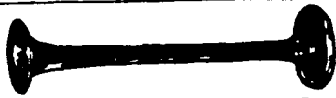


MEDICAL



COLLECTORS



ASSOCIATION

NEWSLETTER NO. 14
DECEMBER 1988

Dear Colleagues:

Once again it is time to distribute the final Newsletter of the year. This one for the winter of 1988, as in previous years, contains two very important forms for you to fill out. The first is the unpleasant but necessary renewal of membership for 1989. The Renewal of Membership form should be filled out and sent to me at the address indicated. Please note that we are continuing to maintain the dues at the same level and the structure of the association will remain the same in 1989. I particularly urge you to fill out the comments and wants section of the Membership Renewal Form since this information is of great interest to all of us and helps to make the Newsletter more valuable. Although, naturally, I hope that everyone will renew their membership in the association for next year, if for some reason you wish to withdraw, I would appreciate it if you would indicate this by checking off "no" and returning the form to me. As in previous years, let me stress that this is the only call for renewal of dues and, therefore, if you wish to continue as a member please fill out the form and return it to me. For those of you who are foreign members, please remember that the dues must be paid in U.S. dollars with a check drawn upon an American bank.

The second important item contained in this letter is the first mailing of the Registration Form for the Fourth Annual Collectors Meeting. The meeting has been organized by Dr. Olgierd Lindan with the help of James Edmonson and Glen Jenkins, who have formed an informal Organizing Committee. The meeting will be held as indicated on the form at the Clinic Center Hotel and the Howard Dittrick Museum of Medical History. The form is self-explanatory, please fill it out and return it with the appropriate payment to me as soon as possible. Please note that the check should be made payable to Dr. Lindan but sent to my office, where the secretarial work will be carried out. In addition to the Registration Form, you will find enclosed the Preliminary Program. Dr. Lindan has done a spectacular job in organizing what promises to be an extremely exciting visit to medical history in Cleveland. In addition to the usual dealers exhibits, he has also offered to open his house for a visit to observe his remarkable collection of electrotherapy and unusual healing devices. This alone would be more than enough to compensate for the trip to Cleveland, however, we also have the unique opportunity to visit in-depth the Dittrick Museum. For those of you who are not acquainted with this museum, you should note that it is one of the foremost historical medical museums in the world. There is a beautiful catalogue of the Gustav Weber Collection from the museum, which was published in June 1986 that

Founder: M. Donald Blaufox, M.D., Ph.D.

Mailing Address: M. Donald Blaufox, M.D., Ph.D. • 1300 Morris Park Avenue • Bronx, New York 10461 • (212) 904-4011

describes some of the remarkable collection in great detail. Dr. Jim Edmonson, the Curator of the Museum, is an accomplished medical history scholar and has contributed to this Newsletter. The visit to the museum should be quite exciting.

In addition to these activities, there will be the morning presentations by various members of the Association. The preliminary program, including a "Show and Tell" is strictly that. Anyone among the membership who would like to present some material formally, should notify either me or Dr. Lindan so that we can arrange for the presentation. If you would like to present something in a more informal vein, please join us for the "Show and Tell" portion of the program.

Once again, in order to keep the organization operating smoothly, please be sure to sign up for renewal of membership and for attendance at the meeting in July as promptly as possible.

You will note on the following pages a number of important items and contributions. A number of new members have joined the organization and they are listed along with the latest collectors' wants and dealers' offerings. Dr. William Helfand has again provided us with a reprint of his articles from Pharmacy in History and Dr. Robert E. Kravetz has also generously allowed us to use another of his interesting commentaries from Vim and Vigor Magazine.

Unfortunately, no one has sent in any original contributions and so I have, instead, chosen to include as the essay-type portion of the Newsletter, a photocopy of a chapter from C.J.S. Thompson's book, The History and Evolution of Surgical Instruments. This book provides a remarkable insight into this area of interest to all medical collectors and I advise anyone who has the opportunity to purchase it at auction or at a rare book store, to snap it up. The chapter which I have chosen to reproduce here is on the Amputation Knife, which I thought would be of general interest. Our Newsletter patent has been kindly supplied by Alex Peck. Alex has a Tieman patent "Patent-Catch" pocket set and he has generously sent me both the pictures and the patent. He has also included references from Tieman's 1889 catalogue and I think this should be of great interest to all of you. Dr. Terry Hambrecht helped Alex find the patent. The kit itself is marked with the Park Row address and probably dates to about 1890. Alex has also kindly supplied me with a photocopy of a silhouette cutout which he recently obtained and which shows a unique portrayal of bloodletting.

A unique and most useful addition to the Newsletter has been provided by Dr. Jack Rubin. Jack has carried out the tedious work of plotting the relationship between the pound and the dollar between 1791 and 1987. Any of you who have old catalogues or price lists and would like to get an idea of the going price for items in your collection can use this to make the appropriate adjustments. Also many of you may wish to try to update the price you've paid for some of the things in your collections. Several other things are included as part of the Newsletter, these include a letter from Dr. Spencer Sherman entitled "Buyer Beware". He brings up a problem which I'm sure many of you have encountered and I think the letter speaks for itself.

I recently received an announcement of a program to be held in Madison, Wisconsin, and I have included that announcement in the Newsletter. David Coffeen of Tesseract has asked me to announce the publication of his catalogue

on microscopy. Although the catalogue was published in September, it is still of great interest to everyone. It contains a large number of very interesting descriptions of microscopy.

Finally, we include two other items as enclosures in this Newsletter, they are the recently introduced Newsletter of Jeremy Norman, which contains a great deal of valuable information and offerings. Also I have enclosed in what has become almost a routine procedure, the announcement for the spring Scientific Antiques Fair in London, which was sent to me by Mr. Peter Delehar.

So then in summary, there are many members of the group who contribute actively to make the Newsletter worthwhile, but I believe we could still hear from a large number of people. I have yet to receive any new items for identification and although I would like very much to include that column on a regular basis, there simply is no material to present at the present time.

If any of you have a few minutes free, please send me whatever you think would be of interest. Please be sure to renew your membership as promptly as possible and I hope you will also attend the Medical Collectors Meeting, each and every one of which has been a great success both in terms of a pleasant social event and an interesting learning experience.

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

SPENCER E. SHERMAN, M.D., P.C.
DIPLOMATE, BOARD OF OPHTHALMOLOGY
F.A.C.S., F.I.C.S.

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NEW YORK, N. Y. 10021
212-753-8300

OPHTHALMIC MICROSURGERY:
CATARACT EXTRACTION WITH LENS IMPLANT
LASER AND RADIAL KERATOTOMY

December 2, 1988

Donald Blaufox, M.D.
1300 Morris Park
Bronx, NY 10461

Dear Donald,

"Buyer Beware"

While travelling in London recently, I visited a shop that sells medical antiques.

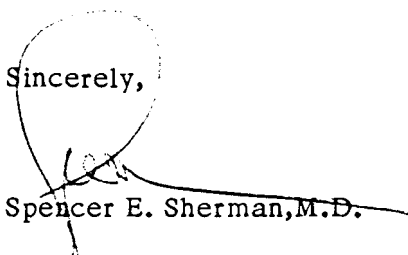
I spied an ophthalmologic antique, circa late 1700s, in a display case. This item bore a great resemblance to an antique which I had bid on at Sotheby's one year ago.

