the Middle of the Twentieth Century*. Waban, Mass.: Maro Publications, 2002. 839pp. [pp 625-656 of Chapter 21 have material on anaesthesia; rev. Swanson BZ Jr. *Bull Hist Med* 77:953-954, 2003]

Stanley Bresticker, M.D.: 1926-2003. *Am-bulatory Anesthesia* 19(1):11, January 2004 [brief obituary; portrait]

Sykes K. The British Council courses in anaesthesia. *Hist Anaesth Proc* 31:17-23, 2002

**Bulletin of Anesthesia History**

Doris K. Cope, M.D., Editor  
200 Delafield Avenue, Suite 2070  
Pittsburgh, PA 15215  
U.S.A.