

MEDICAL



COLLECTORS



ASSOCIATION

## NEWSLETTER NO. 21

MARCH 1992

### GOOD NEWS!

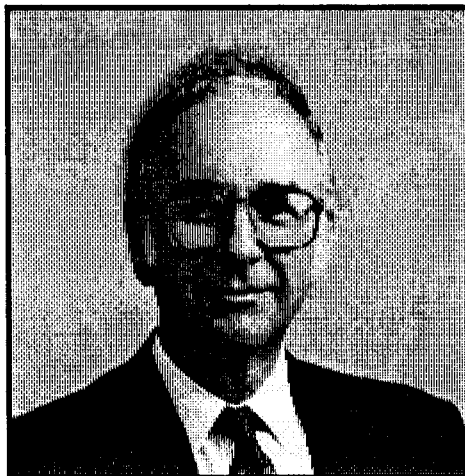
Although no members of the Association have volunteered, Dr. Steve Martin, Assistant Professor, Department of Epidemiology and Social Medicine, Albert Einstein College of Medicine, and Chairman, Section on Historical Medicine, New York Academy of Medicine, has kindly agreed to host the meeting. Details are noted on the sheets preceding this Newsletter. Once again, we are grateful to the New York Academy of Medicine for providing us with meeting space and facilities, which will make a conference possible. We will follow the previous formats of visiting a medical collection the afternoon before the meeting, a reception and dinner, and the meeting the following day, followed by a dealers' session. The last dealers' session in New York was extremely productive as was the dealers' session last year at Brimfield. I am disappointed that it is so difficult to get the members of the Association to actively participate in the meeting by hosting a session. I certainly hope that someone will volunteer to hold the meeting in 1993. Please think about this and if you are prepared, come to the next meeting and let me know or write to me.

This issue of the Newsletter contains quite a bit of information, with a number of announcements which have become available. We are once again including a copy of Dr. William Helfand's "Images of the Drug Mar-

ket" from PHARMACY IN HISTORY, which should be of interest to the readership.

I recently acquired a stethoscope, pictures of which are shown in the Identification Column of the Newsletter. One of our members, Eugene Cunningham, previously showed a similar stethoscope which all of us thought was a monaural stethoscope of about 1920. However, on researching this, it turns out to be a rather unusual adaptor to a Pilling stethoscope, which converts it from a bell to a diaphragm. The stethoscope which I obtained had the bell piece with three interchangeable ends to adjust the diameter of the bell, and one end into which the adaptor could be fit to convert it to a monaural. All of this information is included for the interest of the readership after the "Can you Identify" column which has the pictures of the original stethoscope. In addition, we have received some interesting responses to our previous "Can you Identify" column. Dr. Rosenthal wrote to me concerning

that and suggested that I contacted Bernard Levine. I proceeded to do so and a copy of the original "Can you Identify" illustration along with Dr. Levine's response is included. In addition, Dr. John E. Goins also responded, and his response is included as well.



In going through my readings, I came across a very interesting article by Dr. Michael DeBakey

**Founder: M. Donald Blafox, M.D., Ph.D.**

on the Evolution of the National Library of Medicine. A copy of this fascinating article is included with the Newsletter, with the permission of Dr. DeBakey and the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Alex Peck continues to send interesting items and the latest is a Notice to the Public of the practice of a surgeon and apothecary from 1843, which is reproduced. I've also included a copy of an interesting stethoscope which recently was sold at auction to Alex. He is interested in knowing if anybody has any more information about this particular adaptation. The stethoscope, as you can see, is a Laennec, except that the removable piece which converts the bell, has a right angled attachment, which is most unusual. One hypothesis that has been put forth was that this was an extension to facilitate examination of patients with contagious diseases. Any comments should be sent either to me or directly to Alex Peck.

Susan L. Brock, from the Texas Medical Association sent in an announcement of their History of Medicine Gallery which is included in this newsletter.

I recently received some information about a Collector's Information Clearing House which may be of interest to the membership and copies are reprinted here.

Hammersmith & Company runs tours to England for antique collectors and they have been kind enough to send me copies of their brochure, which are included with the Newsletter.

Brimfield was such a success last year that I am enclosing copies of the Brimfield schedule for those of you who may wish to go on your own.

Peter Delehar has sent us announcements for the forthcoming Scientific and Medical Instrument Fair, which will be held May 10th in London, for those of you who may be able to get to this most interesting show. Also, brochures are included, as are brochures from Auction Team Koln, which sells some interesting items. I received an announcement of the next European Association of Museums of the History of Medical Sciences meeting, which will be in the Netherlands and this announcement is included, as well as some brochures containing an offering of a new reprinting of the medical and surgical history of the Civil War.

Overall, there seem to be a large number of items offered on the market and a considerable number of people demonstrating interest in the general area of medical collecting. Once again I ask the membership please try to take some active interest in the group, it is difficult to continually come up with interesting material without the support of everyone concerned.

Looking forward to seeing as many of you as possible at the forthcoming meeting at New York Academy of Medicine in July, I remain,

Sincerely,  
M. Donald Blaufox, M.D.,PhD.

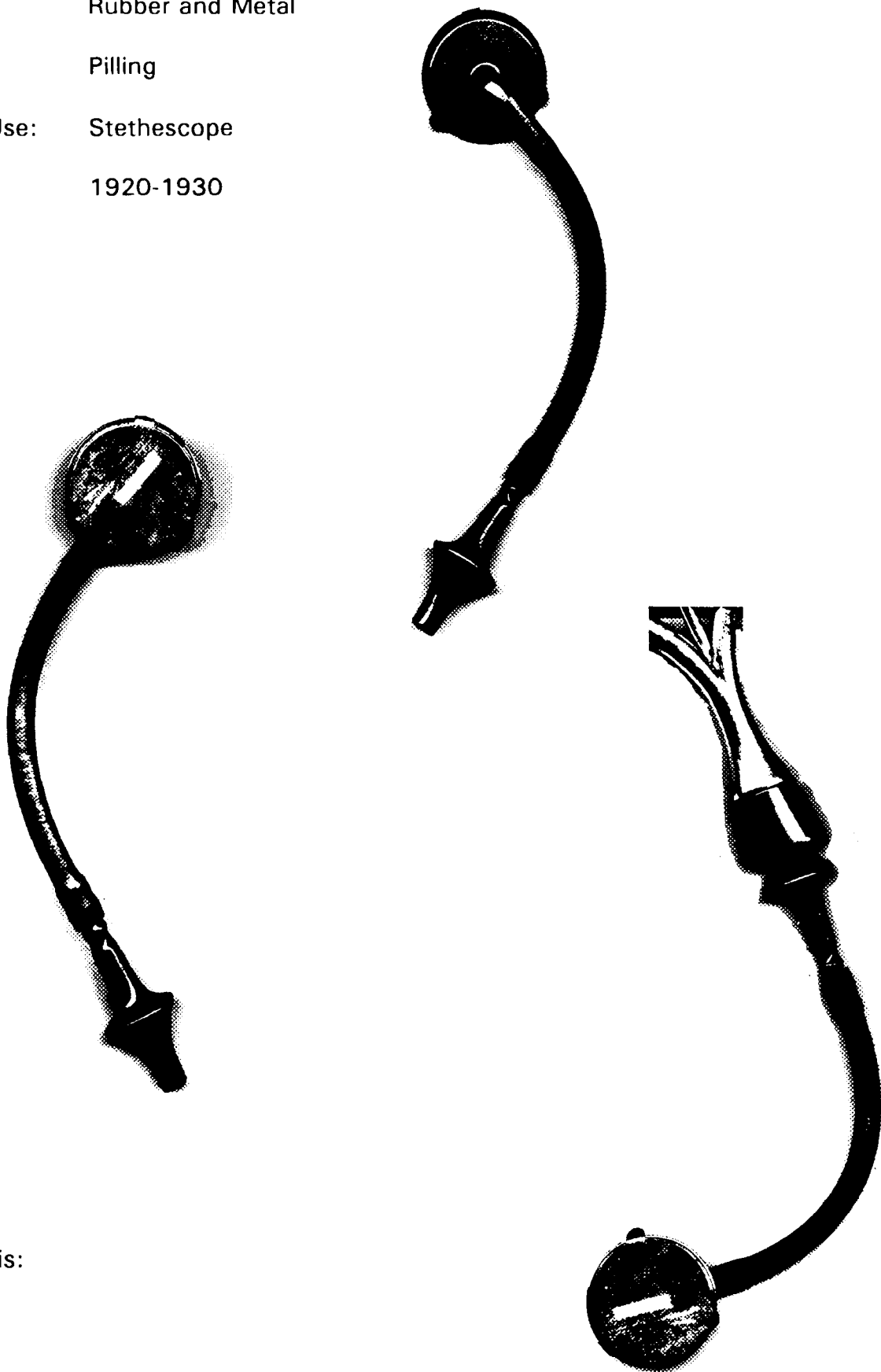
**CAN YOU IDENTIFY THIS**

Materials: Rubber and Metal

Maker: Pilling

Presumed Use: Stethoscope

Date: 1920-1930



I think this is:

From:

Please return to M. Donald Blaufox, M.D., Ph.D.



