

I am pleased to present to you the first newsletter for 1994. I had such a large amount of material to present to all of you that I have chosen to prepare an unusually long newsletter. The newsletter in the fall will probably be considerably shorter in length.

First of all let me direct your attention to the meeting which was held at the Park Central Hotel in New York on April 28th. The meeting was very well attended and the presentations were absolutely superb. Everybody had a marvelous time and in addition there was a most worthwhile dealers exhibition following the meeting. The day was concluded with a delightful dinner at Cite' Restaurant where we all had a chance to speak and get to know each other better.

At this dinner Dr. Rugendorff and his wife graciously volunteered to host a meeting in Frankfurt sometime in 1996 or 1997. Therefore, preparations are now underway to present to the membership a meeting in Europe in the not too distant future with Dr. Rugendorff's help. I also had an opportunity to mention this to Elisabeth Bennion who

has told me that she would certainly be willing to help us in this endeavor.

Also in connection with the meeting Dr. Jay Worth Estes and Dr. J.W. Rosenthal have kindly consented to allow me to append the manuscripts of their presentations to this newsletter. Even though the illustrations which were extremely worth-while are lacking I

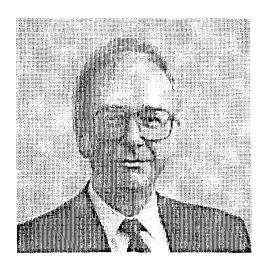
believe that written text still conveys a great deal of very interesting and useful information.

We received presentations from Dr. Albert Kuhfeld from The Bakken Museum and from Dr. Jon Erlen from Pittsburgh both inviting us to hold our 1995 meeting either at The Bakken or in Dr. Erlen's case in conjunction with the American Association of the History of Medicine. Several problems arose in having the joint meeting, the worst of which was a conflict between the museum curators who had a meeting the same time as ours and had to choose one or the other meeting to go to. Because of problems in scheduling and also because of difficulties with my schedule at the time of the AAHM meeting in 1995 and after further consultation with several regular participants in the meeting. I have decided to hold the next Medical Collectors meeting at The Bakken Museum. It will be held on Friday, June 9, 1995. Albert Kuhfeld is working at putting together a program but it will undoubtedly include tours of The Bakken, presentations in the morning, dealers tables and a social evening for dinner. Details of the meeting will be presented to the membership sometime in the fall. I include with this newsletter a copy of Al's letter of invitation. Although we were unable to establish a joint meeting with the AAHM for 1995 we are currently discussing the possibility of a joint meeting in Williamsburg, Virginia in 1997.

I would like to bring a number of inter-

esting items to the membership's attention.

First of all the South
Street Seaport is planning to
have an exhibition which will
include a number of medical
items. The exhibition is being
organized by Dr. Steve Jaffe.
I have enclosed with the
newsletter a notice from him
asking for donations and a
list of articles that he is
seeking. He needs items
both for the special immigrants exhibit and for the
permanent exhibition. The



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

exhibits are probably going to be opening sometime in the neighborhood of January of 1996 so there is no great urgency but please if you have any material that might be of use according to Dr. Jaffe's request please contact either him or me.

It also should be of interest to many of you that Ellis Island has mounted a medical exhibit dealing with immigrant health traditions. The exhibit opened on May 10th and will continue through September 18th. I have enclosed with the newsletter an announcement of this exhibit

Peter D'Onofrio has included a membership application for those of you who have dual interests. The Society of Civil War Surgeons is an extremely active group and some of you may wish to join this as well. The application and his letter can be found in the newsletter.

Getting back to more routine items, Ros Berman contacted me with an item that she bought as a tonsillotome and another item of unknown use that looked like a tongue depressor. I have included both of these items in the column. The item that was sold to her as tonsillotome is listed in my instrument catalogues as a pharyngeal tonsillotome. I am not sure what the pharyngeal modifier means in terms of its relative use. The unusual thing about the item that was sold to her as a tongue depressor is that it is made by Black Star & Frost which is a very fine jewelry firm. I wonder if this was indeed medical at all other than the fact that it belonged to a physician. Please let me have your comments or send them directly to Ros. Her address is listed in the membership section.

Dr. Terry Hembrecht has been kind enough to send me a copy of the patent for Perkins' tractors. This patent was granted February 19, 1776. A very famous, or infamous, depending on your point of view, American healing instrument. The story of Elisha Perkins is an extremely interesting one. Relevant to the patent, I have enclosed with the newsletter a partial abstract from the Perkinian Society which is an interesting group of individuals who obviously thought that Perkins tractors were a cure all for many things. In order to present the other side of things I have abstracted some pages from Haygarth's book on the Imagination where he discusses the total lack of value of Perkins tractors.

Some debate between Dr. Rugendorff and me has gone on concerning the use of an instrument which may be a hare lip forceps or may be a phimosis forceps but is probably both. I enclose this for your information.

I have heard recently from the Interdocumentation Company that they are expanding their instrument catalogue and I enclose this announcement for your interest.

I recently received a letter from a Mr. Arthur Stocks who is trying to sell some dental equipment listed in the newsletter. There is also the usual inclusion of William Helfand's most exciting historical images of the drug market.

A few other announcements are included from the Hartford Medical Museum, the Graduate program for the History of Health, Medicine and Society and some recent offerings from Stanley Burns and from Jeremy Norman.

This is quite a lot of material and I hope you all find it of interest. The membership is alive and healthy as can be seen by the current membership list.

As usual I look for any contributions you may have to the newsletter.

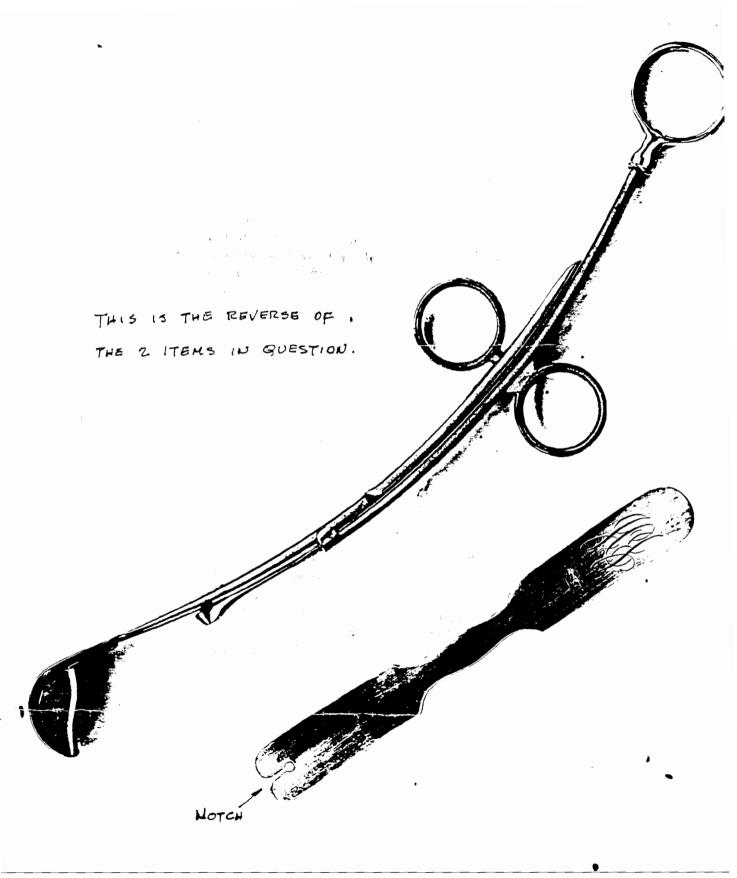
I hope that some material from the other presentations will be available for our next newsletter.

Please put aside the date June 9th for the next Medical Collectors meeting. Please contact me if you would like to present some material at this meeting. Minneapolis in June is delightful and Dr. Kuhfeld has informed that we will probably be able to arrange a luncheon in an outdoor garden and some other enjoyable amenities. Furthermore, since there will be a meeting of the Society of Nuclear Medicine the following week we should be able to get very good hotel rates for everybody since we will be able to tag on to that meeting.

Best wishes and looking forward to hearing from you. I remain.

Sincerely

M. Donald Blaufox, M.D., Ph.D.



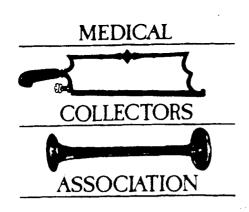
DEAR DON -

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

FOLLOWING YOUR INSTRUCTIONS: - HERE ARE MY XEROX COPIES OF MY TWO QUESTIONABLES.

Can You Identify This Material: Maker: F AB YOU CAN SEE THIS ITEM IS MARKED Presumed Use: STERLING AND HAS A DOCTOR'S NAME \$ INITIALS - IT'S NOT PLEXIBLE - ITS SLICHT CURVED & FIRM - I DON'T UNDERSTAND Date: THE NOTCH AT ONE END. IT WAS SOLD TO ME AS A TONGUE DEPTESSOR. "BLACK, STARR & FROST" STERLING WHAT'S YOUR OPINION? SIDE VIEW THIS IS THE INSTRUMENT. J.C. Jay, M.D. I SHOWED YOU AT THE MEETING IN N.Y. - HARKED 1886 E.A. MERKEL. I COULDN'T CET A COPY OF THE SIDE THAT OPENS - 30 THIS IS MY SKETCH I think this is a: From:

I. Min Luture Issues.



March 7, 1994

Erwin W. Rugendorff, M.D. Consultant Urologist 'Siesmayerstrasse 6 D-60323 Frankfurt am Main, Germany

8 3 17/44

Dear Dr. Rugendorff:

Thanks for your comments about the forceps. In reviewing your photocopies one of the most striking differences to me is that the Harelip instrument #1081 appears to have a saw blade as one of its components. While the Phimosis Clamp is flat at both ends. I think this is a very important difference in addition to the screw. I have a cased instrument which was sold to me as a Phimosis Forceps which has the blunt blades but does not have the lateral screw.