However, unlike its condition noted one year ago, this antique was sparkling. In reality it was re-lacquered.

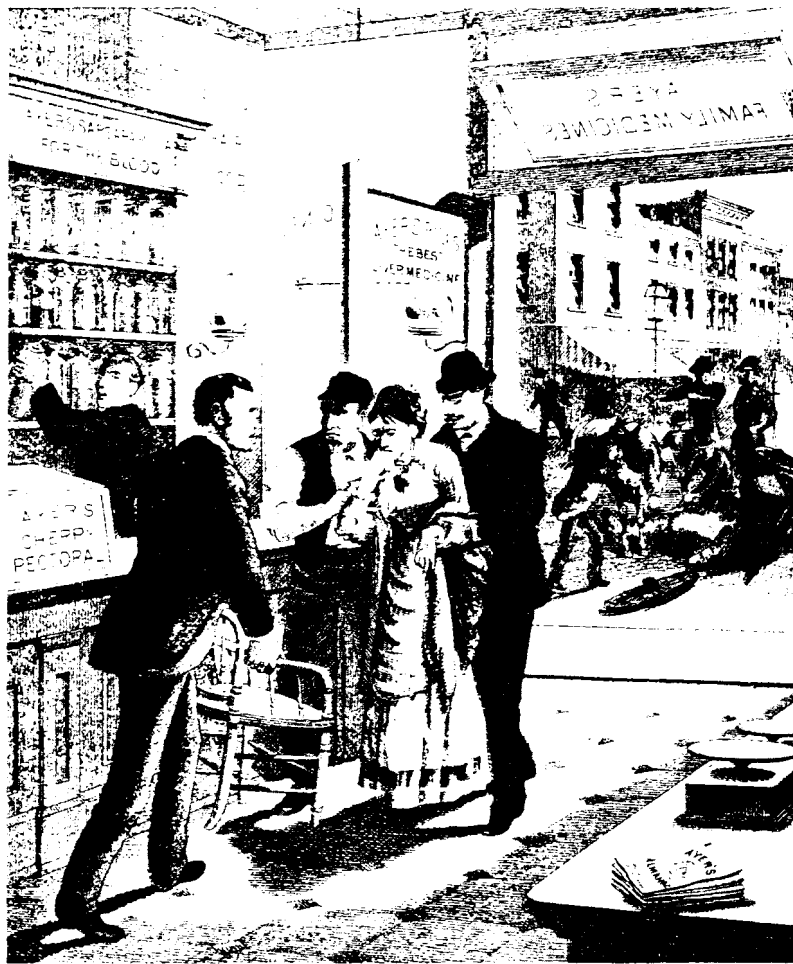
Unfortunately, the intrinsic value of this antique was greatly reduced because of the refinishing. Nonetheless, it was very pleasing to the eye.

The morale of this story is that the serious collector should always view, with suspect, any antique that appears in terrific condition. One should always inquire as to the extent of repair and conditioning and demand documentation to that effect.

Sincerely,



Spencer E. Sherman, M.D.



Historical Images of the Drug Market—VII

by William H. Helfand

If accidents are to happen it is fortunate when they happen at the proper place. In this case a woman whose carriage has overturned has been led a few steps into the interior of a handsome pharmacy where she will be taken care of quite well. The pharmacy displays advertisements for several Ayer's products, Sarsaparilla, Hair Vigor, Liver Pills and Cherry Pectoral. Further, there are copies of the current edition of the ubiquitous Ayer's almanac on the counter. Oddly, there is also a scale on which the pharmacist would normally weigh powders; normally one would not expect the scale to be in a position where the

public would pass directly in front of it. The lighting fixtures and show globe in the window are typical of the period, but it is doubtful that any pharmacy would have so many advertisements for the products of a single company. The illustration appears on the back cover of 'Ayer's Book of Emergencies', published in Lowell, Mass. in 1888 and reprinted again in Ottawa the next year; it is certainly a most appropriate one for the subjects covered in this 36 page pamphlet. (*Size of illustration, 7 x 4³/₄ inches. Original in Kremers Reference Files, AIHP, Madison, Wisconsin.*)

A LOOK BACK

FASCINATING ARTIFACTS FROM THE HISTORY OF MEDICINE




PHOTOGRAPH BY RAY LUTMAN. MEDICINE ANTIQUES COURTESY ROBERT E. KRAVITZ, M.D. HAIR AND GUN COURTESY ARIZONA HISTORICAL SOCIETY

Bitters date back to the reign of King George II of England, who placed a high tax on whiskey and apothecaries, added a little flavoring to the alcohol and named them. In the latter part of the 19th century when the anti-whiskey movement spread in this country, the bitters bottle replaced the whiskey bottle in many households. Of all the bitters ever marketed, the most famous of

them was Dr. J. Hostetter's Celebrated Bitters.

During the Civil War, the government supplied troops with bitters as an invigorant before a dangerous battle. The potion was 94 proof at the time. Retail sales mounted after the war ended in 1865 and surpassed a million dollars a year.

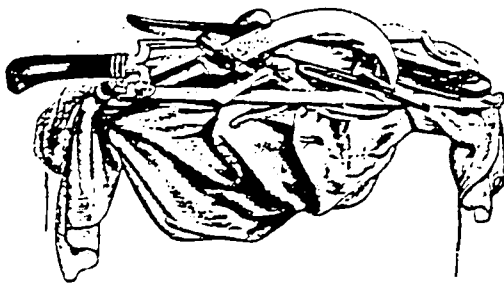
Also pictured is a French pewter medi-

cine spoon from the mid 1800s. An Englishman, Charles Gibson, introduced this type of spoon, known as a castor oil spoon. It had a hinged cover to the bowl which opened for filling and a small orifice for administering the medicine. The liquid was forced down the patient's throat and the spoon was found particularly helpful in feeding the insane as well as the invalid patient. 

THE HISTORY AND
EVOLUTION OF
Surgical
Instruments

By Dr. C. J. S. THOMPSON

WITH A FOREWORD BY DR. CHAUNCEY D. LEAKE



SCHUMAN'S · NEW YORK · MCMXLII

THE AMPUTATION KNIFE

ACCORDING to Aryan tradition, Sūsruta, a disciple of Dhanvantari the Hindu Father of Medicine, records in *Samhita*, his book on Surgery, said to have been written about 600 B.C., a hundred and twenty-one surgical instruments in a chapter he devotes to the preparation of a surgeon for accompanying the king to the battlefield. He enjoins that "the instruments should have good handles and firm joints, be well polished and sharp enough to divide hair. They must be kept perfectly clean and wrapped in flannel in a wooden box but the best and most important of all is the hand." Amputation, he states, was done now and then, notwithstanding the want of good control over the haemorrhage. Boiling oil was applied to the stump by pressure by means of a cup-formed bandage; pitch being sometimes added.

There is a close correspondence between Sūsruta's writings and the Hippocratic collections, and some of the operations he describes agree with the accounts of Alexandrian practice and those given by Celsus.