More Than

100 Years

*After more than a Hundred  
Years of Continuous Manufacturing*  
**The GEORGE P. PILLING  
& SON CO.**

*Announce to the Medical  
Profession the Opening of a*  
**RETAIL DEPARTMENT**

*of*  
**PILLING MADE  
SURGICAL INSTRUMENTS**  
*and*

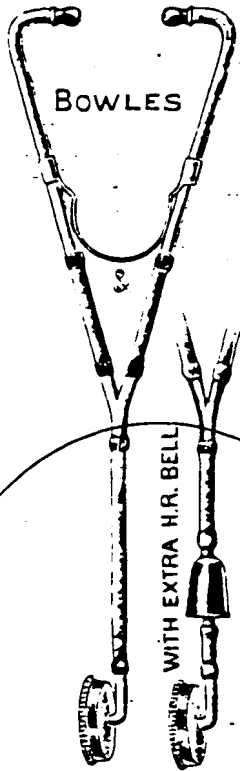
**HOSPITAL SUPPLIES**

*at their Factory*  
**Arch and Twenty Third Streets**

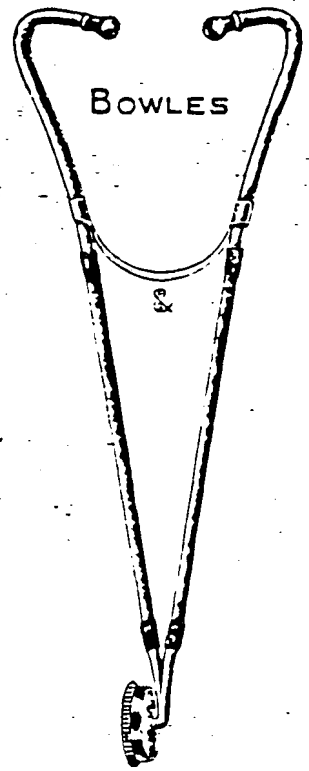
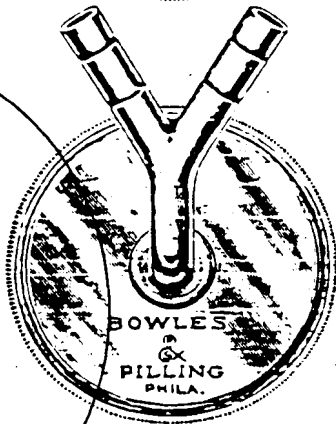
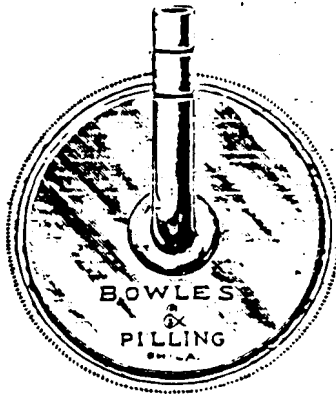
*Philadelphia*

*Pennsylvania*

**U.S.A.**



P7800-10



P7815-18

WITH EXTRA H.R. BELL

**CAUTION**

Because of the imitations of our Genuine Bowles' Stethoscope, be sure our full name appears on the instrument you select.

THE WORD

**BOWLES**

WHEN APPLIED TO A STETHOSCOPE IS A TRADE MARK

Registered U. S. Patent Office

This Trade Mark is the Property

of

THE GEORGE P. PILLING & SON CO.  
Philadelphia, Penna.

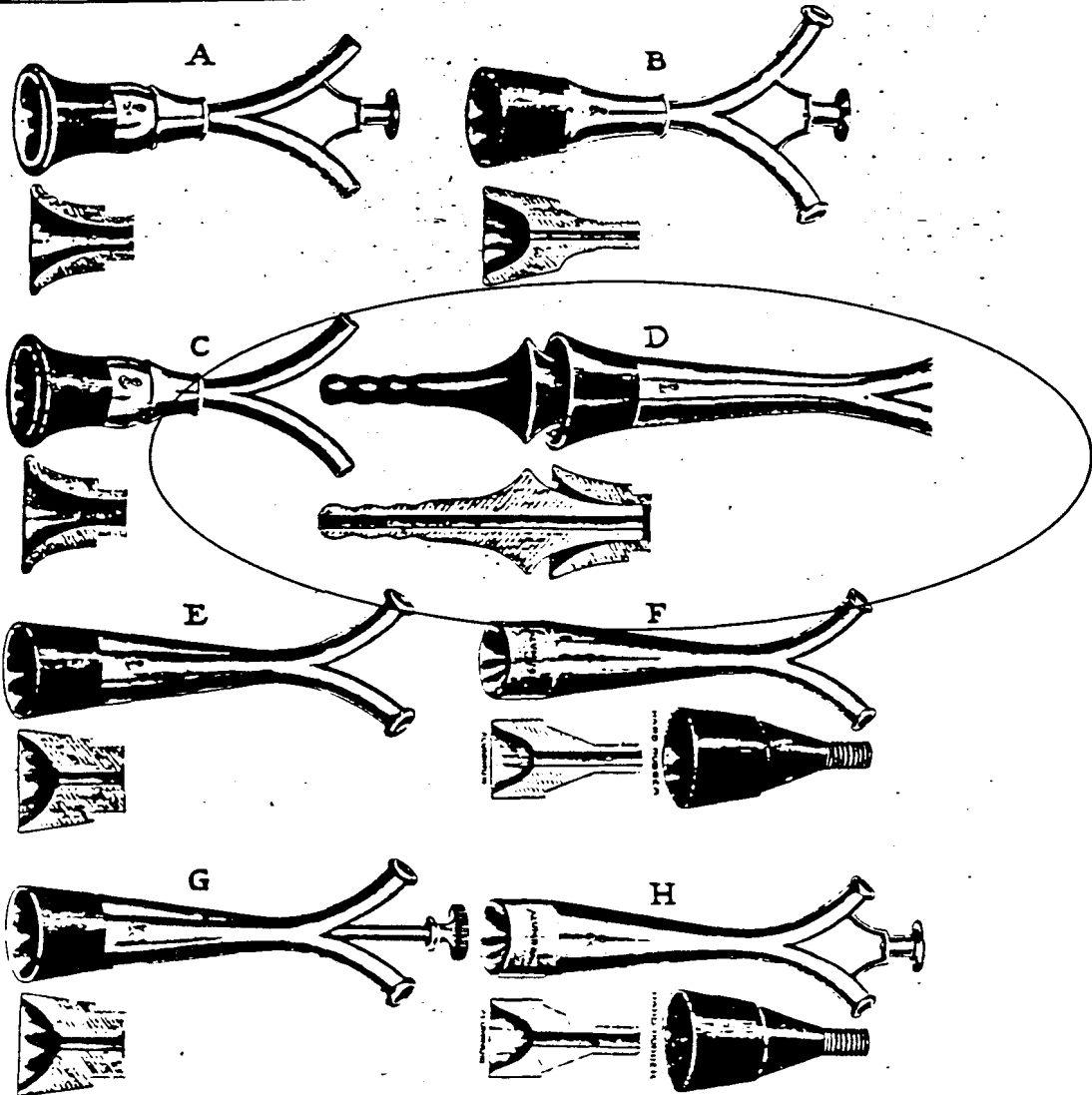
**GENUINE BOWLES' STETHOSCOPES**

- P7800—Bowles', midget size diaphragm, 1-inch diameter, single tube.
- P7801—Same, with extra Hard Rubber Bell, as shown.
- P7803—Bowles', small size diaphragm, 1½-inch diameter, single tube.
- P7804—Same, with extra Hard Rubber Bell.
- P7806—Bowles', medium size diaphragm, 1¾-inch diameter, single tube.
- P7807—Same, with extra Hard Rubber Bell.
- P7809—Bowles', large size diaphragm, 2¼-inch diameter, single tube.