I think that it is very likely that a lot of manufacturers made instruments with minimal modification for different uses. It would have been far too expensive to have a totally differently designed instrument and present the great variety of instruments that many of the catalogues had.

I am enclosing with this letter photocopies of two pages from the Tiemann catalogue of 1889 with Phimosis Forceps and Harelip Forceps, both illustrations being identical.

Thanks again for your interest. I will publish your reservations in the next newsletter.

Sincerely,

M. Donald Blaufox, M.D., Ph.D.

MDB:cm Encl.

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

Erwin W. Rugendorff, M.D.

Consultant Urologist

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M. DONALD BLAUFOX, M.D., PH.D. 1300 MORRIS PARK AVENUE 324 MAZER BRONX, NEW YORK 10461

U.S.A..

February 22, 1994

Dear Dr. Blaufox,

There has been a question about an instrument in a previous number of our journal. I have sent you a photograph of a similar instrument from my collection considering that it could be a phimosis forceps.

Now, I have found a reproduction of the unascertained instrument in the catalogue of Down Bros., Ltd., 1901 (see enclosure # 1081). Considering this reproduction, the questionable instrument is probably a Hare-lip Forceps with parallel blades. As you can see on # 2451, it resembles the Phimosis Forceps, but does not have the lateral screw on the handle. Therefore, I have reconsidered my view about my own instrument too.

Sincerely yours,

N.S. fymbrell

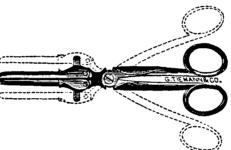
PHIMOSIS. Fig. 2836.—Girdner's Phimosis Forceps.

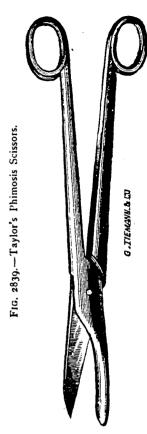
Fig. 2838.—Scissors, curved on the flat, for cutting the Prepare on any of the Forceps.



It is introduced into the preputial opening closed; then, relaxing the spring, causes the the barbs to transfix, first, the mucous membrane, and then the skin.

Fig. 2837.—Cohn's Phimosis Forceps.





Dr. R. W. Taylor's procedure consists in making two incisions, one on either side, exactly in the middle of the lateral portion of the prepuce with a pair of strong scissors (Fig. 2839). The result of this operation is that the prepuce is converted into two flaps—an upper and a lower—with the glans penis between them, and the upper flap can be elevated and the lower one depressed with the greatest ease, so as to expose the whole surface. Then, after the acute disease has subsided and the edges of the incisions have healed, these flaps may be snipped off without confining the patient to the house or taking him away from business. But, it will be objected, you thus have double the amount of raw surface exposed to contagion. Very true, but the advantage gained is more than a counterbalance, and, moreover, if the incision be properly cauterized and dressed, contagion will in most cases be avoided. The caustic preferred by Dr. Taylor is pure carbolic acid, rendered fluid by a small quantity of water. Four pieces of lint are to be cut—two to fit the glans, the one above and the other below—and two strips to place between the cut surfaces. These pieces of lint are soaked in the acid and put in their places; the flaps are then brought together and a bandage wound around the penis, allowing the meatus to be free. The whole should be kept wet with cold water, and the dressing repeated daily until the parts are healed.

FIG. 2840.—Taylor's Syringe, for Sub-preputial Injections.



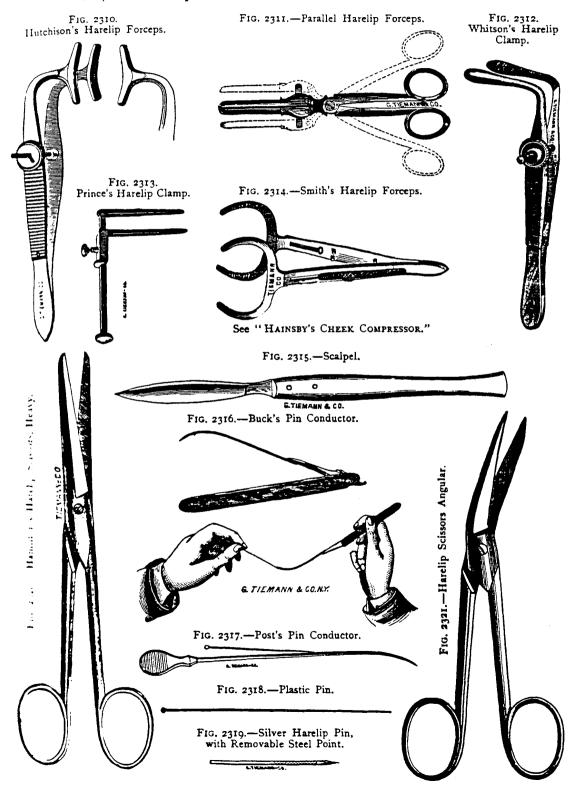
"If, from any cause, an operation be impracticable, the subject of congenital phimosis should be directed at each act of micturition to expose the meatus as fully as possible, in order to prevent the entrance of the

urine beneath the prepuce, and intra-preputial injections should be resorted to if sebacious matter accumulates or any signs of inflammation appear. The best syringe for this purpose is one with a broad flattened nozzle, to facilitate its introduction between the prepuce and glans, as proposed by Dr. Taylor."-"Venereal Diseases." Bumstead and Taylor. 1879.

According to the chronology of the Bible circumcision was instituted as a religious rite by Abraham, in the year of the world 2059—nineteen hundred and forty-nine years before Christ. Several of the Eastern nations still practice it as a hygienic measure.

HARELIP.

Clamps and Forceps for holding the Lips, Scalpels and Scissors for paring the Edges of the Cleft, and Pins to preserve them in contact in order to cause adhesion.



The Society was formed in 1980 by six medical re-enactors who felt that need to there WAR а open communications among those who did this specialty in our hobby. Today, The Society boasts of over 250 members throughout the United States, from California to Connecticut; from Florida to Washington; and all areas in between. The Society also has Australia, Canada. members in England, France, US Virgin Islands and West Germany, and is continually growing.

The Society was incorporated in the State of Ohio in 1990 as a nonprofit corporation and is recognized by the Internal Revenue Service as a tax-exempt group. Organized solely to educate the general public as to the study of medicine as it existed during the American Civil War, The Society covers all aspects medicine, especially surgery, treatment of disease, and treatment of the sick and wounded. This is accomplished through research by Society members, publications, and living history exhibitions and lectures during Civil War reenactments.

The specific goal of The Society is to promote, both for members as well as the general public, as deep and abiding appreciation for the rich heritage of the most turbulent period in America's history.

The Society has been represented as such events as New Market, VA; Perryville, KY; Jackson, MI; the 120th, 125th, and 130th Anniversary of Gettysburg; various other 125th &

130th Anniversary events; and others too numerous to mention.

The Society is also there to help its members further develop and/or enhance their portrayal of a Civil War era medical professional through meetings, the bi-monthly newsletter, The North South Medical Times, encampments, living histories, and the networking between members.

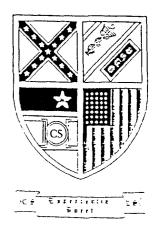
As a group, The Society tries to pick one event a year as a maximum effort event where as many members as possible try to attend. Because of the diversity of location of each member, these annual meetings can vary in size from as few as 6 members to as many as 45 or 50 members. Therefore, most of The Society's business is done either by telephone or by mail.

The Society additionally hosts an annual convention in the fall of each year. Lectures and presentation are by members and nationally recognized Civil War experts from throughout the United States. Convention cities are picked with some Civil War related aspects in mind.

However, The Society is open to anyone, not just re-enactors, interested in any aspect of Civil War era medicine. We have collectors, lecturers, historians, researchers, museum personnel, and re-enactors as active members.

If you wish to join **The Society** please complete the form on the reverse side and send to the address indicated.

SOCIETY OF CIVIL WAR SURGEONS, IN



For Those Interested

in

CIVIL WAR MEDICINE

Significance of Carvings on Chinese Tortoise-Shell Spectacles

Most Chinese tortoise-shell spectacles have ornately carved bridges. Many are similar, but I have located at least nine different motifs. The significance of some may as well be similar, but as the carvings are done by various artisans, there are differences.

The sign of money, of course, needs no explanation. The bat is a sign of happiness and longevity. It is believed that certain types, if eaten, will ensure good sight.

A butterfly carving on the bridge is a symbol of joy, of conjugal felicity--sort of a Chinese Cupid.

Where you find the most ornate carving, however, is the sign of freedom.

The ends of temple pieces are sometimes plain (round or oblong). But some of the round examples have significant carvings. They are carved (sometimes cast if in brass) in the sign of money—and some in the sign of the swastika. The latter is of great antiquity and is common to many countries: In India, it is the monogram of Vishnu and Siva. In Scandinavia and in Peruvian symbols, it is the battle—axe of Thor. It would appear to be a Buddhist importation in China and Japan.

letter, he as well addressed what he considered to be the "real" problems. He stated, "Myopia is much more common among Chinese than foreigners. I use frequently minus 10 to minus 15. In one man in town, a writer in the American consulate, a man now nearly 60, wears a minus 24."

By the latter half of the nineteenth century and the early part of the twentieth century, spectacles in China were progressively made of more usable brass and alloy metals. Many of the more common frames were made completely of brass. The lenses were made of glass, not quartz, which could be ground to more exact specifications for nearsighted, farsighted, and presbyopic persons. And quite possibly by this time, at least some of the "customs" had faded--as the lenses were smaller in size.

In the 16th century, lenses were worn at a 45-degree angle, and the temples were always straight with a joint for folding. (The Japanese, as well, with their flat Mongolian nose, had a problem supporting the spectacles on the bridge of the nose--which is a problem yet to be solved today.) A thread or string was used as a temple piece to hold the frame to the face. They were either tied behind the head or looped over the ears--as did the Spanish, with a weight fastened to the end of the string and left to hang behind the ears. They were usually carried in a case attached to the clothing or hanging over the arm.