It is not, however, until the first century of the Christian era that we have a description of the amputation of a limb. Aulus Cornelius Celsus, in his account of the operation, says: "When the malady gets the better of our medicines the limb must be amputated, but this is attended with great danger, for often during the operation itself the patients die from the haemorrhage or from deliquium. But in cases like this where we have but one remedy, expediency and not safety is the paramount consideration. We are therefore to make an incision with a knife between the sound and morbid parts down to the bone, with this qualification, that we are never to cut opposite a joint and always to include some of the sound part rather than leave any of that which is diseased. When we come to the bone, the sound flesh must be retracted so as in some

⁷ JAMINI BHUSIAN ROY. *Report on Indigenous Systems of Medicine*. Part I. Madras. 1923.

History of Surgical Instruments

measure to denude it; then it must be divided with the saw close up to the sound flesh. The end of the bone is then to be smoothed where the saw has left any asperity and the integuments brought over it, which, in this operation ought to be left loose enough to cover the entire stump or as far as possible. When the stump happens not to be covered with integument it must be dressed with lint and over that a sponge dipped in vinegar is to be secured by a bandage.”

The knife used by the Roman surgeon, judging from the specimen found among the surgical instruments discovered at Pompeii, was shaped like a large scalpel with a steel blade and bronze handle. *Fig. 3 (1)*.

That stumps were sometimes fitted with artificial limbs is evidenced from the leg made of bronze plates fashioned to a wooden core. *Fig. 2*. This unique relic of orthopaedics, now in the Museum of the Royal College of Surgeons, was excavated from an undisturbed tomb near Capua. It was probably intended to replace the right leg, as the skeleton found with it had a waistband of sheet bronze edged with small rivets made to fasten to a leather lining. Two iron bars, having holes at the free ends, are attached to the extremity of the bronze, and a quadrilateral piece of iron found near the position of the foot was probably fixed to the leg below so as to strengthen it.



FIG. 2.—Roman artificial leg of bronze. c. A.D. 300. (*Museum of the Royal College of Surgeons of England.*)

The Amputation Knife

Among the leading surgeons of the first century was Heliodorus (ca. A.D. 75), who was contemporary with Juvenal. On amputation he observes: "In sawing the bone the plate of the saw ought to be applied even, in order that the sawing of the bones be even. When the bones are sawn, cut through the other parts with a scalpel." This clearly shows that the Greek surgeons employed a large scalpel for making the incision.

Archigenes of Apameia (A.D. 48-117), who lived in Rome under the Emperor Trajan and operated for cancer of the breast and ligatured bleeding vessels, described both the circular and flap amputation. With respect to the latter operation he says: "After cutting down to the bone the tendons are to be retracted and the bone scraped and sawn."

Both these surgeons employed ligatures, which, we are told, in Galen's time were "to be bought at a shop in the Via Sacra."

Galen (A.D. 130-200?) himself recommends amputation to be performed in general at a joint in certain cases of gangrene.*

Coming to the seventh century, Paulus Aegineta (A.D. 625-690), who

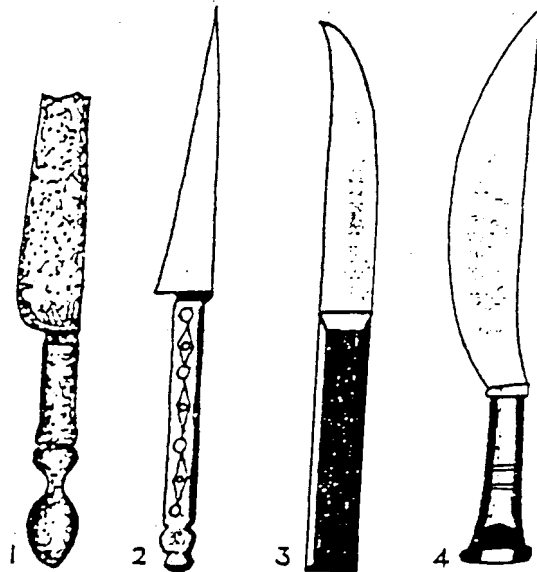


FIG. 3.—Amputation knives: 1, Roman; 2, Albucasis; 3, Wryghtson. 1350; 4, Knife of the fifteenth century.

* *Galen Commentar. De Articulis*, Basle T.V., p. 650.

History of Surgical Instruments

alludes to amputation in his works, says: "Saw the bone as expeditiously as possible, applying a linen rag to the parts which have been cut lest they be torn by the sawing and occasion pain. Then having cut through what remains, apply the red-hot irons and stop the haemorrhage thereby with compression."¹⁰

The Arabian School performed amputations as early as the tenth century and also practised excisions of the bones and joints. Rhazes (850-923 A.D.) observes, on the sawing of bones, that the flesh upward and downward should be stretched with a piece of cloth so that it may not come in the way of the back of the saw. He recommended that when the bone was diseased, the whole diseased portion should be cut out.

Among the instruments depicted in the illustrated manuscripts of Albucasis (A.D. 936-1019) is a knife with a straight blade, wide at the base and narrowing to a sharp point, which he calls a "knife-razor." *Fig. 3 (2)*. In the account he gives of amputations it is directed that the fleshy parts are to be divided with a large scalpel down to the bone, which afterwards is to be sawed across.

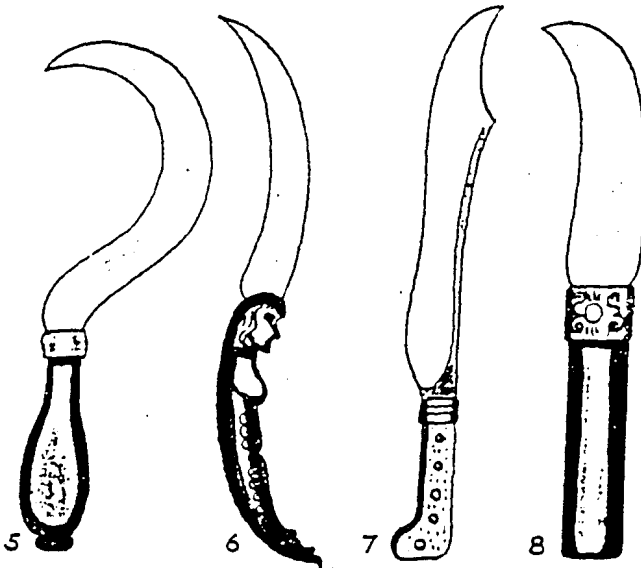


FIG. 4.—Amputation knives: 5, Paré's crooked knife; 6, Paré's incision knife; 7, Vesalius, c. 1550; 8, Guillemeau, 1594.

¹⁰ *Works of Paulus Aegineta*, Vol. II. p. 409.

The Amputation Knife

Guy de Chauliac (A.D. 1298-1368), the famous author of *Chirurgia Magna*, which for centuries influenced the practice of surgery in Europe, followed the Arabian School in his methods of operating. He classified haemorrhage as arterial and venous, and employed styptics, sutures, the actual cautery, and ligation.

In the manuscript work on Surgery that belonged to John Wryghtson of Oxford in 1350, the amputation knife depicted has a short blade which is curved slightly inward at the extremity. *Fig. 3 (3)*. But a century later, the shape of the blade was completely changed, and it was curved backward with the cutting edge on the outside, as shown in the illustration. *Fig. 3 (4)*.