- P7810—Same, with extra Hard Rubber Bell.
- P7815—Pilling Special Bowles', midget size diaphragm, 1-inch diameter, double tube.
- P7816—Pilling Special Bowles', small size diaphragm, 1½-inch diameter, double tube.
- P7817—Pilling Special Bowles', medium size diaphragm, 1¾-inch diameter, double tube.
- P7818—Pilling Special Bowles', large size diaphragm, 2¼-inch diameter, double tube.

**SUPPLEMENTAL CHEST PIECE**

All Bowles' Stethoscopes may be supplemented with the Pilling-Made Gordon Chest Piece, page 156.

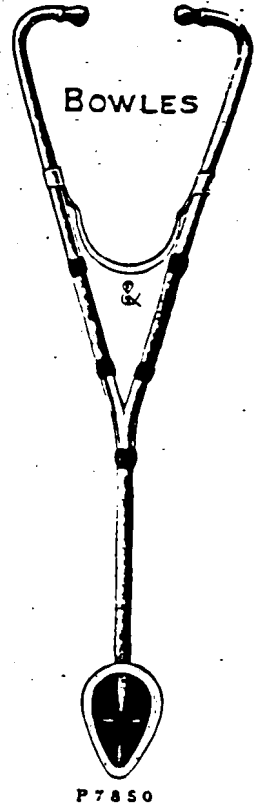
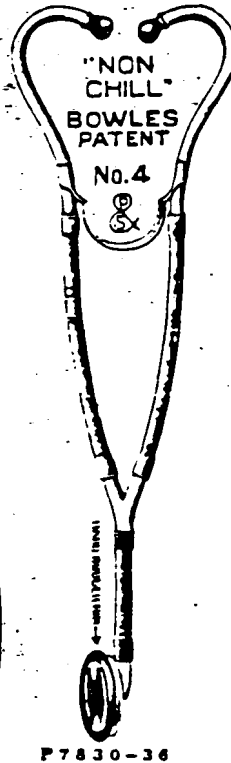
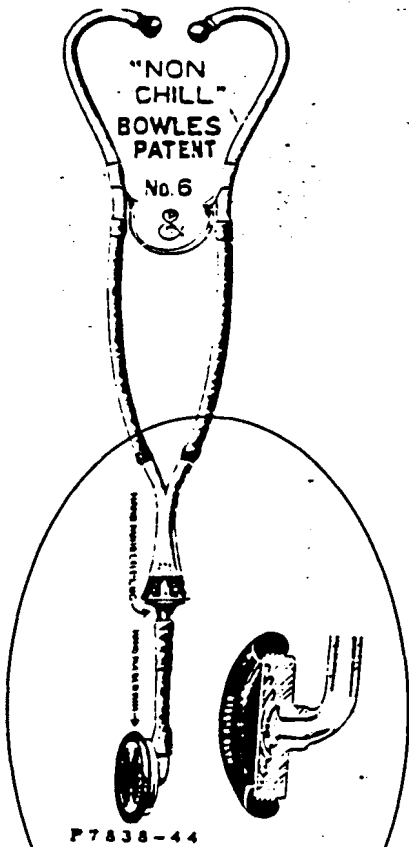


PILLING DELUXE STETHOSCOPES  
COMPLETE WITH BINAURALS

Because of the many inferior quality stethoscopes on the market today, we offer a line of stethoscopes of very high quality, carefully designed and made for the best acoustic results. The metal parts are made entirely of wrought metal, no castings of any kind. All tubular metal parts seamless. All metal portions highly finished. The hard rubber chest pieces are turned from solid material, not cast; neither are they composed of fiber or other cheap molded materials. Each stethoscope is fitted with a binaural of best quality. The rubber tubing is very heavy wall pure gum, the best obtainable.

P8080—Pilling Deluxe Stethoscope (A) complete with tubing and binaural.  
 P8081—Pilling Deluxe Stethoscope (B) complete with tubing and binaural.  
 P8082—Pilling Deluxe Stethoscope (C) complete with tubing and binaural.  
 P8084—Pilling Deluxe Stethoscope (D) complete with tubing and binaural.

P8086—Pilling Deluxe Stethoscope (E) complete with tubing and binaural.  
 P8088—Pilling Deluxe Stethoscope (F) complete with tubing and binaural.  
 P8090—Pilling Deluxe Stethoscope (G) complete with tubing and binaural.  
 P8092—Pilling Deluxe Stethoscope (H) complete with tubing and binaural.



**GENUINE BOWLES' STETHOSCOPES**

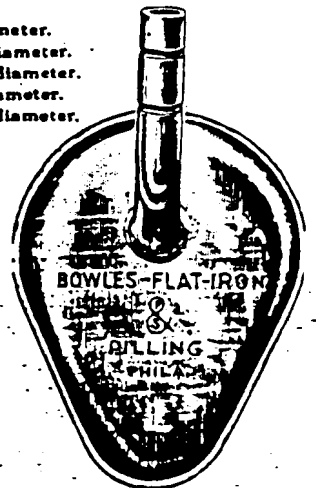
In the Non-Chill Bowles' Stethoscopes the retaining rims are made of hard rubber instead of metal as shown in sectional illustration.

- P7830—Non-Chill, No. 4 Bowles, midget size diaphragm, 1-inch diameter.
- P7832—Non-Chill, No. 4 Bowles, small size diaphragm, 1 1/4-inch diameter.
- P7834—Non-Chill, No. 4 Bowles, medium size diaphragm, 1 3/4-inch diameter.
- P7836—Non-Chill, No. 4 Bowles, large size diaphragm, 2 1/4-inch diameter.
- P7838—Non-Chill, No. 6 Bowles, midget size diaphragm, 1-inch diameter, with Albion Ford chest piece and Bloomfield connection.
- P7840—Non-Chill, No. 6 Bowles, small size diaphragm, 1 1/4-inch diameter, with Albion Ford chest piece and Bloomfield connection.
- P7842—Non-Chill, No. 6 Bowles, medium size diaphragm, 1 3/4-inch diameter, with Albion Ford chest piece and Bloomfield connection.
- P7844—Non-Chill, No. 6 Bowles, large size diaphragm, 2 1/4-inch diameter, with Albion Ford chest piece and Bloomfield connection.

**BOWLES' FLAT-IRON STETHOSCOPE**

The Bowles' Stethoscope of flat-iron shape diaphragm, whereby is obtained the maximum vibration of the hitherto larger style of the Bowles' Stethoscopes, with the adaptability of the smaller instrument; also, by means of this device, the volume of sound can, at the will of the operator, be varied according to the degree of contact with the body.

P7850—Bowles' Flat-iron Stethoscope.



**CAN YOU IDENTIFY THIS**

Materials: White Metal

Maker: Paracamph

Presumed Use: Advertising

Date: 1910-1920

See following pages for answers



I think this is:

From:

Please return to M. Donald Blaufox, M.D., Ph.D.



**ANY QUESTIONS?**

THE KNIFE EXPERT

ASK THE MOST



RESPECTED CONSULTANT IN THE WORLD OF KNIVES

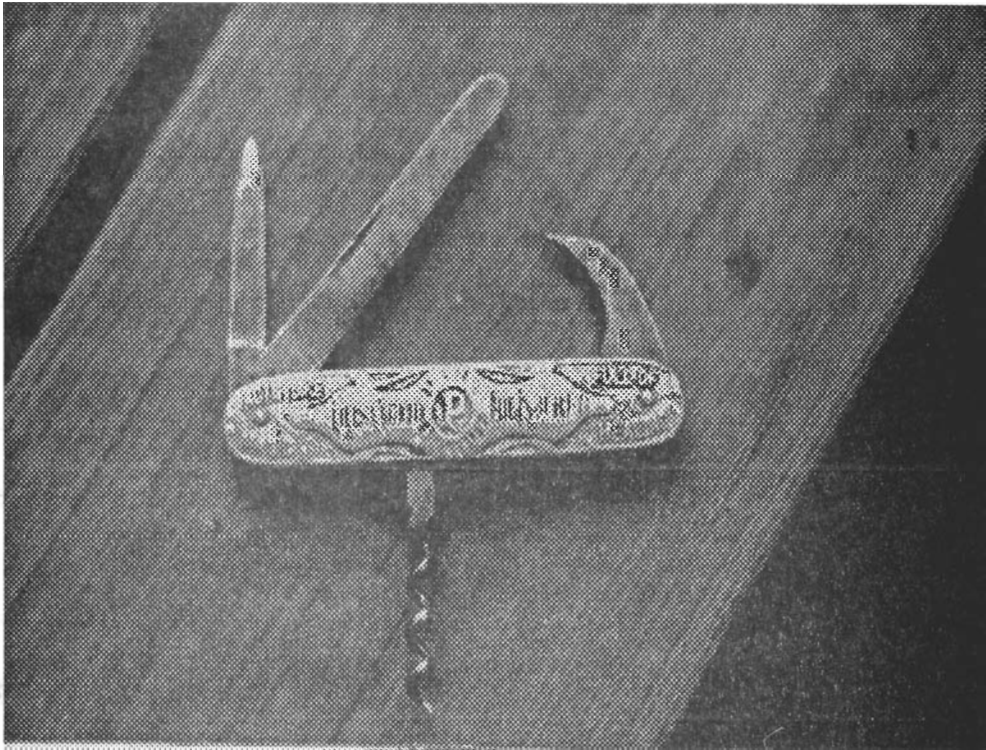
for identification, appraisal, expert testimony, research, or referral services to editors, collectors, knife shows, museums, archaeologists, production designers, attorneys, executors, insurance, law enforcement, inventors, and manufacturers.