I have a pair of folding spectacles in my collection, probably dating in the 16th century, with a raffia (reed) frame. Folding glasses were not only used with string temples, but also had horn pad to press against the forehead. They were kept in a small circular case of wood, leather, or shagreen. Some of the more ornate frames were made of carved tortoise-shell. The tortoise, a sacred animal to the Chinese, is believed to be endowed with the ability to bring good luck and long life. Therefore, they used it to make spectacles and other objects. (The decorative carving on the tortoise-shell frames had definite meaning, which will be discussed later.) Some frames carried clear lenses--where others

had dark or tea-stone lenses. Many lenses were not only plano, but fairly myopic. Both glass and tea-stone lenses, as well as frames, were of a like thickness--most being very thin--about 2 mm. We find these very light in weight, affording comfort and the ability to remain on the face. So much for the "newly invented" thin grind!!

Spectacles then--and in later times, being considered marks of literary attainment, were also used as 'props' to show respect. It was always considered proper to remove the spectacles in China when in the presence of superiors; and even in the presence of inferiors or friends. Rasmussen said, "It is a grave sign of disrespect to the presiding judge to wear spectacles in his presence. . . . When passing a friend on the street, it is also courteous to remove one's spectacles immediately before the greeting." This custom, coupled with the superstitions of the Chinese, sometimes held more weight than the obvious benefits of spectacles and medical treatment in later times. The dispenser of Chinese spectacles, also stated in his letter to AO in 1910: "The Chinese are also very subject to the most severe forms of eye disease and know nothing about the contagious nature of trachoma, etc." Although he discussed numerous customs, superstitions, etc. in his

We find intriguing and amusing methods, however, in their purchase and uses, as well as in the curious customs associated with them. For instance, a Chinese dispenser of spectacles stated in a letter to the American Optical Company in 1910: "Wearing spectacles in those ancient times was generally thought to establish the wearer as intelligent, affluent, and influential." Spectacles, therefore, became a status symbol to the Chinese. Furthermore, the larger the spectacles, the more intelligent the wearer was thought to be. This is why many of the early Chinese spectacles were so and predate our current large fashion eye wear by about 500 years. The dispenser commented, "The Chinese wearer of old spectacles cares nothing for comfort or fit...I sometimes think the increase in size shows a decrease in mental capacity."

Most lenses at that time were fairly large and circular, and were thought of by many to have healing powers. The Chinese eyeglass dispenser stated, "The lenses are many times made of crystal which comes from secret places and is supposed to cure various diseases of the eye. I am frequently asked if my glasses have good medicine in them. . . Some lenses are said to have power to enable to see at night and some to see into the earth to find hidden treasures, minerals, etc."

ANTIQUE CHINESE SPECTACLES

J. Wm. Rosenthal, M.D., D.Sc.

Let us consider the development of Chinese spectacles. From the Caucasian standpoint, spectacles were invented by an unknown Italian in Northern Italy about 1280 A.D. Probably, the invention of spectacles in China predated that by a decade or two, but we are unable to record this precisely because of distance and language difficulties. The latter, as well as the lack of historical libraries, precludes the credit to any particular Oriental inventor. The Japanese apparently obtained eyeglasses from the Chinese and were not involved in the origination process. In 1915 Rasmussen stated:

To attempt to trace the exact genealogy of anything in China is a well-nigh hopeless task. China is a vast beginningless and endless symposium and is at once modern and antique. Things of antiquity are in present use while things of comparative modernity are relegated to equal acceptability with ancient modes and methods. This Oriental country with its revolutions and without its evolutions is the one great cyclical 'Middle Kingdom" at the center of the earth's dominions, and to bear out her own metaphor, being at the cen-

ter of the revolving elements, moves the least.

The story of Chinese spectacles differs little from the usual Chinese stories and is equally illuminated with its fancies, superstitions, and tales. Eminent Orientalists do not usually take all that the old Chinese writers state very seriously, for with the evident absence of scientific knowledge the old historians could not very well be expected to approach matters of natural laws with more than a simple wondering attitude and a mind ready to believe in the mysterious, spirit-like origin of that which they could not understand.

Unfortunately, there are contradictions in the numerous references made to the history of Chinese spectacles. W. H. Holtmann states in W. Poulet's book, "A History of Spectacles,": "The Chinese used spectacles 2000 years ago (circa 22 B.C.)—but not to improve their vision. They used them with the thought that an imaginary force, the 'You Shiu'—which was supposed to be present in the glass—would help visually deficient patients. According to Greefe, these spectacles were produced of tea-stone (Ai Tai), which comes in a light and in a dark color. Spectacles were also used as a protection against bright light."

The development of Chinese spectacles cases paralleled that of the spectacles themselves. The folding spectacles, as previously noted, were kept in circular and were used with delicacy. Other cases larger glasses were made of wood and many times bore inscriptions such as those shown here, which recite allegorical themes. "The river looks like a picture with the morning clouds. After the rain the twin bridge like a reflection on the mirror. The mixed with human activities of the Chinese National Tree all disappeared among the stream." (Chuan-Cheng). wooden case is circa 1780. The second case with scription says: "You should treat the word with modesty and people with honesty." Signed "Spring & Stone hermit"--pseudonym. Another wooden eyeglass case carved of sandalwood reminds us of the hand-carved wooden found in Central Europe around 1500. It has a sliding top with integral tongue and groove fastening.

Another most interesting and beautifully carved wooden eyeglass case is of sandalwood. The carving is on a background of peonies, which signified riches. There are inlays of mother-of-pearl, coral, ivory, and turquoise, all showing figures which illustrate a famous

story of the "Three Kingdoms." This famous Chinese novel shows in this instance, "treading through the snow in pursuit of the plum flower." A magpie is flying over a plum twig.

We find an identical picture on a snuff bottle of the year 1760 in "A Glossary of Chinese Snuff Bottles Rebus," by Raymond Li. It shows the "Three Kingdoms" novel, which describes many tales about the heritage of Ju-Gurliang.

Conclusion

We see that the development of Chinese spectacles was apparently richer in tradition and heritage, as well as in use and fashion, than were the use of eyeglasses and cases in Caucasian countries.

OPIUM AND ITS ARTIFACTS

J. Worth Estes, M.D.®

I'm going to try to put some of the kinds of artifacts that are associated with opium into a sort of historical pharmacological focus this morning. Some of the artifacts I'll show you are in my own collection; others are in museums and private collections around the world. I don't have slides of all possible artifact types, but I think I'll be able to provide a background for many that you may well already have in your own collections.

SLIDE 1: Materia medica box

This is one among many drawers in a box of samples of raw drug materials with which students of medicine or pharmacy were expected to become familiar in the 19th century. Most of the botanical drugs in it had been known to physicians since ancient times, and a large number of mineral drugs was added to the standard pharmacopoeia beginning in the mid-16th century.

SLIDE 2: Opium block in box

This sample from the box is a brick of opium. Such pressed blocks of the exudate collected from the unripe seed pods of the opium poppy [Papaver somniferum] contained about 10% morphine by weight, and about 6% codeine. Morphine and codeine are, of course, the two major naturally-occurring opioids; all the rest are either chemical modifications of those two molecules or are synthesized in the laboratory.

SLIDE 3: Opium field in Turkey

The best yields of morphine and codeine come from poppies grown in Turkey, where this picture was taken. When we were there, we saw armed guards patrolling fields like this one, especially after the seed pods had filled up with raw opium gum.

SLIDE 4: Opium poppy, Turkey, close-up

This is one of the Turkish poppies you just saw. The word opium comes from a Greek word that means "poppy-juice," while codeine is derived from the Greek word for "poppy-head."

SLIDE 5: Harvesting technique

The tools and techniques for harvesting opium vary in different parts of the world. Turkish harvesters use this large curved knife to make circumferential cuts in the immature seed capsules, so that the exudate can escape to the outside. The same knife is then used to scrape opium gum from the capsule until it runs dry.

SLIDE 6: Poppy @ Durham

Although the opium poppy can grow in this country -- I photographed this one in North Carolina -- for some reason it does not yield nearly as much in the way of narcotic alkaloids here as it does in Turkey and southeast Asia. Besides, it's been illegal to grow opium poppies in the United States since 1942.

SLIDE 7: Bottle, Louvre

Some scholars think that this glass bottle, which was made in Egypt sometime around 1000 BC or a bit later, was intended as a container for opium simply because it resembles an upside-down poppy

head. If Egyptian physicians did prescribe opium for their patients -- and there is no evidence that they did -- it would have to have been imported, perhaps from what is now Turkey. Other small jugs from the ancient world have been said to have contained opium because they resemble poppy heads, but, again, the evidence is not convincing. The opium that was later produced at the Egyptian capital city of Thebes was recognized in the West as of the highest quality. By the 18th century, the word Thebaic was medical short-hand for opium-based medications.

SLIDE 8: Ara Pacis Augustae

Opium poppies were occasionally associated with the religious beliefs of several Mediterranean civilizations. For instance, the emperor Augustus dedicated this altar in Rome in 9 B.C. This part of it shows the goddess Ceres, who had some minor healing functions and was associated with Asklepios at some of his major temples. She wears a crown made of wheat and poppy heads. Similar crowns are found on a few figurines of Cretan goddesses made as early as 1500 B.C. Although the details are hard to see here, wheat and poppy heads are also visible above the child sitting on the goddess's lap.

SLIDE 9: Same, detail over right child

This close-up view shows them more clearly. The poppy capsule had been associated with Ceres for centuries by then. Its many seeds represented her role as the goddess of fertility, partly because poppy seeds were often used as a condiment on bread, the most important item in the Roman diet. Moreover, in one legend about her seach for her daughter Persephone, who had been abducted by the god of the Underworld, Ceres visited a town called Meconium, which means "City of Poppies." While she was there, a taste of opium poppies made her forget her sorrowful search for a while.