Ambroise Paré (1509-1590) the great French military surgeon, who gained much of his experience of amputations on the battlefields, describes in his *Chirurgie* two knives that he used when operating. One he calls an incision knife and the other a "crooked knife for dismembering," the blade of which is crescent-shaped with the cutting edge on the inside. He remarks, "when you have made your ligature, cut the flesh

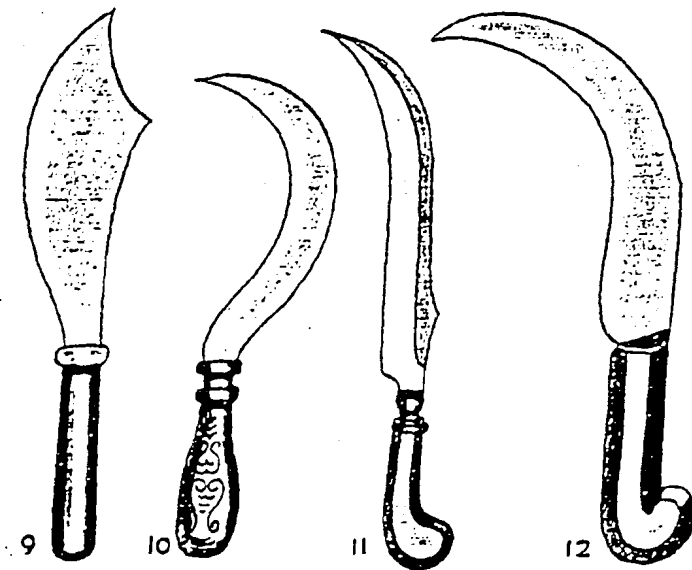


FIG. 5.—Amputation knives: 9, Hildanus, 1646; 10, Scultetus, 1665; 11, Sharp's curved knife, c. 1739; 12, Perret, 1772.

History of Surgical Instruments

even to the bone with the sharp, well-cutting incision knife or with a crooked knife." *Fig. 4 (5, 6)*.

Among the instruments figured in the works of Andreas Vesalius (1515-1564) is an amputation knife with a large blade slightly curved part way at the back and with an almost straight cutting edge which is rounded off at the point. *Fig. 4 (7)*. The wooden handle is decorated and terminates in a knob curving inwards to give firmness to the grip. In 1594, Guillemeau figured another type with a broad blade curved only at the extremity, *Fig. 4 (8)*; but fifty-two years later, Fabricius Hildanus describes a new-shaped blade which differs widely from its predecessors. *Fig. 5, (9)*. Shaped like a scimitar, it has the cutting edge on the outside of the curve of the heavy blade, while the back is bevelled and sharp. The handle of *lignum vitae* is highly turned and finished.

But this innovation did not last long, judging from the *Armamentarium Chirurgicum* of Scultetus (1663), for he reverts to the earlier type, and calls his instrument a "crooked knife wherewith the flesh is cut in so far as the bone which must be saw'd off and is necessary before the amputation of the leg or arm." *Fig. 5 (10)*.

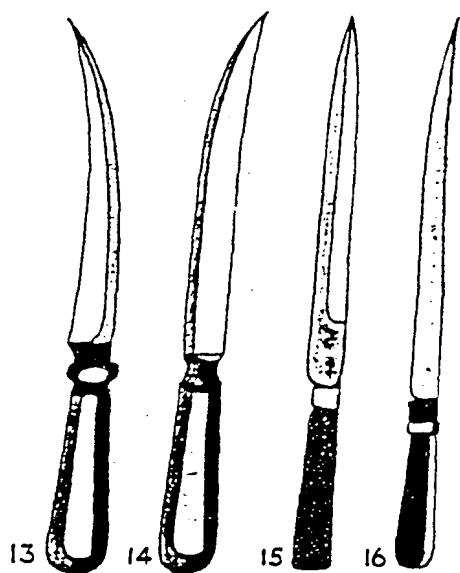


FIG. 6.—Amputation knives: 13, Semi-curved, 1775; 14, Sagivny's; 15, Lisfranc's; 16, Liston's.

During the first half of the eighteenth century several important changes took place in the shape of blades. About 1739 Sharp introduced his strongly curved blade which sometimes had a double edge, *Fig. 5 (11)*, and later Perret favoured a still more crescent-shaped knife with a periosteal elevator which was used in France until late in the century for the amputation of the arm and lower extremity below the knee. *Fig. 5 (12)*:

From 1760 to 1780 the curved

The Amputation Knife

blade of varying shape was in general use, and so remained until eight years later, when Loder advocated a knife with an almost straight edge which he found to be effective. *Fig. 6 (13)*.

Then came a period of transition during which the straight-bladed knife began to replace the strongly-curved type used by Sharp and other surgeons in the earlier part of the century. Benjamin Bell figures a straight knife in his *System of Surgery* in 1788, and Savigny ten years later illustrates a knife with a blade intermediate between Bell's and Perret's, and points out that "care should be taken in the construction of this instrument that the back is not thicker than is absolutely necessary to give and support the required firmness of edge, otherwise it becomes unwieldy in its management." *Fig. 6 (14)*. Sir Astley Cooper, however, preferred the broad back for his amputating knife, which is in a case of his instruments now preserved in the collection in the Museum of the Royal College of Surgeons. It has a very thick back with the sides of the blade much smoothed along its borders, but the blade is straight, slightly curving to a blunt point. A marked flattening of the blade on each side of the back is characteristic of this pattern. The ivory handle which came into vogue about this time is smoothly chequered, but most of the handles of the period are made of lignum vitae and shaped octagonally with the terminal either curved inwards or outwards.

Lisfranc, who preferred straight-bladed knives for amputation, observes that "when a knife is required for the forearm or leg, the cutting edges should be extended to the insertion of the blade into the handle." He therefore had his knives made with long, slender blades with double edges. *Fig. 6 (15)*.

Thus, about the mid-nineteenth century, the fashion of the long straight blade came into favour and its use was established by Robert Liston in 1846. The skill and rapidity with which this brilliant surgeon performed his operations is well illustrated in the story of the historic occasion when he amputated the thigh of a man at University College Hospital on December 21, 1846. The patient had been placed under ether for the first time in this country. He had been successfully anaes-

History of Surgical Instruments

thetized, and Liston, having selected one of his favourite long, straight knives, turned to the students and others who crowded the theatre saying, "Now gentlemen, time me." The operation was completed.

"Twenty-eight seconds," exclaimed Squire, who stood watch in hand.

"Twenty-seven," cried Bucknell.

"Twenty-six," said Russell Reynolds.

"Twenty-five," quietly remarked Edward Palmer, Liston's dresser, and the surgeon smiled in reply."

Some of the knives Liston employed had blades over a foot long which finished with a dagger point, the backs being sharpened for the last two inches. The cutting edges were almost straight till they curved upwards near the free ends to meet the backs. *Fig. 6 (16)*. He thus explains his reasons for favouring the long, slender blade in his *Practical Surgery*:¹² "The form and size of the instrument ought always to be in proportion to the extent of the proposed excision as regards both their length and depth. Nothing can possibly be imagined more abominably cruel, for instance, than the attempt (which has to my knowledge been repeatedly made and which I have in fact witnessed) to remove the lower extremity of a full-grown person with a common scalpel or dissecting knife. If an extensive incision is necessary, an instrument possessing sufficient length of edge must be employed so that the parts may be separated smoothly and quickly."