Author of LEVINE'S GUIDE TO KNIVES AND THEIR VALUES. 20 years experience. Five knife books. Hundreds of clients. BERNARD LEVINE P.O. Box 2404, Eugene OR 97402 (503)484-0294.

Presumed Use: Advertising  
Date: 1910-1920

IF STIFF: A WOODEN BOX OPENER  
IF FLEXIBLE: A PHYSICIAN'S SPATULA

Pen  
SLADE



Wire Seal Breaker (e.g. for champagne bottles)

I think This is: a knife

1 Corrosion

From: 166

Please return to M. Donald Blaufox, M.D., Ph.D

NOT A MEDICAL KNIFE!

One of the members of the Medical Collectors Association, of which I am President, has sent in the attached photocopy of an instrument. He has asked the membership to try to identify it, but so far we cannot. We would appreciate any information you can give us. (picture #8)

M. Donald Blaufox, M.D., PhD.

Bronx, N.Y.

According to the attached photocopy, the knife is marked "PARACAMPH". The advertising on the handle would indicate that the knife was a salesman's gift to a customer. This was a common method of advertising in the early 1900's. The theory behind this practice was that each time the customer used the knife he would be reminded of the product. The knife is a champagne pattern, and the curved tool was used to cut the wire holding the cork. I do not believe that this knife was designed for any specific medical use. It would probably be of interest to one of your group only for the advertising on the handles.

# THE GREAT FRENCH REMEDY.

Supported by a Reputation of Over Three Hundred Years.

## BOYER'S Carmelite Melisse Cordial.

*EAU DE MELLISSE DES CARMES.*

For which Royal Letters Patent have been granted, as recommended by the Paris School of Medicine.

Annual Sales in Paris alone 1,300,000 bottles.



### A SOVEREIGN REMEDY FOR

Apoplexy, Paralysis, Dyspepsia, Colic, Head-ache, Indigestion, Faintness, Chills and Fever, Sea Sickness, &c.

SOLD BY ALL DRUGGISTS.

Get the Genuine. Beware of Imitations.

General Depot at BOYER'S, 59 Park Place, New York.

COMSTOCK BROS., Wholesale Agents.



## Historical Images of the Drug Market—XXVI

by William H. Helfand

WHILE some sources state that the Eau de Melisse des Carmes dates from the fourteenth century, it is more probable that this long-lived product was developed by the inhabitants of a monastery near the Luxembourg Gardens in Paris some 300 years later. Taken as an anti-spasmodic and for a host of other maladies, it quickly enjoyed great popularity and is still being sold. When the Revolution in 1789 suppressed religious orders and confiscated their property, the dispossessed Parisian Carmelites formed a commercial organization to exploit their chief asset. Rights to the product later passed to one Amedée Boyer, who continued to expand its market overseas. The advertisement

for "The Great French Remedy, Boyer's Carmelite Melisse Cordial," appeared in Comstock Brothers 1878 Almanac, where it shared space with other well known proprietaries including Ayer's Sarsaparilla, Perry Davis' Vegetable Pain Killer, and Udolpho Wolfe's Aromatic Schiedam Schnapps. While numerous products over the years have used the name "Melisse de Carmes," each proclaiming to be authentic, it is probable that each agreed only in containing a certain amount of the leaves of *Melissa officinalis*. We find this herb used more frequently today in fish sauces, stuffing or, because of its piquant taste, as a substitute for lemons.

# **NOTICE TO THE PUBLIC.**

---

**HENRY NELSON,**

**Surgeon and Apothecary,**

After having gone through all the Academical Courses requisite to the art and practice of Surgery, and from his being enabled to certify to any gentleman or lady who may honour him with a call---by an examination of the Tickets of the different Classes he attended--and also by his Diploma received from the Royal College of Physicians & Surgeons, Glasgow, that he is not an untaught intruder---but hopes by his attention to his patients to merit their esteem and interest---and by his moderate charges, to accommodate himself to the rank in society of those who may honour him by a call.

H. NELSON has a large stock of MEDICINE of the best quality, which he intends selling cheap.

Tobbermore, July, 1843.

[Richardson, Printer, Cookstown.]



# Science and Education

## From Vesalius classic to an artificial heart, TMA showcases medical history

**T**he leather medical bag looks as though the Texas physician who used it grew too old or too tired to deliver babies anymore, came home from his last case, and never opened it again.

Gauze remains wound inside and a bottle of Johnson & Johnson Synol Soap is capped and about one-quarter full. Another bottle holds a viscous solution of Amphyl Antiseptic and Germicide ordered from Bloomfield, NJ.

Unused ampules are still enclosed in a cardboard tube labeled "Caffeine Sodio-benzoate," produced by Sharp & Dohme. There are forceps, hypodermic needles, and *Obstetrical Emergencies* "by an experienced obstetrician," copyright 1912.

This bag, containing technology used by the country doctor of the early 1900s, is but one artifact in the first exhibit staged in the new TMA headquarters building by the TMA History of Medicine Committee.

"Technology in Medicine: 150 Years of Medical Innovation" officially opened July 26 at the dedication of the headquarters building in downtown Austin. The exhibit includes highlights from Texas medical history, including a Civil War surgical kit and the world's first implanted

artificial heart. The exhibit will continue through November 10, 1991.

Housed with the Technology in Medicine exhibit are three permanent History of Medicine exhibits showing the progress of organized medicine from the founding of TMA in 1853 to the present.

"What makes this exhibit so valuable is that all the items on display were owned or donated by Texas physicians and their families," says TMA library director Susan Brock. "Because no funds are currently available to purchase historical materials or artifacts, we rely entirely on the generosity of TMA members."

Among the first objects that visitors entering the exhibits from the main headquarters entrance at West 15th and Guadalupe streets see is the first artificial human

heart, implanted by Texas physician Denton Cooley. The heart is on loan from the Smithsonian Institute. In addition, several heart valves studied in Texas are on display along with major publications in Texas Heart Institute history.

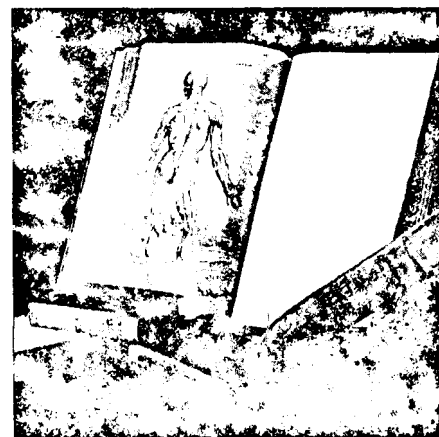
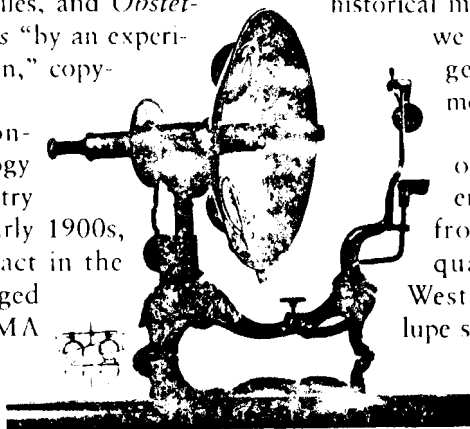
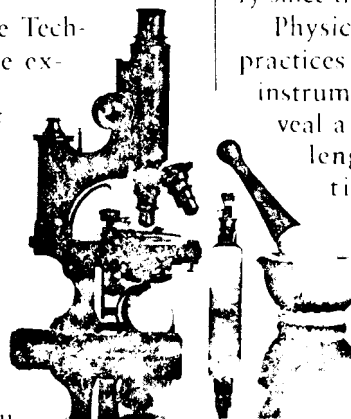
Featured nearby under filtered light is a 1555 edition of Vesalius' *De Humani Corporis Fabrica Libri Septem*. The work, given to the TMA Library by Hampton C. Robinson, MD, of Houston, has

been described by one historian as "the greatest event in medical history since the work of Galen."