SLIDE 10: Cameo of Lavilla/Ceres

In addition, opium's asociation with sleep and death was a reminder of her daughter's forced visit to the Underworld each winter. This agate cameo, made a few years after the Altar of Peace, also shows the wheat-and-poppy-head crown. In this case, a royal princess is being identified with Ceres, a little propaganda connecting Augustus and his family with the peace and fertility that his rule would produce.

SLIDE 11: Poppy in Dioscorides

The Greco-Roman physician Dioscorides included several species of poppy in the highly influential *Materia Medica* he wrote in the middle of the first century A.D. – this picture of an opium poppy is in a Byzantine manuscript version made in the year 512 for the daughter of a former Roman emperor who was then living at Constantinople. Dioscorides claimed that he based his drug descriptions on his own clinical observations as well as on the written descriptions of earlier authorities. He said opium was an effective analgesic and anti-inflammatory agent when it was applied topically — which, in retrospect, seems highly unlikely. However, his observations that, when taken by mouth, it alleviates not only pain but also diarrhea, cough, and insomnia as well parallel our own uses of opium derivatives today.

SLIDE 12: Lemery's opium poppy

By the 17th century, and into the 18th, when this picture was published, opium was classified as a "sedative narcotic." All drugs that were labelled as narcotics were thought to affect the brain. Some, like Belladonna, were called "stimulant narcotics" because they were assumed to stimulate the mind and increase body evacuations such as sweat and feces, as well as to increase muscle activity and the pulse rate. Others, like opium, were called "sedative narcotics" because they inhibit nervous activity, promote sleep, and relieve pain, all without causing sweating or diarrhea.

SLIDE 13: Mysteries of Opium Reveal'd title page

My own interest in the history of opium medications was initially aroused by this book, first published in 1700 by Dr. John Jones, and reissued a year later. Jones had earned a doctorate in civil law at Oxford in 1677, and was licensed to practice medicine in London a year later, although we don't know just how he obtained his medical training. He seems to have practiced medicine while working as a Church of England lawyer.

SLIDE 14: Table from Jones's book

In *The Mysteries of Opium Reveal'd*, Dr. Jones recommended, in this table, what he considered to be the "Best and Safest Opiates." It lists the doses he recommended for 15 different opium preparations appropriate to people of four graded body builds. His therapeutic recommendations were not based on any concept of selectivity of the drug's action, although he did emphasize opium's anti-anxiety effects. The other clinical effects he observed include: increased sweating; pain relief; cessation of diarrhea; lowering of the pulse; dry mouth; flushed skin; increased sexual activity; and dilation of the pupils --somehow, opium's clearcut miotic effect was not recognized for another 100 years or so, not until 1818.

SLIDE 15: Dose-effect Curves

The doses Jones gives in his table can be regarded as equipotent doses, regardless of which therapeutic effect was to be achieved. For each opium preparation he recommended three doses as a suitable range of doses for each body build. For instance, he suggests doses of 10 to 15 to 20 drops of Liquid Laudanum for weak women, and 20 to 30 to 40 drops for strong men. Because the middle doses are always midway between the two extreme doses in all dose ranges, the middle doses can be taken as median equieffective doses for each body build.

The handouts show the 15 preparations that Jones described, arranged in 8 numbered equipotent groupings. The first 6 groups are solid dose forms, while numbers 7 and 8 are liquids. Groups 1, 2, 3, and 7 were relatively recent inventions, introduced in the 17th century. By contrast, the others — groups 4, 5, 6, and 8 — date from the ancient Roman world, from the first century B.C. to the second century A.D. The one exception — Diascordium in group 6 — was designed to be a modern improvement on the ancient opiate called Mithridate.

For each of the 15 preparations I plotted the median effective doses against body weights appropriate to persons of the body builds Jones specified. The resulting curves for the most potent solid opiates are summarized in Curve No. 1 on the left, lying nearest the abscissa, the X-axis. The curve for the least potent solid dose forms in group number 6, Mithridate and Diascordium, isn't shown here because it wouldn't fit on this graph. Similarly, the curves for the equieffective liquid formulations are on the right.

Part of the apparent efficacy of Jones's orally administered opiates — that was, of course, the only route of administration open to him — may be attributable to his greater interest in their effect on anxiety rather than pain, effects which seem to be separable. These dose-effect curves computed from Jones's data reassure us that opiates used in the 17th and 18th centuries did have some measurable pharmacological effects, however those effects were evaluated clinically.

SLIDE 16: Table: Doses & Potencies of SOLID opiates

To what practical uses can we put data like those derived from Jones's median effective doses of 15 opiates used in the 17th and 18th centuries? For \ example, they can help us decipher the therapeutic vocabulary of historical opiates. For instance, in his great *Dictionary* of 1755, Samuel Johnson reported that, "A moderate dose of opium, taken internally, is generally under a grain." My calculations suggest that Johnson had in mind the most potent solid preparations.

For another example: during the American Revolution, the standard medicine chest for a Continental Army battalion contained 20 ounces of raw opium. Since army pharmacopoeias specified one grain as the usual dose of the drug, this table permits us to calculate that the battalion chest contained enough opium for almost 9,000 doses. Even assuming that multiple doses were usually necessary, such a

THE MAJOR HISTORICAL OPIATES

Abstracted from: J. Worth Estes, "John Jones's Mysteries of Opium Reveal'd (1701): Key to Historical Opiates," Journal of the History of Medicine and Allied Sciences 34: 200-209, 1978.

Preparation 1. Solid Panacea (by 1677) Wedel's Laudanum (1682) LeMort's Extract (c. 1690)	No. of Inactive Ingredients* 0 0 0	Percent Opium Content 100 % 95 % 100 %	Range of Doses 0.5-2.0 gr. 0.5-2.0 gr. 0.5-2.0 gr.	Relative Potency 250 250 250	Dose Range as mg. of Morphine** 5.0-10.0 4.8-9.6 5.0-10.0
2. Dr. Bate's Pacifick Pill (1691)	3	85 %	0.5-3.0 gr.	204	4.2-14.0
London Laudanum (by 1677)	6	80 %	0.5-3.0 gr.	204	4.0-13.2
3. Starkey's or Matthew's Pill (before 1665)	4	13-18 %	3.0-12.0 gr.	44	4.8-10.6
4. Philonium Romanum	13***	2.5 %	16-60 gr.	10	3.4-6.6
Philonium Persicum (both 1st century AD)	14***	5.7 %	16-60 gr.	10	7.6-15.0
5. Theriac (1 st century AD) (=Venice Treacle)	55****	1.3 %	30-180 gr.	4	3.4-10.2
6. Mithridate (2 nd century BC)	50	0.3 %	120-480 gr.	1	3.6-7.2
Diascordium (c. 1540)	15	0.3 %	120-480 gr.	1	1.6-3.0
7. Liquid Panacea (before 1677)	1	> 15 % w/v	10-40 drops	20 drops = 1 gr. of Solid Panacea	_
Sydenham's Laudanum (1670)	2	>11 % w/v	10-40 drops	Same	_
Laudanum Liquidum Cydoniatum (before 1677)	5-6	> 9% w/v	10-40 drops	Same	
8. Diacodium (1st century AD) (= Syrup e Meconio)	1	> 6 % w/v	0.4-1.5 oz.	0.7 oz. = 1 gr. of Solid Panacea	_

^{*} Excluding vehicles (e.g, water, alcohol, honey).

Calculated on the basis of 65 mg morphine/grain, and morphine concentration as 10% of raw opium, completely extracted.

Including henbane seeds, which Jones recommends be omitted.

^{****} Including 2.6% squills.

chest permitted treating a great many wounded men, and many cases of diarrhea – indeed, the chest allowed 15 doses for each of the 600 men normally comprising a battalion.

SLIDE 17: Table: Doses & Potencies of LIQUID opiates

As another example of potential uses of these data, those for the liquid preparations confirm Thomas de Quincey's estimate of their relative potencies. In his Confess-ons of an English Opium-Eater, de Quincey wrote that 25 drops of Laudanum were equivalent to one grain of solid opium. This means that his Laudanum was only about 80% as potent as the Liquid Laudanum described by John Jones a century before. In 1813, de Quincey was taking 320 grains of opium daily, as 8,000 drops of Laudanum measured by the wine glass full. He preferred Laudanum to opium pills, because the onset of action was more rapid for the liquid dose form, as we'd expect today. Although the exact formulas of the 15 preparations listed in the handout changed somewhat after Jones wrote his book, their relative potencies did not change very much.

The extraction and purification of morphine from opium were first reported in 1817, athough they had been accomplished in 1806. However, in 1822, Dr. Jacob Bigelow of Boston, one of the authors of the first *United States Pharmacopoeia*, wrote only that: "At present we may venture to predict that morphine probably will not supersede crude opium in medical practice."

There was, of course, no good way to administer purified morphine until the modern hypodermic syringe was invented, in the 1850s. In the meantime, Bigelow and his contemporaries continued to prescribe the most potent oral opiates then available. At the same time, they allowed the older, less potent, dose forms, those with the most exotic names and compositions, to continue their slide into what we can now recognize as pharmacologically deserved oblivion.

SLIDE 18: Laudanum bottle

Laudanum was the most potent liquid preparation of opium available for long after Jones published his book. The invention of the word "laudanum" has been ascribed to Paracelsus, who died in 1541. Although it's not clear just how he derived the word, he seems to have intended it, in the first place, for a preparation made with pearls and gold. Whatever the case, the English were applying the term "laudanum" to tincture of opium as early as the year 1600. That this bottle of Laudanum was made less than 100 years ago is good evidence of the drug's great therapeutic success over three to four centuries.

The LeMort's Extract in Group 1 in the handout was invented about 1690. By 1746 it was called Paregoric, derived from a Greek word for "soothing." It was made with camphor and other ingredients as well as opium. From about 1650 to 1850, Paregoric, Laudanum, and other opium preparations were used for three primary purposes: as antidiarrheals, as sedatives, and as analgesics, more or less in that order of descending frequency. Opiates were also prescribed for cough, which is reasonable, and to relax the common bile duct, which we now know is not reasonable, since morphine actually constricts its smooth muscle. Sometimes opiates were given along with purgative drugs such as calomel, to counteract their strong cathartic effects.