Liston insisted that the handle of a surgical knife should be perfectly smooth and polished, as in fact, he observes, ought to be the handles of all instruments in the use of which delicacy of touch is necessary. "Some practitioners," he continues, "have carried fashion so far, that many even of the catheters and sounds are to be found fitted with wooden handles, deeply grooved and chequered. The inventors of these seem to have been more afraid of losing hold of the instrument in a fit of agitation and panic than intent upon fitting it for its legitimate purpose and using it in a proper and workmanlike manner."

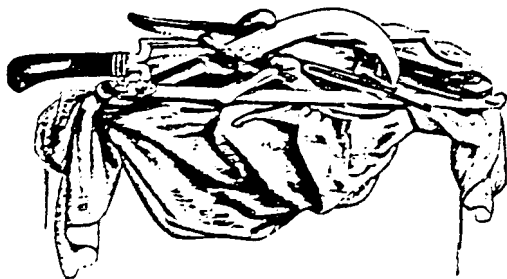
¹² C. J. S. THOMPSON, *Lister*, 1934, p. 15. John Bale and Danielson.

¹³ ROBERT LISTON, *Practical Surgery*, 4th edition, 1846.

The Amputation Knife

A pair of Liston's amputating knives that belonged to Syme of Edinburgh are now in the "Lister Collection" in the Museum of the Royal College of Surgeons. The blades are fourteen and a half inches long and an inch and a quarter deep.

The trophy of instruments reproduced below from Liston's work is said to represent the amputating knives which he held to be obsolete.



UNITED STATES PATENT OFFICE.

FREDERICK A. STOILMANN, OF BROOKLYN, NEW YORK.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 236,105, dated December 28, 1880.

Application filed April 2, 1880. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. STOILMANN, of the city of Brooklyn, county of Kings, and State of New York, have invented new and useful Improvements in Tool-Handles for Surgical Instruments, &c., of which the following is a specification.

This invention pertains to that class of devices in which many forms of tools, as cutting-blades, may be used with the same handle; and the invention consists in a peculiar combination of the blade with the handle by means of a supporting-rievet and reciprocating ellipse working in a slot in the shank of the blade in such a manner that by partially turning the ellipse the blade may be removed from the handle and another blade inserted and fastened therein, as will hereinafter appear.

In the drawings, Figure 1 is a plan of the instrument complete. Fig. 2 is an enlarged view of the connecting parts, but separated. Fig. 3 shows the parts connected and their relative position to each when locked together.

At A is represented the handle of the instrument, and B is the blade, in one form of which there are or may be many of various forms belonging to the same set and to be used with the same handle. The shank or part of the blade where it is attached to the handle is formed with a broad surface, as at C, to be inserted in a corresponding kerf in the end of the handle, as at D, and there is a longitudinal slot, as at E, formed in the shank near its center, to permit the passage of a flattened rivet or pin, as at F, which, as the shank is shoved into the end of the handle, serves as a point of support in and near the closed end of the slot, as represented at Fig. 3. Another supporting point or pivot is provided at G, to work in a hole or enlarged place in the slot, as at H, and said pivot is slightly flattened on its opposite sides to permit it to enter the slot in the shank, and is then turned when it is opposite the enlarged portion of the slot, as at H, and thereby fills said space and serves

as a locking device to hold the shank from being drawn endwise from the handle which supports the pivots or pins that lock the two parts together. Said locking-pivot is provided with a small lever, as at K, which is vibrated to and fro to turn the pivot into position to receive the slotted shank and to lock it to the handle when properly inserted. Said lever may be turned to touch upon a pin or stud, as at M, in the handle, where the parts are to be combined, and then it is moved in the opposite direction to keep the longer axis of the locking-pivot transversely to the slot in the shank, and thereby fix and hold the shank firmly in the handle.

It is evident that various kinds of tools may be so combined with a handle and in a very firm and durable manner, as the pins or rivets have broad bearing-surfaces to fit in the slot, and thereby give large bearing and wearing surfaces.

I therefore claim—

1. As a new manufacture, a handle provided with a kerf, a fixed supporting rivet or pin crossing the kerf, and an ellipsoidal pivot, also crossing the kerf, for locking a blade or tool to the handle, as described.

2. The combination of a blade or tool with a handle by means of a slotted shank, a kerf in the handle, a fixed rivet, and a flattened pivot, both passing through the slot in the shank, substantially as set forth.

3. The combination of the slotted shank, the kerf in the handle, or its equivalent, the flattened fixed rivet, and the flattened pivot passing through the slot in the shank, having a lever to revolve the same, substantially as described.

In testimony I have hereunto set my hand and seal in the presence of two subscribing witnesses.

FREDERICK A. STOILMANN. [L. s.]

Witnesses:

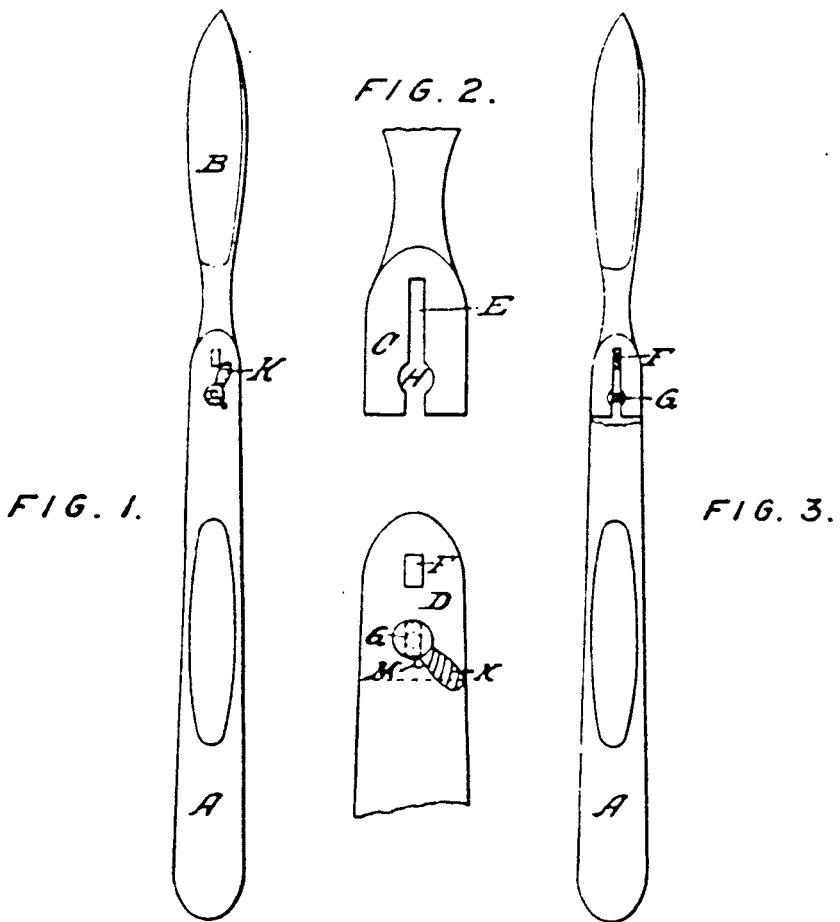
EUGENE N. ELIOT,
THOS. A. CONNERY.

(No Model.)

F. A. STOHLMANN.
Tool Handle.

No. 236,105.

Patented Dec. 28, 1880.