Physicians' notebooks describe practices of the 19th century, and instruments from those times reveal a great deal about the challenges physicians (and patients) faced. Surgical instruments used during the Civil War demonstrate the frequent reliance on amputation, and letters from 19th century Texas doctors contain colorful comments on patients, politics, and procedures.

"By studying the enormous progress of medicine over the last century," Ms Brock says, "you get a glimpse of what the future holds in technological advances in medicine."

Exhibit hours are from 8:15 am-5:15 pm, Monday through Friday, and 9 am-1 pm on Saturday. The exhibit will close for some holidays. For additional information, contact Susan Brock, Texas Medical Association Library, 401 W 15th St, Austin, TX 78701, (512) 370-1540.



JANE BUNRY, associate editor, writes and edits the Public Health and Science and Education sections of Texas Medicine.

## 1886 report catalogs surgeries in Texas

**A**mong treasures in the TMA library's permanent History of Medicine exhibit, is one of three remaining copies of *Report of the Special Committee on Surgery of the Texas State Medical Association*. The report was presented at the association's annual meeting in 1886. San Antonio civic leader and Scotland-trained physician George Cupples was chairman of the committee and author of the report, which opens a window on the life of patients and physicians of that time.

Tending to his committee duties with care, Dr Cupples and colleagues produced the report from questionnaires mailed to more than 6,000 Texas physicians. The result was 76 pages of data. Physician's name, patient age, diagnosis, sex, race, outcome, complications, anesthetic, antiseptic, physician comments . . . It's all there.

Gangrene, of course, was a common problem in surgical patients, and while the high incidence of gunshot wounds confirms the rugged image of the West, the common occurrence of railroad-related accidents is more of a surprise.

Several cases stand out, partly because of their extreme nature, but mostly because of the surgeon's courage in tackling them.

There was one case of "congenital elephantiasis of the foot (the foot weighed 5 pounds);" another physician noted an "immense tumor, haunch," in a 19-year-old woman. The tumor weighed 42 pounds and had a circumference of 36 inches. The patient did not survive. A 30-year-old patient suffered "alarming symptoms from chloroform" during a leg amputation. In another case, the surgeon reported a 4 x 5-inch tumor "suppurating and full of maggots." That patient died too.

But most patients lived, even those undergoing relatively delicate surgeries. Of the 39 patients undergoing cranial trephining, 33 survived. Their injuries resulted from a variety of accidents, diseases, and assaults, including a horse kick, a hatchet blow, "a punctured [wound] of brain," and "blow with pistol."

One surgeon described removing a "fragment which had penetrated dura mater, and was encysted in frontal lobe of brain." He reported using chloroform and opening the frontal sinus. The patient experienced a "quick recovery," but his "epilepsy [was] no better."

In his introduction to the report, Dr Cupples defends Texas surgeons as "second to those of no country in the variety, the boldness and the success of their operations, in practical skill, in fertility of resources, and in that self-reliance founded on knowledge, without which no man can be a successful surgeon."

He extols the "hard, every-day work of the surgeon; not in well-appointed hospitals, supplied with every means and appliance that modern science and the marvelous ingenuity of this age have placed at his disposal, but under the most difficult circumstances, deprived even of necessary instruments, and, as has fallen to the lot of some of our number, compelled to amputate a limb in a negro cabin with a bowie knife and a carpenter's saw."



The next scheduled History of Medicine Committee exhibit is "Closing in on Cancer," November 15, 1991, to February 10, 1992, sponsored by the National Cancer Institute. Future exhibits will feature military medicine, public health, and women physicians.

## Special Communications

# The National Library of Medicine

## Evolution of a Premier Information Center

Michael E. DeBakey, MD

From a small collection of medical publications in the Surgeon General's Office in 1836, the National Library of Medicine has developed into the leading repository of medical information in the world. Despite strong opposition and impediments from certain quarters, involving considerable machinations and intrigue, the determination of interested medical leaders and sympathetic members of Congress triumphed in having this remarkable institution established on the campus of the National Institutes of Health, Bethesda, Md. As a participant in many of the negotiations preceding that decision, I have happily witnessed the transformation of the Library, long housed in cramped, makeshift quarters, to its present magnificent structures in the heart of our nation's foremost medical research center. Its prodigious collection of print, audiovisual, and electronic information; its imaginative research projects; its excellent outreach program; and its innovative services and products are indispensable to all practicing health professionals, scientists, and medical educators, as well as to journalists, government officials, and others. The ultimate beneficiary, of course, is the patient.

(JAMA. 1991;266:1252-1258)

"STUDY the past if you would divine the future," the Chinese philosopher Confucius wisely advised.<sup>1</sup> On that premise, I would like to relate some personal recollections concerning the development of the National Library of Medicine (NLM), particularly events I have witnessed personally and followed closely, as this institution has evolved from a collection of a couple of hundred medical books to the premier resource in the world for health practitioners, medical scientists, and educators.

### HISTORY

#### Names

The NLM has had an interesting, if sometimes penurious, past. Not only

From the Department of Surgery, Baylor College of Medicine, Houston, Tex.

The Seventh Annual Leiter Lecture, delivered at the Lister Hill Center, National Library of Medicine, Bethesda, Md, April 20, 1990.

Reprint requests to Office of the Chancellor, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030 (Dr DeBakey).

has its location changed several times, but so has its name. From its origin as the Library of the Surgeon General's Office in 1836, it became the Army Medical Library in 1922, then the Armed Forces Medical Library in 1952, and finally, in 1956, the National Library of Medicine, which Public Law 941 designated as a civilian agency within the US Public Health Service. In 1968, the NLM became a part of the National Institutes of Health (NIH) (Fig 1).

#### Sites

Joseph Lovell, MD, Army Surgeon General from 1818 to 1836, was the first head of library operations. He lived on Pennsylvania Avenue across from the Executive Mansion, in Blair House, which he had built. During Lovell's last year in office, the budget for medical books was only \$150.<sup>2</sup>

In 1862, the Library, which had previously moved with the Surgeon General from place to place, was housed in the

parlor of a small building next to the Riggs National Bank (Fig 2). After the Civil War, in 1867, the Library moved to the second floor of Ford's Theatre (Fig 3), the site of President Lincoln's assassination, which is still standing at this writing. Above and below were the Army Medical Museum and the Record and Pension Division. In 1887, the Library moved again to the west end of the second floor of a new red brick building on the Washington Mall next to the Smithsonian Institution (Fig 4). Except for gaslight in offices along the central corridors, the Library contained no artificial illumination, natural light filtering through an extensive bank of clerestory windows. Not until the early 1900s was the building wired for electricity. The Library remained there until 1962.

#### John Shaw Billings, MD

The one man whose name is almost synonymous with the origin of the Library is John Shaw Billings, MD (Fig 5), a battlefield surgeon at Gettysburg who was put in charge of the Library in 1865. He took the task of acquiring new materials seriously, perusing catalogs and vigorously soliciting gifts from physicians, consultants, and publishers at home and abroad. Oliver Wendell Holmes considered John Shaw Billings "a danger to the owner of any library," so adept was he at acquiring journals from colleagues and associates.<sup>3</sup> He spent many evenings indexing journals that were delivered to his home in large baskets. Billings also began the organization and classification of the collection. As a medical student, he had been frustrated by the lack of a central bibliographic source in medicine. Much of the early growth and development of the

Library was attributable to his determination to provide such a source and to make it accessible. The collection expanded from 1800 volumes in 1865 to 117 000 books and 192 000 pamphlets in 1895, when he resigned.<sup>4</sup> In three decades he had built the Medical Library into the largest in the world.

In 1879, Billings produced the first *Index Medicus* and, in 1880, the first *Index-Catalogue*. The *Index Medicus* remains a dependable, and greatly expanded, monthly subject and author index to more than 250 000 articles from some 2700 journals. Despite the advent of the remarkable computerized bibliographic databases, more than 5000 libraries continue to subscribe to the *Index Medicus*, and I would not know what to do without my own set, particularly to retrieve publications before 1965.