A new application of opium appeared in 1732, when Dr. Thomas Dover added opium, ipecac, and a couple of potassium salts to wine. The undissolved mixture, called Dover's Powder, was used for many years as a potent diaphoretic, to help sweat out the edema fluid that commonly accumulated in dropsy and other chest ailments, as well as for other purposes, especially serious fevers.

SLIDE 19: Theriaca Adromachus jar

If Laudanum was — is — the most potent of the orally administered opiates, Theriac was one of the least potent preparations described by John Jones, or by anyone else, for that matter. Theriac had been invented in the first century A.D. as an improvement over the older Mithridate as an antidote against poisoning with any poison — the word "theriac" was Greek for a venomous animal or serpent. This jar for theriac was probably made during Jones's lifetime.

SLIDE 19A: Theriac jar

This is an 18th-century French jar for Theriac. Most recipes for its manufacture specified well over 50 ingredients; one used in Edinburgh in 1794 had 61. Most physicians recognized that its only active ingredient was opium. Nevertheless, no one urged that the inactive components be eliminated.

SLIDE 20: Theriac in Tacuinum

Theriac is the subject of this picture in a *Handbook of Health* made for an Italian bishop in the 1390s. In the accompanying text, the drug is described in ancient humoral terms as warm and dry, and therefore as "primarily good for cold temperaments, for old people, in Winter, in cold areas and, if necessary, anywhere else." It was also said to be "good against poisons and both cold and warm illnesses." Thus, it was a medieval panacea.

SLIDE 21: Theriac ritual

This shows the annual ritual surrounding the preparation of the multiple-ingredient Theriac at Venice in the 1790s, under the watchful eyes of the city-state's officials. Indeed, another name for Theriac was Venice Treacle; the word "treacle" is a corruption of "theriac." The very idea of this elaborate procedure suggests not only the more-or-less magical origins of the remedy, but also the necessity of preserving its efficacy by having civic officials insure that the complex formula was scrupulously prepared. However, as many contemporary physicians knew full well, the huge number of ingredients in Theriac did not really make a panacea of it -- by the 1790s it was regarded only as a weak opiate.

SLIDE 21-A: Mithridate Jar

By far the least potent of all historical opiates was Mithridate. Although, like Theriac, it was made with 50 or more ingredients, it contained only about one-fourth as much opium. However, as testified by this jar, made in the 18th century, Mithridate was available until the very late 18th century; it was clearly another popular, and therefore long-lived, opiate.

SLIDE 22: McMunn's Elixir bottle

By the 1860s, Dr. McMunn's Elixir of Opium was being advertised in this country as possessing all the sedative, analgesic, and antispasmodic properties of opium, but without its side effects, especially constipation — which seems, in retrospect, highly unlikely. Moreover, the proprietor of this remedy claimed it was non-addicting, non-poisonous, and superior not only to Laudanum and Paregoric, but also to Morphine itself. The reason for this remedy's unusual virtues was said to be the simple fact that it was the "Pure and Essential Extract from the Native Drug." That is, it was claimed to contain highly purified elements of the raw drug, not just Morphine alone.

This Elixir was a popular panacea in 19th-century America. It was promoted for conditions as diverse as diabetes, consumption, syphilis, rheumatism, the DTs, mania, fever, and hemorrhage. It was somewhat more realistically recommended for diarrhea, renal and intestinal colic, cholera, and for cough.

SLIDE 23: Mrs. Winslow's card

Many people then thought that if one dose of a drug — any drug — was good for you, then two or three doses were two or three times better. As far as opium was concerned, cost was not a major factor in this regard. For instance, in England, a quarter-ounce of Laudanum, containing about 10 grains of opium, could be bought for only a penny, which could also buy a pint of beer. As a result, by 1837 opium had become a leading cause of death by poisoning in Great Britain. It was no more expensive in this country, where it was advertised for 6 cents an ounce in the 1897 Sears, Roebuck catalogue.

One of the most notoriously lethal opiates was Mrs. Winslow's Soothing Syrup, widely promoted for alleviating the pain of teething in children. Moreover, if it was good for that purpose, it was also good for making children sleep under normal conditions. Some mothers gave it to their children to keep them

asleep all day, while the mothers were at work, or to keep them quiet all night. Thus, it is probably no surprise that about a third of all opium overdose victims in England were children.

SLIDE 24: Mrs. Winslow's card, another

Mrs. Winslow's Syrup appears to have been promoted only for use in children, not adults. I haven't been able to find data about the incidence of opiate deaths in the U.S., but it may not have been as great as in England. Such deaths were probably more frequent than official data indicate; it is thought that some poor working parents purposely killed their children with opiates, to reduce their impact on the family's already marginal finances.

SLIDE 25: Perry Davis card

By contrast, this home remedy was promoted for people of all ages, since it was advertised not only for pain, but also as a tonic and as a blood purifier. Perry Davis's Pain Killer was probably the single most popular proprietary opiate sold in the United States in the 19th century. Introduced in 1840, it contained effective analgesic amounts of opium, potentiated by by being dissolved in 77% alcohol. Notice here that it's good for both the baby and for the father's ailing foot, and especially that it is so effective that the family can send its doctor away.

SLIDE 26: Schenck's Pulmonic Syrup

Opium was probably the active ingredient in many so-called pulmonic, or pectoral remedies. Pectoral was simply an adjective referring to the chest. Most opium alkaloids would certainly control the coughing associated with many lung diseases, especially tuberculosis, the leading killer of the 19th century. Many of these remedies were based on wild cherry syrup, and virtually none listed other ingredients, but opium is known to have been used in some of them, perhaps including this one.

SLIDE 27: Kilmer's Cough Cure bottle

Kilmer's Cough Cure was prosecuted by the Food and Drug Administration soon after the 1906 Food and Drug Act went into effect, on the grounds that its label failed to list its contents, as the new law required — it was almost irrelevant that its chief active ingredient was opium. Some of the most effective cough remedies were made with Heroin soon after its discovery in 1898 at the Bayer Company in Germany — that newly synthesized drug was thought to be non-addicting for several years — its true high addiction liability was finally uncovered in 1910. But the first federal contols on narcotics — the Harrison Act — was not not passed until 1914.

SLIDE 28: NY Quinine & Chemical Works

The New York Quinine and Chemical Works used eye-catching portrayals of opium poppies at the top and bottom of this 1901 advertisement to highlight its purified extracts. The North American Indian is, of course, irrelevant to the Quinine, Strychnine, Cocaine, or Morphine shown in the ad. But Morphine is clearly the featured product here.

SLIDE 29: Jars with poppy heads, etc.

The middle jar here contains opium poppy heads, as its label indicates. Since opium was always collected as the latex gum before being extracted, these dried heads were probably used only for the seeds they contain.

SLIDE 30: Morphine Parvules

A more modern dose form introduced early in the 20th century was the Morphine "Parvule," a sugar-coated pill. This was an important innovation, however; such dose forms were devised simply to disguise the bitter taste that characterized many botanical alkaloids.

SLIDE 31: Morphine syringe

When the hypodermic needle and syringe were introduced in the mid-19th century, doctors finally had a way of exploiting the Morphine extracted from raw opium. Because it permitted taking full therapeutic advantage of the purified extracts of plants like the opium poppy, physicians could be more certain of the doses they administered, and, therefore, of achieving the effect they intended. This is part of a kit used about 1911. The Morphine Sulfate solution was in a little glass vial. The end of the vial nearest the needle is covered with rubber, which was penetrated by the interior end of the double-pointed needle. The other end of the vial is plugged with a small cork, which was pushed by the plunger until the desired amount of morphine in the vial had been delivered subcutaneously.

SLIDE 32: "Morphinomaniac"

The good news was that hypodermic syringes were available to physicians treating men injured in the Civil War. The corresponding bad news was that many of those men became adddicted to Morphine. Addiction became so wide-spread among war veterans and then others that it was labelled "the American disease." But debilitating dependence was by no means confined to soldiers, or even to the U.S. In 1897, Eugène-Samuel Grasset, who lived in Paris, made this lithograph, which he called "Morphinomaniac," to illustrate the horror of drug addiction long before our own politicians told us merely to "Say No to Drugs!" It's hard to be sure, but the woman in the lithograph appears to be using a syringe much like the one I just showed you, to give herself a subcutaneous dose of morphine.

SLIDE 33: Opium den postcard

It must have been the popular notion of a Chinese opium smoking-shop as an exotically sinful place that induced someone to produce this postcard around the turn of the century, presumably for the tourist trade. However, the shop shown here is far more elegant and richly appointed than those described by most contemporary observers. They usually differentiated between the small shops frequented by the poor, where several men lay in a single crowded room, and the more spacious beautifully furnished special rooms set aside for smoking opium in the homes of the rich.

SLIDE 34: Man smoking, China

Another postcard shows an apparently affluent Chinese man in a well appointed shop. But opium smoking was not indigenous to China. Although it began there in about 1700, Arab traders had first introduced China to opium, as an antidiarrheal drug around 800 A.D. The imperial government tried to prohibit opium imports in 1729, but by the year 1800 British entrepreneurs were making huge profits by smuggling opium from India to China. The encouragement of addiction among the Chinese eventually became a matter of British foreign policy after 1842, following the first Opium War with China.

SLIDE 35: Opium kit

The treaty ending that conflict forced China to become the major market for opium grown in British India. It's been estimated that most Chinese opium smokers were only mildly addicted, that they preferred to experience only low levels of intoxication so that they could avoid the horrors of the withdrawal syndrome. Only after the 1949 Communist Revolution did any Chinese government take strong—and effective—steps to eradicate opium use in their country. This opium smoking kit is typical of those used primarily in the northern provinces of China about 100 years ago. It differs somewhat from the perhaps more familiar kind used in the southern part of the country, which favored thicker-stemmed pipes

with bowls in the middle of their stems. In addition to the instruments you see here, the smoker needed a lamp and a stand on which to rest his pipe.