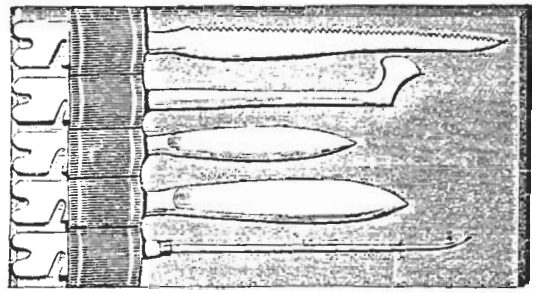
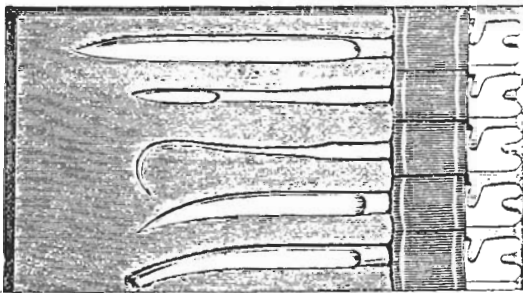
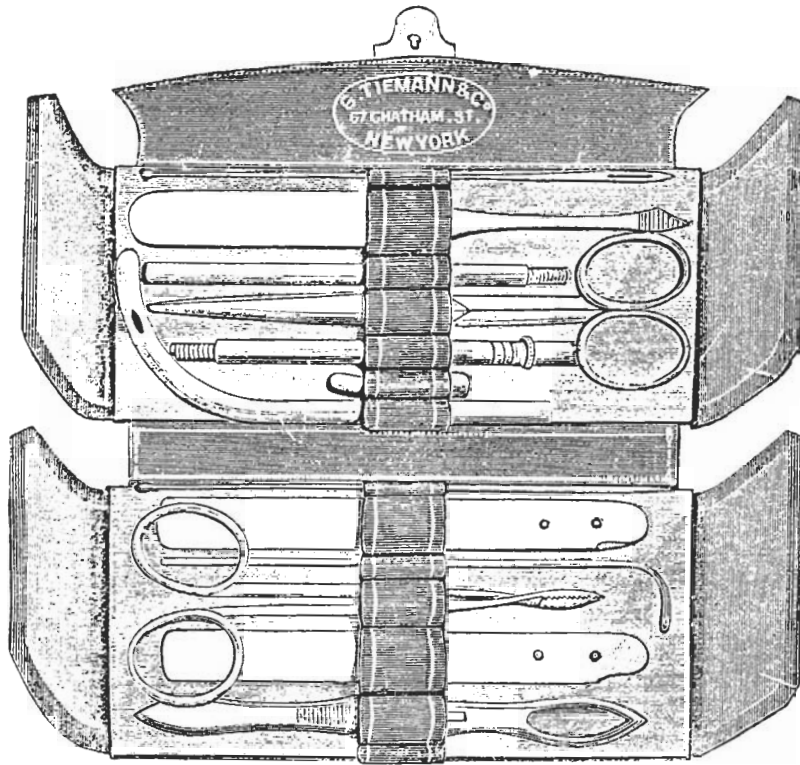


WITNESSES:
Eugene N. Eliot,
Thos. A. Connery.

INVENTOR:
Frederick A. Stohmann.
BY Boyd Eliot,
att.

POCKET CASES.

FIG. 1274.—Tiemann & Co.'s Patent Pocket Set. A.



Tiemann & Co.'s Patent Catch Pocket Set.

\$35.

This Pocket Set contains, in a very neat and compact Case of Turkey morocco, with silver lock:

- 2 Patent-catch Handles.
- 1 Post's Exploring Needle.
- 1 Tenaculum.
- 1 Gum Lancet.
- 1 Sharp-pointed Bistoury.
- 1 Probe-pointed Bistoury.
- 1 Tenotomy Knife.
- 1 Large Scalpel.

1 Small Scalpel.

- 1 Finger Knife.
- 1 Metacarpal Saw.
- 1 Lancet.
- 1 pair Straight Scissors.
- 1 pair Dressing Forceps.
- 1 pair Spring-catch Fenestrated Artery Forceps.
- 1 Spatula.
- 1 Grooved Director and Aneurism Needle.
- 2 Silver Probes.
- 1 Compound Catheter of sterling silver.
- 1 Caustic Case of sterling silver, made *seamless*.
- 6 Needles and Suture Silk.
- 2 coils Silver Suture Wire.

POCKET CASES.

FIG. 1275.—Woodworth's Pocket Set.



Woodworth's Pocket Set.

\$22.

(By Dr. WOODWORTH, Surgeon-General Marine Hospital Service, U. S.)

- Two-fold red morocco Case, with metal hinge and lock, very flat.
- 1 Male and Female Catheter, silver.
- 1 Vaccinating and 1 Exploring Lancet, concealed inside of the Catheter.
- 1 pair Scissors with 1 open ring.

- 1 Open Ring Dressing Forceps, answers for holding needles also.
- 1 Tenotome and Scalpel, white handle, spring back.
- 1 Sharp-pointed and 1 Probe-pointed Bistoury, white handle, spring back.
- 1 Abscess Lancet.
- 1 Silver Ear Spoon and Probe.
- 1 Steel Tenaculum and Delicate Ear Hook.
- 1 Director and Sims' Adjuster.
- 6 Needles, Silk and Wax.

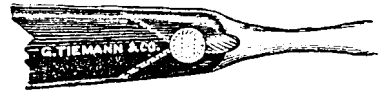
FIG. 1276.—Tiemann & Co.'s Patent-Catch Pocket Instruments. B.



Shank of blade.



End of handle, with turn-button in position to receive blade.



Handle and blade fastened.

Tiemann & Co.'s Patent Pocket Set. B.

\$25.

In morocco, velvet-lined Case.

- 2 Patent Handles (B), hard rubber, for following blades:
 - 1 Exploring Needle.
 - 1 Tenaculum.
 - 1 Gum Lancet.
 - 1 Curved Sharp-pointed Bistoury.
 - 1 Curved Probe-pointed Bistoury.
 - 1 Tenotomy Knife.
 - 1 Large Scalpel.
 - 1 Finger Knife.
 - 1 Metacarpal Saw.
- 1 pair Straight Scissors.
- 1 Weir's Vaccinating Lancet and Comb.
- 1 Spatula and Elevator.
- 1 pair Silver Probes.
- 1 Parker's Sterling Silver Male and Female Catheter and *seamless* Caustic Case.