For publications after that date, we can now quickly query more than 13 million records from 25 NLM databases instead of manually poring over year after year of the weighty volumes of the *Index Medicus*, as was previously necessary. A number of examples of the lifesaving value of MEDLINE have been recorded,<sup>5</sup> but the countless times physicians perform a search to solve daily clinical problems have not been as widely publicized. In my own case, I would have felt severely handicapped without these resources—in my surgical, research, teaching, and literary endeavors.

### THE NEED FOR LEGISLATION

Attempts to obtain a permanent building for the Medical Library have had a long and tortured history. In 1918, Surgeon General William Crawford Gorgas, MD, proposed a new structure be built, and the following year Congress appropriated \$350 000 for the purchase of land next to Walter Reed Hospital "for the final location of the . . . Museum, . . . Library, . . . [and] Army Medical School."<sup>2</sup> Nothing ever came of that effort.

In 1930, the Army was notified that the Library and Museum must vacate the quarters on the Washington Mall because the old building was to be demolished. Again, because of a large national deficit, plans for a new building were put aside. At the instigation of Harvey Cushing, MD, a friend of President Franklin D. Roosevelt, the President instructed the Surgeon General to prepare legislation authorizing a new building for the Library and Museum. The bill was passed, but World War II interceded, and the project was dropped.<sup>2</sup>

Whether the military establishment

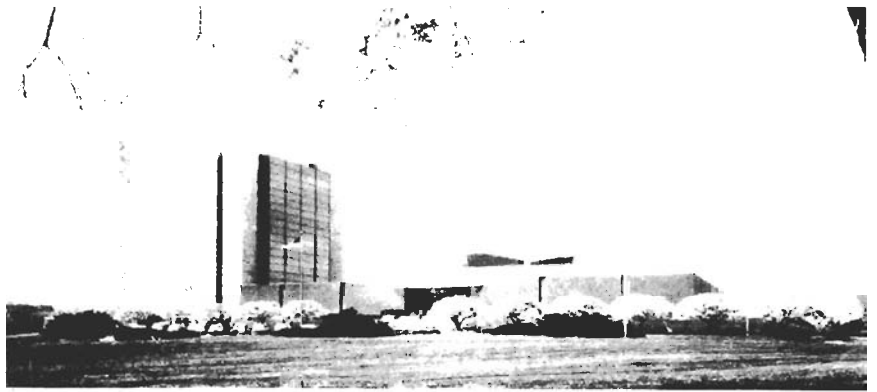


Fig 1.—The National Library of Medicine, on the National Institutes of Health campus (courtesy of the National Library of Medicine).



Fig 2.—Surgeon General's Library, next to Riggs National Bank (1862-1867) (courtesy of the National Library of Medicine).

Fig 3.—Surgeon General's Library, in Ford's Theatre (1867-1887) (courtesy of the National Library of Medicine).





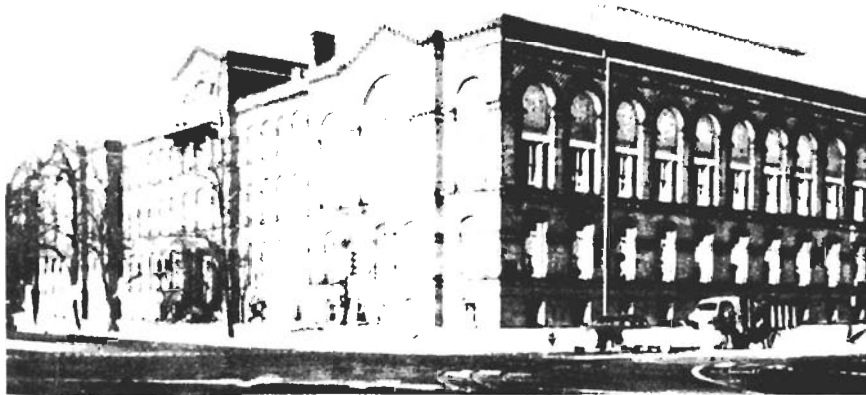


Fig 4.—Army Medical Library, on the Washington Mall (1887-1962) (reprinted with permission from *Resident & Staff Physician*. Copyright © July 1974, by Romaine Pierson Publishers, Inc).

is the proper place for a National Library of Medicine had long been debated. In 1915, 1929, and 1930, there were movements to transfer it to the Library of Congress. In 1931, the American Medical Association proposed reorganizing the Library, and a committee of the American Library Association considered the matter later, but concluded that such a move would be unwise.<sup>6</sup>

Shortly after Colonel Harold W. Jones became Librarian of the Army Medical Library in 1936, he wrote the Surgeon General that

there is literally not an inch of room for expansion anywhere in the entire building except for a dirty old coal hole that is unspeakable. . . . We need the whole place cleaned, we need . . . paint and electric wiring, . . . varnishing, . . . people with vacuum cleaners, . . . new furniture, . . . and many other things.<sup>2</sup>

My own interest in this Library dates to my responsibilities as a medical officer in the Army assigned to the Surgical Consultants Division of the Office of the Surgeon General in 1942. In this capacity, I was charged with preparing position papers, memoranda, and technical bulletins constituting policy regulations authorized by the Surgeon General and representing underlying principles and guidelines for military surgical practice. In addition, I also acted as Editor, along with then-Captain Gilbert Beebe in our office, for the preparation of a classified medical publication, *Health*, distributed to military officials in their theaters of operation. This function required considerable library research on military medical activities during previous wars, and for this purpose I spent many hours browsing in the Army Medical Library.

Although I enjoyed my visits there, I became increasingly concerned with the deplorable physical and crowded conditions of the Library (Fig 6). The lighting was poor, it was sometimes difficult to find a place to sit at a desk or table to

work, and it was often necessary for the staff to place tarpaulins over the book stacks when it rained to protect the collection from leakage. You can imagine the discomfort of working in this nonair-conditioned building in the middle of Washington's hot, muggy summers, when only a few inefficient fans were operating. The staff at that time deserves the highest commendation for its dedication under these difficult conditions.

My concern about the future of the Library mounted as I continued to witness the physical deterioration of its magnificent collection. Shortly after the end of World War II, I expressed this concern to General George Lull, and I recall his weary and discouraging response about the futile efforts of the Surgeon General's office to obtain a new building during the previous 30 or so years. It thus became increasingly apparent that as long as the Library had to compete in the annual budget of the military forces, it was at a great disadvantage. From the viewpoint of the military command, the Library had minuscule significance by comparison with a tank, battleship, or airplane.

While still an officer in the Surgeon General's Office, I presented my view to Surgeon General Norman Kirk, MD, and at a meeting of the Association of Honorary Consultants in 1946, I stated that it probably would be desirable to separate the Library from the Army and make it a National Library of Medicine. I later learned that Keyes Metcalf, then President of the American Library Association and Director of the Harvard University Library, and five other librarians, had conducted a survey of the Army Medical Library on the recommendation of Colonel Jones. In January 1944, this American Library Association committee presented to Major General Norman Kirk a report<sup>7</sup> recommending transfer of the Army Medical Library to the Federal Security Agency.



Fig 5.—John Shaw Billings, MD, whose name is synonymous with the nation's premier medical library (courtesy of the National Library of Medicine).



Fig 6.—Crowded, deteriorating condition of the Armed Forces Medical Library, 1953 (courtesy of the National Library of Medicine).

For almost a decade thereafter, a number of committees, government agencies, and the Honorary Consultants of the Library (Fig 7), as well as individual persons, directed various efforts toward this matter and made numerous proposals. There was, of course, an understandable desire on the part of the Army Medical Service not to relinquish this highly prized jewel to some other agency.

In May 1949, the Medical Advisory Committee to the Secretary of Defense



Fig 7.—Association of Honorary Consultants to the Army Medical Library, October 20, 1950. Left to right, top row, Edward H. Cushing, MD; Rear Admiral George W. Calver; Robert M. Stecher, MD; Thomas Edward Keys; Michael E. DeBakey, MD; Frank Bradway Rogers, MD. Bottom row, Colonel Joseph Hamilton McNinch, MD; Wilburt Davison, MD; Morris Fishbein, MD; Chauncey D. Leake, MD (courtesy of the National Library of Medicine).

(the Cooper Committee) on which I served had considered the future of the Library and had recommended that the Library be considered a civil function operated by the Department of the Army.<sup>6</sup> It further recommended that immediate action be taken for construction of a new building. The Committee believed that a transfer to another agency at this crucial time might jeopardize the program of revitalization that had been directed by Surgeon General Raymond Bliss. The proposed transfer was further emphasized by the Federal Security Agency's inclusion of a working library for the Bethesda Research Center, which, of course, the Bureau of the Budget considered a duplication.