SLIDE 36: Opium kit, splayed

The knife, marked number 1, was used to cut a chunk of opium from a block like the one I showed you earlier. Or, the spoon, marked number 6, could be used to scoop opium gum from a bottle, so that it could be rolled into little balls. The small cup marked number 2 was used to hold unsmoked opium balls that the smoker had made for himself, or those he bought redy-made in the smoking shop for use on its premises. He then put the ball on the two-pronged fork at number 5, and held it over a flaming lamp.

Depending on how skillfully the smoker had made his opium balls, when held over the fire they would expand to two to six times their original volume; the more the ball expanded, the more pleasure could be inhaled. Finally, the smoker put the swollen hot ball on the bowl of his pipe — number 7 — and took the deepest draught he could. After a couple of pulls, the ball collapsed into the pipe bowl, so the smoker had to use the needle-like tool, number 4, to loosen the residue and pull it up again for another drag. After the opium ball had been entirely used up, the resulting gummy ash was scraped out of the pipe and deposited on the flat dish marked number 3.

I think it's fair to conclude that the range of artifacts associated with opium over the past 3,500 years tells us as much about self-administered home remedies and illicit pleasures as it does about the practice of medicine conducted by regular physicians. The artifacts also tell us something about societies that use opium, including some of their religious beliefs. Finally, they highlight pharmaceutical manufacturing techniques as well as advances in pharmacological knowledge. The story I've presented to you has some gaps in it, but I think the basic outlines would be the same even if we had a whole museum full of artifacts related to opium in front of us this morming.

Thank you.

OF THE

IMAGINATION,

AS A CAUSE AND AS A CURE OF DISORDERS OF THE BODY;

EXEMPLIFIED BY

FICTITIOUS TRACTORS,

AND

EPIDEMICAL CONVULSIONS.

" DECIPIMUR SPECIE." HOR.

Read to the Literary and Philosophical Society of Batin

ΒY

JOHN HAYGARTH, M.D.

F.R. S. LOND. AND EDINB.

OF THE ROTAL MEDICAL SOCIETY AT EDINBURGH, AND OF THE AMERICAN
ACADEMY OF ARTS AND SCIENCES.)

BATH, PRINTED BY R. CRUTTWELL;
AND SOLD BY
CADELL AND DAVIES, STRAND, LONDON.

1800.

Price One Shilling.

TRACTORS.

THAT faculty of the mind which is denominated the Imagination, has been the subject of two very elegant compositions in the English language, in prose and poetry, by Addison and Akenside. It has not wholly escaped the notice of medical writers, but merits their farther investigation. This slight Essay may, perhaps, incite others to prosecute this inquiry more fully, in order to extend the power of physicians to prevent and cure the maladies of mankind.

In physick as well as in philosophy, to discover the cause of an effect is frequently a very nice and difficult investigation. The success of medical practice effentially depends upon this faculty of sagacious discernment. One who is carried away by

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every wind of dostrine, and who recommends every new medicine which is in vogue and becomes popular, without confidering the evidence and fair probability of its efficacy, will frequently administer inert, and sometimes injurious remedies, to his patients.

"The Tractors have obtained such high reputation at Bath, even among persons of rank and understanding, as to require the particular attention of physicians. Let their merit be impartially investigated, in order to support their same, if it be well founded, or to correct the publick opinion, if merely formed upon delusion. Such a trial may be accomplished in the most satisfactory manner, and ought to be performed without any prejudice. Prepare a pair of false, exactly to resemble the true Tractors. Let the fettet be kept inviolable, not only from the patient, but every other person. Let the efficacy of both be impartially tried, beginning always with the falle Tractors. The cases should be accurately stated, and the reports of the effects produced by the true and false Tractors be fully given, in the words of the patients."

This hint, and in these terms, I communicated to Dr. FALCONER. He entirely approved the idea, and very readily consented to make the proposed trial upon the most proper cases which could be selected from his patients in the General Hospital.

We contrived two wooden Tractors of nearly the fame shape as the metallick, and painted to resemble them in colour. Five cases were chosen of chronick rheumatism, in the ancle, knee, wrist, and hip. One of the patients had also gouty pains. All the affected joints, except the last, were swelled, and all of them had been ill for several months.

On the 7th of January, 1799, the wooden Tractors were employed. All the five patients, except one, affured us that their pain was relieved, and three much benefited by the first application of this remedy. One felt his knee warmer, and he could walk much better, as he shewed us with great satisfaction. One was easier for nine hours, and till he went to bed, when the pain returned. One had a tingling sensation for two hours. The wooden Tractors were drawn over the skin so as to touch it in the slightest manner. Such is the wonderful force of the Imagination!

Next day, January 8th, the true metallick Tractors of Perkins were employed exactly in like manner, and with similar effects. All the patients were in some measure, but not more relieved by the second application, except one, who received no benefit from the former operation, and who was not a proper subject for the experiment, having no existing pain, but only stiffness of her ancle. They felt (as they fancied) warmth, but in no greater degree than on the former day.

.

This trial was witnessed by Dr. FALCONER, Mr. NICHOLLS, surgeon of the Hospital, Mr. FARNELL. apothecary of the Hospital, and myself, on both days; and on the second day by Mr. PHILLOTT, also surgeon of the Hospital. It need not be remarked, how completely the trial illustrates the nature of this popular illusion, which has so wonderfully prevailed, and spread so rapidly; it resembles, in a striking manner, that of Animal Magnetism, which merited the attention of FRANK-LIN, when ambassador from America, and of other philosophers at Paris. If any person would repeat these experiments, it should be done with due folemnity. During the process, the wonderful cures which this remedy is faid to have performed ought to be particularly related. Without these indispensible aids, other trials will not prove as successful as those which are above reported. The whole effect, undoubtedly depends upon the impreffion which can be made upon the patient's Imagination.

This method of discovering the truth, distinctly proves to what a surprising degree mere fancy deceives the patient himself; and if the experiment had been tried with metallick Tractors only, they might and most probably would have deceived even medical observers. Yet this test of truth is perfectly candid. A fair opportunity was offered to discover whether

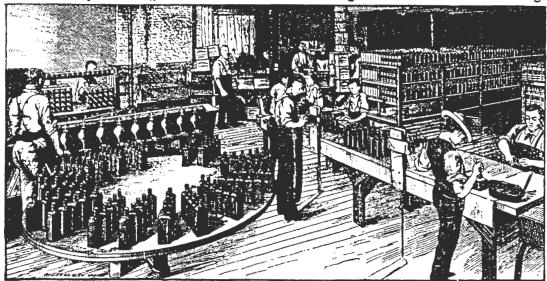
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the metallick Tractors possessed any efficacy superior to the ligneous Tractors, or wooden pegs.

In the decision of this question, it ought to be duly considered that the chronick rheumatism is a very obstinate and permanent disorder; that out of the five cases, (being all who were subjected to the trial) four of the patients believed themselves immediately, and three remarkably, relieved by the false Tractors; and that this report is founded upon the unanimous teftimony of five medical witnesses. This evidence is not inferior to what is alleged in favour of the true Tractors, especially if it be considered that the cases which have been published are selected from many which were unsuccessful, and passed over in filence. This fuccess of the false Tractors can only be exceeded by the exaggerated stories which, for fome months past, have been reported in every company with increasing amazement and credulity.

The proposer of these experiments, if he could have produced authentick and conclusive proofs of the real esticacy of the metallick Tractors, would, with equal frankness, and much grenter satisfaction, have given his testimony in their favour, as another means of administering relief to the sufferings of mankind. If any proselyte to Perkinism should still believe in the superior virtue of this remedy, both the witnesses of these recent events and the patients above-mentioned are ready to satisfy any farther inquiries on this subject.—Bath, Jan. 24th, 1799.

HOSTETTER'S STOMACH BITTERS, Gives that Physical Vigor which is the Main Safeguard of Health and Strength.



This represents the Bettling Department of The Hostetter Company.

HOSTETTER'S ILLUSTRATED ALMANAC FOR 1891, with accurate tables, and full of information, now being gratuitously distributed, offers a means of relief to all who are suffering from Dyspepsia. Malaria, Fever and Ague, and all diseases arising from inaction or disorders of the Stomach, Bowels, Liver and Kidneys, and submits testimony to its efficacy from physicians who have prescribed it, and patients who have experienced its reviving and curative powers. Prepare to enjoy the coming year by renewing your physical man with a course of the Bitters. Ask you for an Almanac and ponder the message it brings. For Sale by all Druggists and Dealers in Proprietary Medicines.