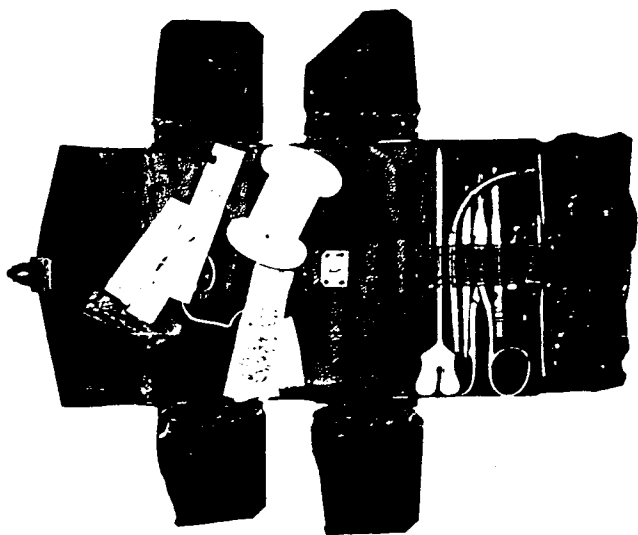
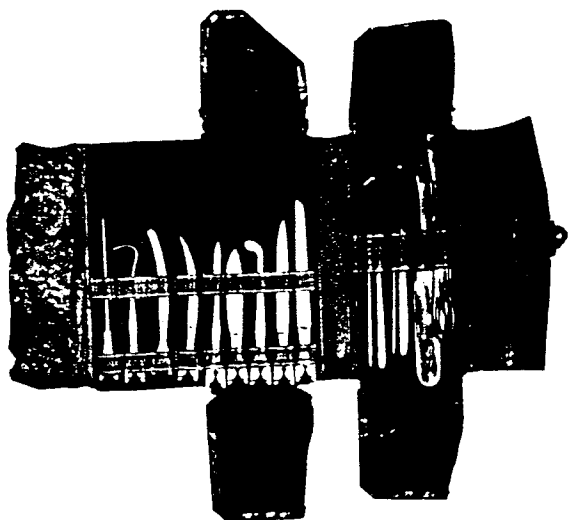
- 1 Dressing or Polypus Forceps, double crossing.
- 1 Spring-catch Fenestrated Bull-dog Artery Forceps and Needle Forceps, combined.
- 1 Director and Aneurism Needle. Needles and Silk.

Minor's Pocket Set.

\$22.50.

Two-fold morocco Case.

- 1 pair Spring-catch Forceps.
- 1 pair Hamilton's Artery Forceps.
- 1 Tenaculum and Aneurism Needle.
- 1 Sharp and 1 Blunt-pointed Tenotome.
- 1 Sharp-pointed Bistoury and Scalpel.
- 1 Silver Probe and Director.
- 1 pair Scissors.
- 6 Needles, Silk.
- 1 Silver Catheter and Caustic Case.





UPDATING HISTORICAL \$ AND L DATA TO CURRENT VALUES

Jack Rubin

The following table can be used to convert historical dollar or pound data to current dollar values. This is useful when one is attempting to put old catalog prices into perspective, reading historical literature, updating the worth of collections, etc.

The series was created by splicing published runs of the consumer price index or its calculated equivalent, correcting the result to a current baseline (1986 = 1.00) and then doing the appropriate arithmetic with the annual pound exchange rates. I guarantee the accuracy of the arithmetic; as to the validity of tracking medical instrument prices by means of the more prosaic CPI, I believe that it is better than nothing and I am willing to throw the matter open for further discussion and fine-tuning.

HISTORICAL DOLLAR AND L UPDATE FACTORS

<u>DATA YEAR</u>	<u>\$/L FACTORS</u>	<u>DATA YEAR</u>	<u>\$/L FACTORS</u>	<u>DATA YEAR</u>	<u>\$/L FACTORS</u>
1839	10.35/50.29	1790	9.14/ 41.76	1741	13.15/ 84.70
1838	10.35/50.29	1789	9.71/ 44.38	1740	16.10/117.20
1837	9.74/47.33	1788	9.37/ 42.83	1739	16.66/125.76
1836	10.03/48.76	1787	8.79/ 40.15	1738	15.85/118.22
1835	10.68/51.91	1786	8.69/ 39.69	1737	15.82/118.02
1834	11.04/53.64	1785	8.69/ (Post	1736	16.57/121.43
1833	11.42/52.18	1784	8.10/ Rev.	1735	15.87/114.30
1832	11.04/50.44	1783	7.66/ War	1734	15.85/116.16
1831	10.35/47.29	1782	6.54/ and	1733	16.30/119.48
1830	10.35/47.29	1781	00.18/ Rev.	1732	16.97/121.31
1829	10.35/47.29	1780	00.09/ War	1731	16.60/112.69
1828	10.03/45.85	1779	00.31/ in-	1730	14.75/ 99.54
1827	9.74/44.50	1778	1.53/ sta-	1729	15.63/104.10
1826	9.74/44.50	1777	2.77/ bil-	1728	15.58/103.74
1825	9.74/44.50	1776	8.45/ ity)	1727	14.82/ 98.69
1824	10.03/45.85	1775	12.04/ 88.75	1726	14.31/ 95.29
1823	9.20/42.03	1774	11.17/ 84.35	1725	14.96/ 99.66
1822	8.28/37.83	1773	10.91/ 80.37	1724	16.27/ 96.16
1821	8.28/37.83	1772	10.63/ 75.98	1723	17.16/115.82
1820	7.88/36.03	1771	11.64/ 85.81	1722	17.72/104.75
1819	7.20/32.89	1770	11.93/ 81.61	1721	18.40/108.76
1818	7.20/32.89	1769	12.47/ 87.54	1720	16.78/ 99.17
1817	6.90/31.52	1768	12.11/ 89.22		
1816	6.49/29.67	1767	11.51/ 84.83		Notes:"DATA YEAR"=
1815	6.02/27.51	1766	11.38/ 83.43		historical year.
1814	5.26/24.02	1765	12.06/ 92.12		
1813	5.71/26.09	1764	12.04/ 92.00		"\$ UPDATE FACTOR"=
1812	6.49/29.67	1763	10.97/ 84.26		consumer price in-
1811	6.62/30.26	1762	10.84/ 84.67		dex base (1986)
1810	7.04/32.19	1761	11.81/ 91.28		divided by histor-
1809	7.04/32.19	1760	11.64/ 82.66		ical year cpi, or
1808	6.90/31.52	1759	11.64/ 80.10		prior to 1800, cpi
1807	7.52/34.39	1758	12.78/ 90.26		calculated from
1806	7.04/32.19	1757	13.13/ 96.80		wholesale index.
1805	7.36/33.63	1756	13.48/103.01		
1804	7.36/33.63	1755	13.36/100.23		"L UPDATE FACTOR"=
1803	7.36/33.63	1754	13.08/ 97.56		\$ update factor
1802	7.70/35.19	1753	12.71/ 94.84		multiplied by L
1801	6.62/30.26	1752	12.54/ 92.91		exchange rate. Be-
1800	6.49/29.67	1751	12.57/ 95.43		fore 1776 Pennsyl-
1799	6.43/29.40	1750	12.56/ 95.30		vania currency is
1798	6.56/29.97	1749	12.50/ 95.53		basis for \$ and L
1797	6.37/29.09	1748	12.47/ 96.39		update factors.
1796	5.78/26.40	1747	13.64/112.02		
1795	6.24/28.53	1746	15.26/121.35		Convert L data of
1794	7.50/34.28	1745	15.79/123.34		the form L/s/d to
1793	8.35/38.17	1744	15.99/118.46		L + 0.05s + 0.004d
1792	9.01/41.18	1743	15.47/109.85		before use of the
1791	9.30/42.52	1742	13.46/ 95.59		update factor.