In the meantime, a task force of the Management Committee recommended transfer of the Library from the Department of Defense, with three alternatives: (1) transfer to the Department of Health, Education, and Security; (2) annexation to the Library of Congress; and (3) establishment of an independent agency under the general supervision of the Library.

To investigate this recommendation, the Cooper Committee established an ad hoc committee, on which I served with Edward H. Cushing, MD, John F. Fulton, MD, Henry R. Viets, MD, and Colonel Joseph Hamilton McNinch, MD. We met with Mr Charles Cooper on August 15, 1950, and recommended that the Secretary of Defense immediately make the Army Medical Library a civil function of the Department of the Army, thus relieving the military bud-

get of the cost of its operation, and that the Secretary of Defense recommend to the President that the Division of Medical Sciences, National Research Council, study the Army Medical Library with reference to its function and place in government and submit its conclusion and recommendations.<sup>6</sup>

Mr Cooper accepted these recommendations, and I felt that, after much frustration, real progress might be made in advancing the best interests of the Library.

In my address on "The Future of the Army Medical Library" at the Seventh Annual Meeting of the Association of Honorary Consultants to the Army Medical Library on October 20, 1950, in Washington, DC, I related in some detail various events emanating from various sources, including a number of committees on which I served, such as the Cooper Committee and one of its ad hoc committees, the Hawley Board, the Management Committee in the Office of the Secretary of Defense, Bureau of the Budget, the National Research Council, and the Offices of the Secretaries of the Army, Navy, and Air Force.<sup>6</sup> The actions of these various groups may be characterized, despite the sincerity of those involved, as taking tortuous, convoluted, conflicting, and sometimes confusing, devious, and frustrating directions that, in general, accomplished little beyond emphasizing the need for a new building.

Up to that time, the Library's functional activities had "grown like Topsy"—chiefly through the early momen-

tum of John Shaw Billings—until it became an indispensable service supported solely by federal funds, but with only a tenuous legislative basis for expenditures. Legislative authorization for the Library lay in the provisions of the Joint Congressional Resolution of April 12, 1892 (27 Stat 395), and the Act of March 3, 1901 (31 Stat 1039), which placed the resources of the Army Medical Library at the disposal of duly qualified persons in the states and territories and the District of Columbia. These Congressional resolutions contained no indication that Congress intended for the Army Medical Department to operate a national medical library.

The Army Medical Library found itself in the curious position of having been developed by a military agency into a national institution primarily for civilian purposes and of being expected to fulfill this function without proper authorization. That was the heart of the problem, and it accounted for many of the obstacles in the proper operation and development of the Library. The Surgeons General, for example, encountered difficulty in justifying operating funds on either a military or legislative basis. The \$1 million annual budget at that time was questioned by both the military and the Bureau of the Budget.<sup>6</sup> It was obvious to me that as the cost of the military establishment rose, the competition for Library funds would receive even closer scrutiny. I was therefore convinced that the problem of the Library could not be resolved without adequate legislation to define its responsibilities and establish it clearly as the National Library of Medicine.

Throughout the 30 or more years of convoluted discussions, dialogues, debates, and disputations, the two factors that had the greatest impact on the fate of the Library were the First Hoover Commission and, more especially, the Second Hoover Commission.<sup>8,9</sup> The guiding principle that I developed and expressed at that time, which ultimately led to a pragmatic achievement and which influenced my actions in the report of the Second Hoover Commission, was based upon two propositions: (1) the need to define the purpose and function of a National Library of Medicine and the need for authorization or legal basis for its activities. In this connection I stated that "I have come to believe that its most important contribution to the advancement of medical science is concerned with bibliographic control of current medical literature by means of special indexes and compilations . . ." and (2) ". . . the Library should be closely associated with a medical agency and operated as a medical library, not a gen-



SOME PRIME MOVERS OF THE LIBRARY BILL



Fig 8.—Prime movers of the Library Bill (reprinted with permission from *Resident & Staff Physician*. Copyright © July 1974, by Romaine Pierson Publishers, Inc).

eral library . . ." and should be "sensitive to the demands of the medical profession and medical scientists . . ."

Turning points for the fate of the Library were the First and Second Hoover Commissions, when action was finally taken to move the recommendations forward. Because of the friendship I had developed with Tracy Voorhees, who was Chairman of the First Task Force, we were able to get him to intercede with his friend, President Hoover, during the work of the Second Commission. With other prime movers of the Library Bill (Fig 8), Mr Voorhees, who had been Chairman of the Board of the Long Island (NY) College of Medicine, had an understanding of the needs of the Library, and because he had the ear of President Hoover, I engaged his help in emphasizing the direness of the needs. Mr Voorhees accompanied me on a luncheon visit to President Hoover in his apartment at the Waldorf Towers, and when Mr Hoover asked me which of the Presidential Commission's Medical Task Force recommendations I would most like to see enacted, I said, without hesitation, the National Library of Medicine legislation, one that I had worked hard for in the Commission deliberations. After the Commission's report was submitted to the Congress, a number of us who had been working on the recommendation encouraged Senators Lister Hill and John F. Kennedy to prepare legislation for its implementation. Toward this end, I worked very closely with Senator Hill's staff.

On March 13, 1956, Senators Hill and Kennedy introduced Bill S 3430: "to pro-

mote the progress of medicine and to advance the national health and welfare by creating a National Library of Medicine." A comparable House bill was HR 2826. Senator Hill (Fig 9), the son of a physician, was deeply interested in this bill, as he was in all health legislation. The Committee on Foreign and Interstate Commerce changed S 3430 as originally introduced, to provide for the operation of the Library by the Public Health Service. The amended bill was reported out of Committee on May 29, 1956, and passed the Senate on June 11, 1956. A number of us worked hard to persuade the Surgeon General of the Army, Silas B. Hays, not to oppose the legislation. I cannot overemphasize the key role Sen Lister Hill played in this legislation.

While the legislation was evolving, however, there was considerable controversy about the site and later the Library's relationship with the NIH. Senator Everett Dirksen of Illinois tried to influence the legislation to locate the new building for the Library adjacent to the American Medical Association headquarters in Chicago, Ill, based on the lobbying efforts of Morris Fishbein, MD, the highly visible Editor of *The Journal of the American Medical Association*. A number of us mounted a campaign to locate the Library in the Washington, DC, area as a kind of independent agency, not under the control of the Library of Congress or organized medicine, but as an institution of the government, related to a medical activity, ideally the NIH. I further recommended the establishment of a strong advisory board of medical scientists and



Fig 9.—Sen Lister Hill, sponsor of the Senate Library Bill (courtesy of the National Library of Medicine).

medical librarians to guide the Library's policies. Of overriding importance, of course, was an adequate building.

In 1956, the Democratic National Convention was approaching. The powerful Speaker of the House, Sam Rayburn of Texas, was aware of the pressures building up in Chicago and Washington, but he knew little about the Library and decided not to let this issue create a political problem. When hostilities developed for the Democratic National Committee on an issue of so little significance, at least in his mind, Rayburn simply tabled the matter. He was not going to let the bill go through. These events were reported in July 1974 in an article entitled "How Congress Almost Aborted the National Library of Medicine," by Ted Klumpp, MD,<sup>10</sup> who became Chairman of the Medical Services Task Force of the Second Hoover Commission when Chauncey McCormick, the first Chairman, died.

Senator Hill called me and said, "Mike, we have the votes, and we could pass the Library bill, but the Speaker won't let it come up because of the political situation. Do you know anyone in Texas who has influence with him?" I had just recently moved to Texas and was not yet widely acquainted, and my inquiries among a number of well-known citizens came up blank. Rayburn was from a small town and fiercely independent. Then I recalled that I had operated on the husband of the Secretary of the Democratic National Committee, Dorothy Vredenburg, and I had gotten to know her and her husband very well. I called Dorothy and said, "You could do a great service to the nation. We need to get the National Library of Medicine established, and we have the votes but Representative Rayburn is holding up the bill. Since you know him well, perhaps you could persuade him to let the bill go through (Fig 10). I don't want to see the bill passed up this year;



Fig 10.—Dorothy Vredenburg, Secretary of the National Democratic Committee, and Speaker of the House Sam Rayburn of Texas, who were helpful in getting the Library bill out of committee (reprinted with permission from *Resident & Staff Physician*. Copyright © July 1974, by Romaine Pierson Publishers, Inc).

we may have difficulty getting it through next year. All we need is to get it out of committee." She said, "Mike, I'll see what I can do." A few days later she called and said, "It's all set. He's going to release it." Senator Hill was delighted, of course. Dorothy Vredenburg's role in this important matter was never widely known. She retired in 1989 as Secretary of the Democratic National Committee.