D. HERBERT HOSTETTER, President. THEO. R. HOSTETTER, Vice Pres't.

M. L. MYERS. Sec'y and Treasurer. THE HOSTETTER COMPANY, Proprietors, PITTSBURGH, PA.

When you write, please mention "The Cosmopolitan,"

Historical Images of the Drug Market—XXIII

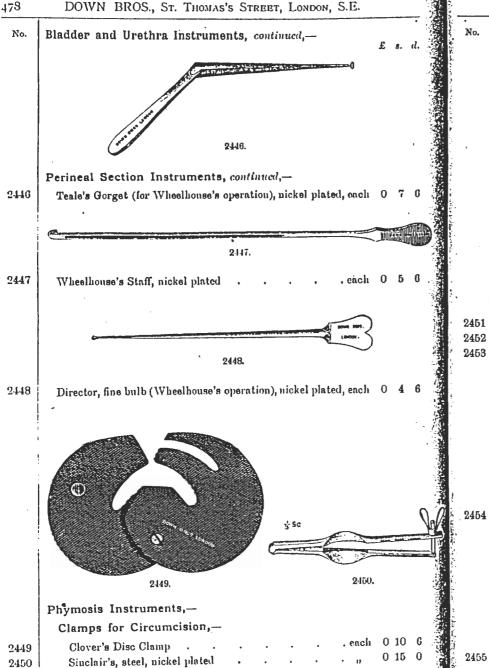
by William H. Helfand

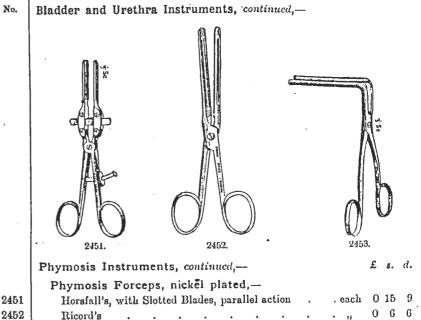
I HE Hostetter advertisement in the December, 1890 issue of The Cosmopolitan showed its packaging department in action. The Bitters arrived from an upstairs manufacturing department through a vertical pipe at the upper left, flowed through valves to fill nine or more bottles at a time, after which the bottles were placed by a worker on a circular rotating table in lines of six bottles each. They were subsequently picked up, capped, and labeled by a team of four men at a rectangular table; finally these bottles were stacked on shelves and eventually crated for shipping. Reflecting the prevailing concepts of the time, male workers did not wear uni-

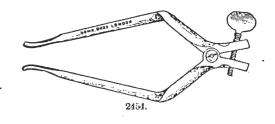
forms, but did use aprons; hats appeared to be optional. Hostetter's semi-automated system was sufficient to produce about one million bottles annually, their estimated sales in 1891. The heavily advertised Bitters contained about 4% by volume of crude drugs, and 36 to 39% alcohol, possibly its chief allure. The almanacs proposed in the advertisement were Hostetter's chief means of promotion; in each year during the last quarter of the nineteenth century from ten to thirteen million copies in English and eight foreign languages were published annually.

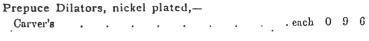
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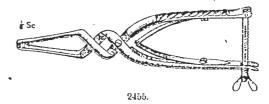
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. cach 0 13 6 Gardner's

. St. Thomas's, rectangular pattern .

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No.	Cleft Palate and Hare-llp Instruments, continued,—	No.	Cleft Palate and Hare-lip Instruments, continued — Hare-lip Instruments.
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	1072.		
1071	Suture Adjusters, forged out of solid steel, nickel plated, continued,-		
1072	Torked pattern		1077. 1078. 1079.
	1078.	1077 1078 1079 1080	Forceps, nickel plated,— Durham's, right and left Sinith's, right and left Ditto, double, two sizes, 1½ and 1½-in.
1073	Teats, for feeding each O 1 0		
•	± 4 sc 1074.		
	1076,		1091.
	COLUMN THE TOTAL OF THE PARTY O	1081	With parallel blades
	1076,		726.
1054	Wire Twisters, forged out of solid steel, nickel plated,—		Hare-lip Pins,—
1074 1075 1076	"S" shape	725 720 2 1082	Glass heads

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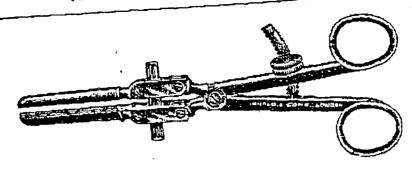


Fig. 3082.

2. d.

Phymosis Forceps (Horsfall's), with parallel slotted blades, nickelplated, Fig. 3082... 0 15 6



Fig. 3088.

Phymosis Needle (Curling's), nickel-plated, Fig. 3083 0 2 0



Fig. 3084.

Circumcision Forceps, with slotted blades and Improved take-apart joint, nickel-plated (as used at the London Hospital), Fig. 3084 ... 0 12 6

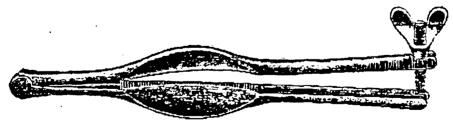


Fig. 8085.

Circumcision Clamp (Sinclair's), nickel-plated, Fig. 3085

0 13 6

Extract from "THE LANCET."

"The necessity of circumcision in many cases, and the benefits derived therefrom being more recognised in modern surgery, have brought this ancient operation more into vague at the present day. Fig. 8065 represents a plated steel clamp made by Mesers. Asson & Sons, of London, which is an improvement on the wooden instrument which was made for and at the suggestion of Hall Rajah Boh, of Salangor. I have found the operation with this clamp so simple, rapid, clean and safe, no stitching of the mucous membrane or tying of vessels being required, that I have no besitation in recommanding this instrument, with the Malay operation, to the profession."

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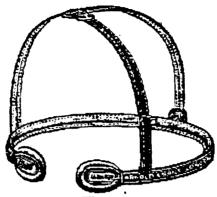


Fig. 1361.

Harelip Truss (Hainsby's), Fig. 1361 10s. 6d. and 0 15 0 (Measurement required, circumference of head taken at level of upper lip.)

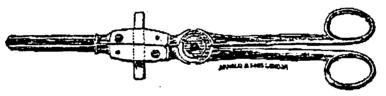


Fig. 1362.

Harelip Forceps, with parallel blades, nickel-plated, Fig. 1362 ... 0 12 6



Fig. 1363.

Harelip Forceps (T. Smith's), double nickel-plated, Fig. 1363 ... 0 15 0

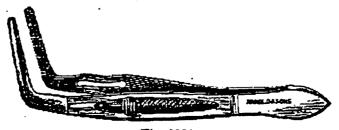


Fig. 1864.

Harelip Forceps (T. Smith's), right and left, nickel-plated, Fig. 1364 each 0 10 6



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M. DONALD BLAUFOX. M.D., PH.D. 1300 MORRIS PARK AVENUE 324 MAZER BRONX, NEW YORK 10461

U.S.A.,

March 24, 1994

Dear Dr. Blaufox,

Thank you very much for your letter from March 7, 1994. Incidentally, I have found yesterday reproductions of the Horsfall's Phymosis Forceps and a Harelip Forceps in Arnold's Catalogue of Surgical Instruments. Besides your observation concerning the form of the blades, it seems that another difference between the two kinds of instruments is the lateral screw too. The function of the screw could be the to fix the blades under strong pressure for insuring hemostasis.

I am enclosing with this letter photocopies of two pages from the above mentioned catalogue.

I am looking forward to meeting you at the Annual Meeting of the Medical Collectors Association in New York.

Sincerely yours,

N.S. Judorff

Stanley B. Burns, M.D. Collection

1994

Artistic and Historic Vintage Photographs

INTRODUCTION TO THE BURNS COLLECTION



Specializing in photographs of

Medical and Health Care African-Americans Japan & Orient Death & Dying India & Egypt Occupations Ethnology Judaica Architecture Criminology Folk Traditions Early Hollywood War (Crimean-WWII) Early Color Photography Industry & Transportation Early American Cities & Towns

UNIQUE IN ITS BREADTH AND SCOPE,

The Burns Collection houses the nation's largest and most comprehensive collection of early medical photography (1840-1920). The Archive offers publishers, exhibitors, authors, researchers and the media its consultation services and the use of its images, as well as of its extensive library of medical history.

Photographs from the Collection have been used in more than 100 exhibitions, 20 feature films, and in television shows and videos. They have also appeared in a wide variety of publications, from scientific journals to children's textbooks.

The Burns Collection contains over 35,000 original medical photographs. Many of these photographs are unique images: daguerreotypes, ambrotypes, and tintypes of the 1840-1860 era. The vast majority of the photographs depict patients with diseases long since conquered, and medical treatments, technologies and practices long since outmoded. They show hospital and nursing personnel at work, along with related health care practitioners. The Collection houses a wide range of original nineteenth century photos of physicians and patients in contemporary clinical settings, including many medical firsts and famous cases. Personalities and events not believed to have been photographed are here preserved. The Collection holds the only known photographs of practicing phrenologists, blood letting and skull trephination.

Entire albums of historic events are available. One, commemorating the opening of the new operating room at Johns Hopkins Hospital in 1904, includes pictures of Drs. Halstead and

Cushing performing what is now known as the "all star operation." The Collection also includes physicians' personal albums. Amongst these are four compiled by Dr. R.B. Bontecou of wounded Civil War soldiers. Another is by an American physician who travelled with Pancho Villa during his famous expeditions and battles in Northern Mexico. Other albums of war experience include those featuring medical practices in the Spanish-American War and World War I. Almost all of the known early American medical publications with original photographs (1858-1887) are housed in the Archive.

Although best known for its medical photographs, the Collection includes over 200,000 other images. Almost every type of nineteenth century genre photograph is represented. The Collection is particularly strong in the following areas: Early color photographs (ranging from hand-painted daguerreotypes to autochromes); Folk and African-American photographs, representing one of the largest compilations in the U.S.; War images from the Crimean through WWII, including the largest private collection of wounded Civil War soldiers; Judaica, including images of people, villages and rituals of Eastern European and North African cultures. The Criminology portion of the Collection includes photographs of jails and criminals, and is particularly strong in artistic images. The Ethnology photographs of Europe, North Africa, and Asia show individuals in traditional dress. The remainder of the Collection focuses on photographs from the United States, the Middle East (Orientalism), Asia and the Indian subcontinent, Mexico (Mexican Revolution), and on the hand-painted photo-📆 graphs of China and Japan.

HISTORY OF THE COLLECTION

In 1975, Dr. Stanley B. Burns, an eye surgeon and vision specialist practicing in New York City, became interested in daguerreotypes and other early photographs. By 1978, Dr. Burns had acquired, through aggressive buying and connoisseurship, one of America's most important collections of early photography.

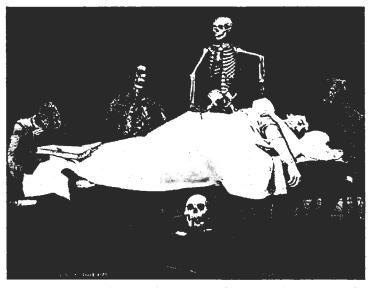


That year, Dr. Burns' collection was recognized by Time-Life as one of America's foremost new collections in their *Encyclopedia of Collectibles*. Dr. Burns wrote the chapter in the *Encyclopedia* on the new opportunities available in collecting vintage photographs.