HISTORICAL DOLLAR AND POUND UPDATE FACTORS

<u>YEAR</u>	<u>\$/L</u> <u>FACTORS</u>	<u>DATA</u> <u>YEAR</u>	<u>\$/L</u> <u>FACTORS</u>	<u>DATA</u> <u>YEAR</u>	<u>\$/L</u> <u>FACTORS</u>
6/87*	0.96/ 1.53*				
1986	1.00/ 1.47	1937	7.70/38.04	1888	12.26/59.84
1985	1.01/ 1.38	1936	7.98/39.65	1887	12.26/59.60
1984	1.06/ 1.43	1935	8.06/39.47	1886	12.26/59.72
1983	1.11/ 1.69	1934	8.26/41.53	1885	12.26/59.60
1982	1.15/ 2.00	1933	8.53/36.18	1884	12.26/59.60
1981	1.22/ 2.46	1932	8.10/28.41	1883	11.82/57.35
1980	1.34/ 3.13	1931	7.26/32.96	1882	11.42/55.72
1979	1.52/ 3.23	1930	6.62/32.18	1881	11.42/55.27
1978	1.69/ 3.25	1929	6.45/31.37	1880	11.42/55.37
1977	1.82/ 3.19	1928	6.45/31.43	1879	11.82/57.47
1976	1.94/ 3.50	1927	6.37/30.95	1878	11.42/56.06
1975	2.05/ 4.56	1926	6.25/30.36	1877	10.35/52.87
1974	2.24/ 5.25	1925	6.31/30.46	1876	10.35/56.49
1973	2.49/ 6.09	1924	6.47/28.58	1875	10.03/56.39
1972	2.64/ 6.61	1923	6.48/29.61	1874	9.74/53.07
1971	2.73/ 6.66	1922	6.60/29.22	1873	9.20/50.77
1970	2.85/ 6.83	1921	6.18/23.78	1872	9.20/50.68
1969	3.02/ 7.21	1920	5.52/20.20	1871	9.20.50.49
1968	3.18/ 7.59	1919	6.39/28.32	1870	8.71/48.88
1967	3.31/ 9.11	1918	7.34/35.02	1869	8.28/53.80
1966	3.41/ 9.50	1917	8.62/41.04	1868	8.28/56.78
1965	3.50/ 9.81	1916	10.13/48.30	1867	7.88(Post-
1964	3.56/ 9.94	1915	10.89/51.84	1866	7.52 and
1963	3.61/10.11	1914	11.00/54.23	1865	7.20 Civil
1962	3.65/10.27	1913	11.15/54.29	1864	7.04 War
1961	3.70/10.35	1912	11.42/55.60	1863	8.95 insta-
1960	3.73/10.49	1911	11.82/57.59	1862	11.04 bil-
1959	3.79/10.66	1910	11.82/57.59	1861	12.26 ity)
1958	3.82/10.74	1909	12.26/59.84	1860	12.26/59.60
1957	3.93/10.96	1908	12.26/59.72	1859	12.26/59.60
1956	4.07/11.39	1907	11.82/57.59	1858	12.73/61.89
1955	4.13/11.52	1906	12.26/59.60	1857	11.82/57.45
1954	4.11/11.56	1905	12.26/59.72	1856	12.26/59.60
1953	4.13/11.62	1904	12.26/59.72	1855	11.82/57.47
1952	4.16/11.62	1903	12.26/59.72	1854	12.26/59.60
1951	4.26/11.92	1902	12.73/62.14	1853	13.24/64.37
1950	4.59/12.86	1901	13.24/64.63	1852	13.24/64.37
1949	4.64/17.11	1900	13.24/64.50	1851	13.24/64.37
1948	4.59/18.51	1899	13.24/64.50	1850	13.24/64.37
1947	4.95/19.95	1898	13.24/64.23	1849	13.24/64.37
1946	5.66/22.81	1897	13.24/64.50	1848	12.73/61.89
1945	6.14/24.76	1896	13.24/64.50	1847	11.82/57.47
1944	6.28/25.38	1895	13.24/64.76	1846	12.26/59.60
1943	6.39/25.82	1894	12.73/62.14	1845	11.82/57.47
1942	6.78/27.41	1893	12.26/59.72	1844	11.82/57.47
1941	7.51/30.26	1892	12.26/58.84	1843	11.82/57.47
1940	7.88/30.19	1891	12.26/59.72	1842	11.42/55.49
1939	7.96/35.24	1890	12.26/59.72	1841	10.68/51.91
1938	7.85/38.37	1889	12.26/59.84	1840	11.04/53.64

"EPIDEMICS AND THEIR SOCIAL IMPACT:
A SYMPOSIUM IN MEMORY OF WILLIAM COLEMAN"

Madison, Wisconsin
31 March - 1 April 1989

Program

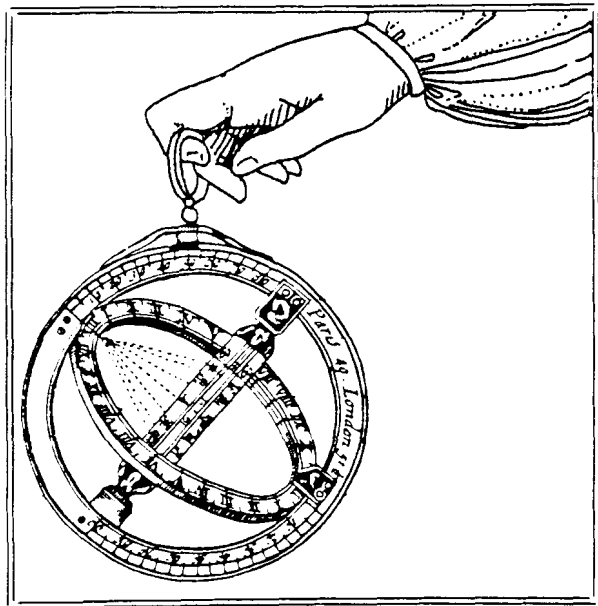
FRIDAY, 31 March:

1. "Plague and Medicine's Past: The Meaning of the Fourteenth-Century Black Death from the Middle Ages to Our Own Time" - Faye Getz
2. "Rashes in the Renaissance: The Threat of Typhus" - Ann Carmichael
3. "Disease and the European Settlement of the New World" - Alfred W. Crosby, Jr.
4. "Tracing Patterns of Disease in Africa's Past" - Marc Dawson

SATURDAY, 1 April:

5. "Mosquitoes, Ships, and History: Yellow Fever and Public Health Reform in the 19th Century" - Margaret Warner
6. "The Social Impact of Cholera" - Richard J. Evans
7. "The Wages of Sin? Struggles over the Social Meaning of Venereal Disease and AIDS" - Elizabeth Fee
8. General Commentary - William H. McNeill

The symposium will conclude with a banquet on Saturday evening. All interested persons are invited to attend this symposium. For details, write Mrs. Loretta Freiling, Institute for Research in the Humanities, Old Observatory, 1401 Observatory Drive, University of Wisconsin, Madison, WI 53706.



TESSERACT

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Early Scientific Instruments

David Coffeen, Ph.D.
Yola Coffeen, Ph.D.

September 1988

Our new fall catalogue will be a special issue entitled "Microscopy 1665-1956." The fully illustrated 40 page catalogue will offer for sale a wide variety of early microscopes, books, slide preparation tools, and prepared specimens, including an original Culpeper-type microscope by Culpeper himself, a copy of the first issue of Hooke's 1665 *Micrographia*, a Powell & Lealand No. 1 stand binocular outfit, a large Grunow brothers New Haven stand c.1855, and a library of trade catalogues owned by a Leitz microscope salesman.

We will be happy to send a complimentary copy of this catalogue to anyone interested in receiving it.