After 40 years of debate and diversion, President Eisenhower signed into law the National Library of Medicine Act on August 3, 1956, and the National Library of Medicine was created as a national civilian institution. Even after the legislation passed, NIH Director James Shannon exerted some resistance to putting the Library on campus. A Board of Regents was established, and it was the Regents' task to select a suitable site for the new building. As a member of that founding Board, I suggested a lovely spot adjacent to the NIH—an old golf course—which I thought would be an ideal site. A lively debate ensued. Despite NIH Director Shannon's vigorous objections, I stuck to my guns that the Library belonged at the NIH. I felt strongly that the Library had to be related to a substantive medical scientific activity. Research nourishes the Library; it is an indispensable resource before the investigator begins the research, and it provides new information on completion of the research—a cycle that repeats itself continuously. Fortunately, I had a number of friends and associates on the Board who supported my position, like Isador S. Ravdin, MD, Professor of Surgery at

the University of Pennsylvania, Philadelphia, and Chauncey Leake, MD. The Regents did, indeed, select this site, and we were able to get the land. On December 14, 1961, on the 125th anniversary of the Library's founding, the building was dedicated, and the collection was moved in the early months of 1962.

The John Shaw Billings Centennial in June 1965 offered an opportunity not only to chronicle Billings' remarkable achievements, but also to draw public attention to the Library's potential as a national center for biomedical communications—an active information processing center instead of a passive repository for books and journals—an inevitability resulting from the growth of new technologies. Joseph Leiter, PhD, for whom this Lecture is named, was appointed Associate Director in 1965 to manage various new NLM operations and functions that grew out of the new technologies.

#### Regional Medical Library Network

One of the issues addressed by President Johnson's Commission on Heart Disease, Cancer and Stroke, which I chaired, was the development of plans for a Regional Medical Program system. Because of my long association with the Library, I was well aware of the dire needs of our nation's medical libraries and wanted to include in the system a regional library network, as well as extramural and intramural library research, development, and training programs. I had, in fact, discussed the sad state of our libraries in an article, "Chaos Among the Stacks,"

published in early 1963.<sup>11</sup> I invited Martin Cummings, then NLM's Director, to assist with these plans. Our Commission's report, in December 1964, provided great impetus for this program.<sup>12</sup> I had written much of it myself because I wanted to be sure that certain recommendations, including the Regional Medical Library (RML) network and assistance to libraries, received adequate emphasis. The report, including the recommendation for the establishment of the regional medical libraries, was submitted to President Johnson, who transmitted it to Congress.

On January 19, 1965, Senator Hill and Rep Oren Harris introduced in Congress the Medical Library Assistance Act (S 597 and HR 3142), and 3 months later Rep John Fogarty introduced an identical bill (HR 6001). The bill, which was strongly supported by the medical and library communities, passed with an overwhelming majority. That legislation allowed NLM to provide grants to improve medical library services and facilities and to create a regional medical library network to facilitate the sharing of collections. The present network, which deserves great commendation for its cost-effectiveness and ready accessibility to medical information, consists of seven regional medical libraries, 135 resource libraries, and about 5000 other medical libraries. The NLM Outreach Planning Panel, which I was privileged to chair, has recommended a reinvigoration of the RML network, with emphasis on an outreach program to segments of the health community currently underserved, in which the RML staffs act as a "field force" for NLM products and services.<sup>13</sup>

#### LISTER HILL CENTER

In 1968, Sen John Sparkman introduced a resolution for a new NLM research facility to be named the Lister Hill National Center for Biomedical Communications, and on August 3, 1968, President Johnson signed the Joint Resolution of Congress authorizing the construction. The purpose of the new Center was to apply the latest technology to problems in biomedical communications. The Center, reorganized in 1983, contributed much to the development of MEDLINE and has been at the forefront of communications, technology, and informatics. The building was dedicated on May 22, 1980, with Senator Hill and Congressman Paul Rogers, another longtime friend and supporter of the Library, in attendance. Among recent studies of the Center are the potential of optical videodisc technology for document preservation, storage, and retrieval; development of inno-

vative health-science teaching materials; and computer-based "expert" systems to aid practitioners in clinical decision-making. This center is a fitting tribute to Senator Hill's unstinting support of the Library and its activities.

## INTERNATIONAL PROGRAM

The Library's international program includes a global medical library network involving the United Kingdom, Canada, Australia, Japan, Sweden, France, West Germany, Switzerland, Italy, Kuwait, Colombia, Egypt, China, and Mexico. The NLM has had special associations with the USSR, the People's Republic of China, and Egypt and has supported programs in Israel, Poland, India, and Yugoslavia. In addition, it has assisted many developing countries through library loans, photocopies, and specialized reference and bibliographic services. The Library is, indeed, a world-class institution.

Other valuable NLM programs, products, and services include Integrated Academic Information Management Systems (IAIMS), user-friendly GRATEFUL MED, medical informatics, artificial intelligence, all created by



Fig 11.—Donald A. B. Lindberg, MD, present Director of the National Library of Medicine (courtesy of the National Library of Medicine).

the fertile minds of NLM's dedicated leaders and implemented by its equally dedicated staff.

It is a long way from John Shaw Billings' modest Army Medical Library to

the two imposing buildings that house the NLM and its massive collection of print, audiovisual, and electronic information; its sophisticated research and development programs; and its creative and forward-looking professional staff. From the stewardship of John Shaw Billings, MD (1865) to that of Donald A. B. Lindberg, MD, (1984) (Fig 11) spans 129 years, but across that span the two men, like all the directors between them, had a common purpose and common personal characteristics: they were all dedicated to improving the accessibility of biomedical information to serve the health needs of our nation and the world, and they all had the vision to plan for the future, the creativity to initiate bold new programs, and the determination to stay the course despite setbacks and impediments. The NLM they have built has been indispensable to the career of other health professionals and unquestionably to my own. Our patients have been the real beneficiaries.

I am grateful to the staff of the National Library of Medicine for providing historical materials and photographs.

## References

1. Confucius; Soothill WE, trans. *The Analects or the Conversations of Confucius With His Disciples and Certain Others*. London, England: Oxford University Press; 1937.
2. Rogers FB. The old library in Washington, 1836-1961. In: *Past, Present, and Future of Biomedical Information*. Bethesda, Md: National Library of Medicine; 1987:16-26.
3. Miles WD. *A History of The National Library of Medicine: The Nation's Treasury of Medical Knowledge*. Bethesda, Md: National Library of Medicine; 1982:71.
4. Mehnert RB. A world of knowledge for the nation's health: the U.S. National Library of Medicine. *Am J Hosp Pharm*. 1986;43:2991-2997.
5. DeBakey ME. When your doctor needs to know—fast. *Reader's Digest*. 1987;131:110-113.

6. DeBakey ME. The future of the Army Medical Library. *Bull Med Libr Assoc*. 1951;39:122-127.
7. Metcalf KD, Doe J, Fleming TP, Marshall ML, Mumford LQ, Osborn AD. *The National Medical Library: Report of a Survey of the Army Medical Library*. Chicago, Ill: American Library Association; 1944.
8. *The Hoover Commission Report on Organization of the Executive Branch of the Government*. New York, NY: McGraw-Hill International Book Co; 1949.
9. *A Report to the Congress*. Washington, DC: Commission on the Organization of the Executive Branch of the Government; 1955:63-64. House document No. 99.
10. Klumpp TG. How Congress almost aborted the National Library of Medicine. *Resident Staff Phy-*

*sician*. 1974;20:58-66.

11. DeBakey ME. Chaos among the stacks. *Med World News*. 1963;4:58, 61.
12. DeBakey ME (chairman). The President's Commission on Heart Disease, Cancer and Stroke. *Report to the President: A National Program to Conquer Heart Disease, Cancer and Stroke*. Washington, DC: President's Commission on Heart Disease, Cancer and Stroke; 1964:1:75.
13. DeBakey ME (chairman). Outreach Planning Panel, National Library of Medicine. *Report of the Board of Regents: Improving Health Professionals' Access to Information*. Bethesda, Md: US Dept of Health and Human Services, National Institutes of Health; 1989:6.