In 1984, the world's first exhibition of medical photographs as art was presented at Buffalo's CEPA Gallery. It was curated from the Burns Collection by noted curator Marvin Heiferman.

In 1988, the Burns Archive moved into its permanent headquarters, a New York townhouse built in 1890. Here,

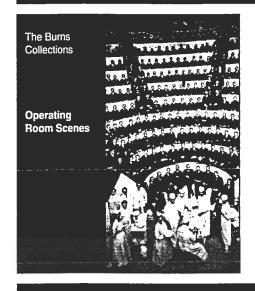
nineteenth century ambiance and decor, along with a backdrop of medical and photographic equipment, provide a proper setting for the display of vintage photographs.

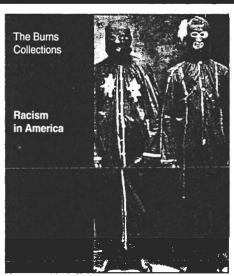


In 1991, Burns Archive Productions was founded. This division of the Collection does book packaging, from concept to camera-ready mechanicals. In addition to photographic projects, it produces cookbooks, fiction, historic works and other non-fiction.

By 1992, Art & Antiques has noted Dr. Burns as being amongst the "Top 100 Collectors in America." The Collection is rated as the number one private collection of historic photography. In addition, Aperture rates the Collection as one of the six most important private photographic collections – of any type – in the world.

CATALOGUE GUIDES TO THE COLLECTION





We are now in the process of producing catalogues of our special collections. These books will serve as historical guides as well as stock photo resources. Medical catalogues will include: Operating Room Scenes, Doctors at Work, Anomalies & Curiosities of Medicine, Orthopedics, Dissection & Autopsy, Neurology–Psychiatry, Obstetrics, Pediatrics, and Nursing.

Non-medical catalogues will include: Judaica, Racism, Black America, Africa, Asia, Far East, Ethnology, Criminology, and Folk Arts.

We are in the process of preparing images for release on CD-ROM. Books can be ordered directly from the Burns Collection.

PHILANTHROPY

As a part of its program for the support of photographic and art institutions the Burns Collection has donated, since 1982, thousands of vintage photographs to institutional collections. Among the recipients of these images are: The J. Paul Getty Museum, Santa Monica; The Museum of Modern Art, The Metropolitan Museum of Art, New York; The Philadelphia Museum of Art; The New Orleans Museum of Art; The Museum of Photographic Art, San Diego; The Oakland Museum; The Museum of American Folk Art, New York; The Bronx Museum of the Arts; The Center of Contem-

porary History, Wyoming; Columbia College, Chicago; The Hudson River Museum; The National Museum of Health & Medicine; American Museum of the Moving Image; South Street Seaport Museum; The Smithsonian Institution; National Museum of Design – The Cooper Hewitt Museum; The National Arts Club, New York.

Exhibitions by various institutions, including those mentioned above, frequently use images from the Collection. The Collection has been featured in over 15 solo exhibitions and over 30 group exhibitions since 1978.

CULTURAL MINORITY PHOTOGRAPHIC COLLECTION

COLLECTING PIONEER

Dr. Burns was a pioneer in what museum professionals and art historians now refer to as the Cultural Diversity movement. He recognized in the late 1970's that there was a major void in the preservation and presentation of cultural minority art. Seeking to fill the void, Dr. Burns collected African-American, Latino and Asian photographs. His goal was to make the art world aware of this unappreciated body of material and promote its collection and preservation by institutions. To stimulate this, Dr. Burns presented collections of the images to various institutions. These core collections became the catalyst for yearly public exhibitions and corporate support.



MUSEUM DIRECTORSHIP

The Bronx Museum of the Arts, one of the leaders of the Cultural Diversity movement, recognized Dr. Burns' special contribution by asking him to join the Board of Trustees. There, as Vice Chairman of the Permanent Collection Committee, he helps direct their collection policy. His goal is to support the premise that American

museum collections can be best served by bringing into the mainstream art representing the full spectrum of America's cultural components. The future of artistic preservation must incorporate our cultural diversity not on a quota basis, but in an equal partnership.

THE AFRICAN-AMERICAN COLLECTION

The African-American Collection consists mainly of images from photography's earliest era, 1840-1890. While the bulk of the collection focuses on the middle class in the nineteenth century, rare 1840's daguerreotypes of slaves and other topical images make the Collection an important national resource. The only known daguerreotype of a ceremony for freeing slaves is perhaps the rarest item. The collection also includes images of indigenous African cultures.

The Burns Collection of African-American imagery fills a void in institutional collections. Noting that the traditional image of the African-American presented to the public represents the viewpoint of a third party — i.e. photographers taking photos of African-

Americans to highlight social prejudice or, on the other extreme, as sentimental heroic representations — Dr. Burns concentrated his collection on the "routine" portrait: images depicting successful people as they wished themselves to be seen.

THE ASIAN COLLECTION

The Asian Collection emphasizes photographs of China, Japan and the Indian sub-continent, although almost all countries and cultures are represented, from the Maylay Archipelago to Mongolia. The photographs are mainly of indigenous cultures in their original settings, but include images of the Western presence in Asia and of Asian immigrants in the United States. Photographs by Asian photographers are an important aspect of the collection. The most important image in the collection is the only known daguerreotype of Chinese Coolies in native dress at work in a gold field, circa 1852.

LATINO COLLECTION

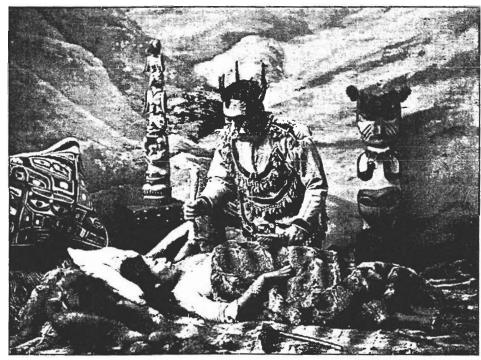
The Latino Collection's primary focus is on Mexico, and especially on images from the Mexican Revolution era. Images of Puerto Rican, Cuban and other Latino cultures are also represented, but mainly those from the Spanish-American War era. Daguerreotypes from South America, mid-nineteenth century images of immigrants to United States and images of Californian Latino cowboys round-out the collection.

ETHNOLOGY COLLECTION

These images depict peoples from around the world in their traditional costumes and environments, and in genre scenes. Images of immigration are an important part of this collection. These images show how various ethnic groups were depicted in countries to which they emigrated.

JUDAICA COLLECTION

This collection consists of over 10,000 images from 1847-1960. It emphasizes early Palestine, Eastern Europe and the Diaspora, including the United States. Among the rare images in this collection is a daguerreotype of Confederate Surgeon General David Camden DeLeon and unpublished photos of the Holocaust, including views from inside various ghettos.



FEATURE FILMS & DOCUMENTARIES

Dr. Burns specializes in consultation to the film industry. He has worked on films with many noted directors and producers, including Adrian Lynn (Jacob's Ladder), Robert Altman (Mrs. Parker and

Her Circle), Ken & Ric Burns (The Civil War) and George Hickenlooper (Grey Night). Dr. Burns was recently involved with a documentary of the life of Martin Scorcese.

PERIODICALS

Since 1977, Dr. Burns has published over 150 articles on specific aspects of photographic history. They have appeared in such periodicals as Art and Antiques, Hippocrates, Health Care Today-Connecticut, Diagnosis, Canadian Journal of Diagnosis, MD Magazine, Medical Heritage, OB-GYN World, New York State Journal of

Medicine, Art Forum, and LICA Journal, Vuumi. Stories detailing the Archive's holdings and accomplishments have appeared in the New York Times, American Heritage Magazine, NY Press, Arts & Antiques, Aperture, People, Vogue, Connoisseur, Manhattan Spotlight, Off Hours, The Best Report and The Clarion.

PUBLICATIONS

BOOKS:

- 1994 Harms Way, (Co-author: Joel-Peter Witkin)
- 1993 Face of Mercy: A Photographic History of Medicine at War, (Co-authors: Drs. M. Naythons and S. Nuland)
- 1993 Sleeping Beauties, A Screen Play, (Co-author: Jennifer Holm)
- 1991 Photographie et Medecine 1840–1880; Catalogue, (Co-author: Jacques Gasser, M.D.)
- 1990 Sleeping Beauty: The History of Memorial Photography in America
- 1990 The American Dentist: A Pictorial History, (Co-authors: Richard Glenner, D.D.S., Audrey Davis, PhD.)
- 1987 Masterpieces of Medical Photography: Selections from The Burns Archive, (Co-author: Joel-Peter Witkin)
- 1983 Early Medical Photography in America: 1839-1883

BOOKS IN PREPARATION:

- 1994 Forgotten Marriage: A Guide to The Painted Tintype & The Decorative Frame
- 1994 Catalogue of Topical Images from the Burns Collections
- 1995 Blue, Grey & Red: The Photographic History of the Wounded Soldier in the Civil War
- 1995 Body Making: Transformations of Self Image (in America) – Photo Essay
- 1995 Strange Fruit: A Photographic History of Lynching & Vigilantism in America
- 1996 A Dream Deferred: The Photographic History of the Black American Middle Class in the Nineteenth Century

All books are available or will be available from the Stanley B. Burns, M.D. Collection.

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Epoch Films
Florentine Films
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STOCK PHOTOGRAPHS/BOOK PACKAGING

- The Collection contains over 250,000 ORIGINAL vintage photographs and thousands of prints and lithographs.
- The Collection is the world's largest comprehensive collection of early medical photography.
- Our in-house library of over 10,000 volumes allows our researchers to rapidly answer your photographic and historic questions.
- · Basic research fees and standard commercial rates.
- · Book packaging, from concept to camera-ready mechanicals.

FOR PUBLICATION, EXHIBITION, DOCUMENTATION, RESEARCH & CONSULTATION:

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