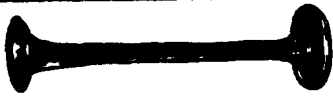


MEDICAL



COLLECTORS



ASSOCIATION

## NEWSLETTER NO. 22

November 1992

Dear Collectors:

This is the last newsletter of 1992. The meeting which was held in July at the New York Academy of Medicine was a great success. Forty members of the group attended the meeting and the dinner which was held the prior evening. Dr. George Wantz graciously showed his collection and Norman Medow hosted the group at the Griffis Club which is the faculty club for Cornell Medical Center. The talks were all excellent and highly informative.

I am delighted to announce that Dr. Gustave Colon, who was a speaker in July has graciously agreed to host the next meeting of the group which is scheduled for July in New Orleans. Details are not available at this time but the meeting will include a trip to the New Orleans Pharmacy Museum and the lectures will probably be at a hotel in or near the French Quarter. Dr. Colon is planning to use the Double Tree Hotel and The Windsor Court Hotel to accommodate persons attending the meeting. These two hotels will offer choice of accommodations at moderate and more expensive prices. The dates of the meeting have been tentatively set at July 16, 17 and 18. We are planning to hold a cocktail party the evening of July 16th probably at the Pharmacy Museum. Because of the great number of very fine restaurants in New Orleans, Dr. Colon has decided that we will go with a cocktail party and let people go out to restaurants of their choice that evening rather than try to arrange for a banquet. We have not yet lined up any definite speakers but we hope that John Salvaggio will present a review of the history of Charity Hospital of New Orleans. Dr. Colon, who charmed everyone with his excellent lecture on the dueling surgeons of New Orleans, is prepared to present some more of his research. However, we need other interested parties to volunteer to speak and add to the general enjoyment of the program. Anyone who is interested in presenting a topic at the meeting should contact either me or Dr. Colon.

This newsletter has the usual format with an identify column which has been sent in by Alex Peck, patents, interesting articles and a number of announcements which are either part of the newsletter or have been inserted in the text. Once



again we continue our inclusion of extracts from Bill Helfand's series on Pharmacy in History. In this issue he reviews Thermogene. I have also included a photocopy of some chapters from Charles Truax which deal with the Azoux anatomical preparations as well as a number of pages from the Ward's Natural Sciences Establishment catalog which also present various anatomical models made by Azoux and other manufacturers. This catalog is very interesting and a number of Azoux models have appeared in the market place. This information should be of interest to anyone who has either seen or had the opportunity to purchase one of these models.

Among the announcements which should be of interest to the membership is a letter which I received from Gretchen Worden announcing the availability of the Mutter Museum 1993 calendar. This calendar of medical history should be a very interesting thing to have on the wall.

A letter from Jane Herz announces the forthcoming Auction Team Koln auction which will have some medical instruments of interest, contact her for more details (see announcement in this newsletter).

Additional enclosures include an offering by Barbara Shalit for book plates for individuals who wish to personalize their library. There is an announcement of an exhibit at the Strong Museum which deals with America's drug habit and some interesting historic artifacts related to this as well as a copy of a clipping from the newspaper which describes the exhibit in some detail.

While I was in England in May, I encountered a small medical museum which is in the Woolstaplers Hall in Chipping Camden. This interesting little museum makes a fun detour for someone who happens to be in that area of the Cotswolds and I have included a copy of the brochure for your review.

**ALSO INCLUDED IN THE NEWSLETTER IS THE RENEWAL FORM. PLEASE FILL THIS IN AND RETURN YOUR DUES IF YOU WISH TO CONTINUE TO RECEIVE THE NEWSLETTER NEXT YEAR.**

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

I would like some input from the members about advertising and giving out the names to non-members. An increasing number of individuals have contacted me to ask to advertise in the newsletter or to obtain mailing labels or our mailing list. This requires considerable secretarial support and so I have resisted getting involved in these additional activities. However if the majority of the members believe it would be of value, I will make these things available to non-members at a reasonable charge. Let me have your thoughts on the matter when you return your membership renewal forms..

**AS USUAL I WOULD LIKE TO MAKE A PLEA FOR SOME ACTIVE PARTICIPATION IN THE NEWSLETTER WHICH SHOULD BE A REPRESENTATIVE FORUM FOR ALL OF THE MEMBERSHIP. I HAVE NOT HEARD FROM MOST OF YOU AND SO YOU ARE NOT TAKING FULL ADVANTAGE OF THE BENEFITS OF MEMBERSHIP.**

During the meeting of the Medical Collectors Association an object was shown at the Can You Identify section of the meeting and there was considerable debate over whether it was a trocar or a champagne tap. I have added some pages from the volume "Cork Screws for Collectors" which clearly demonstrates the item which was indeed a champagne tap. Of particular interest is the fact that this item was made by S. Maw & Sons, London and since this is a medical manufacturer some individuals might have been confused into thinking it was medical. This is added as a word of caution to the collector to be wary of instruments which may resemble medical instruments but may not be.

Among the patents we are including is a United States patent on radioactive materials which was submitted by Dr. Curt Schmidt. Among other objects related to radium is a new exhibit which opened at the Library of Health Sciences at the University of Medicine and Dentistry in New Jersey dealing with radium and radiation and a copy of that announcement is enclosed. Gretchen Worden sent us some interesting information on The Eye Sharpener which is included for everyone's amusement and Terry Hambrecht has given us permission to reproduce his article on Dr. Chisolm's inhaler. He also has included with this article a copy of the patent by Elisha Perkins on Perkins' Tractors. Anyone who has encountered these elusive objects will find this patent most interesting to read.

I recently received a mailing from ICD, The Inter Documentation Company, which is offering microfiche collections of various famous medical books and also offers collections of medical instrument catalogs. I have included this for everyone's interest.

Mosby Yearbook Publishers has put out some new historical items and I enclose with this newsletter copies of their brochures. The latest announcement of the Scientific and Medical Instrument Fair which Peter Delahar hosts which will be held next year on May 9th is enclosed. A reprint of an article on the National Armed Forces Institute of Pathology is included for which we have a number of reprints on hand.

This pretty well rounds out the content of this issue of the newsletter.

Please be sure to renew your membership if you wish to continue to be a member and please let me know if you are interested in presenting at the next meeting of the group which will be held in New Orleans.

Best wishes for a happy holiday to everyone.

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

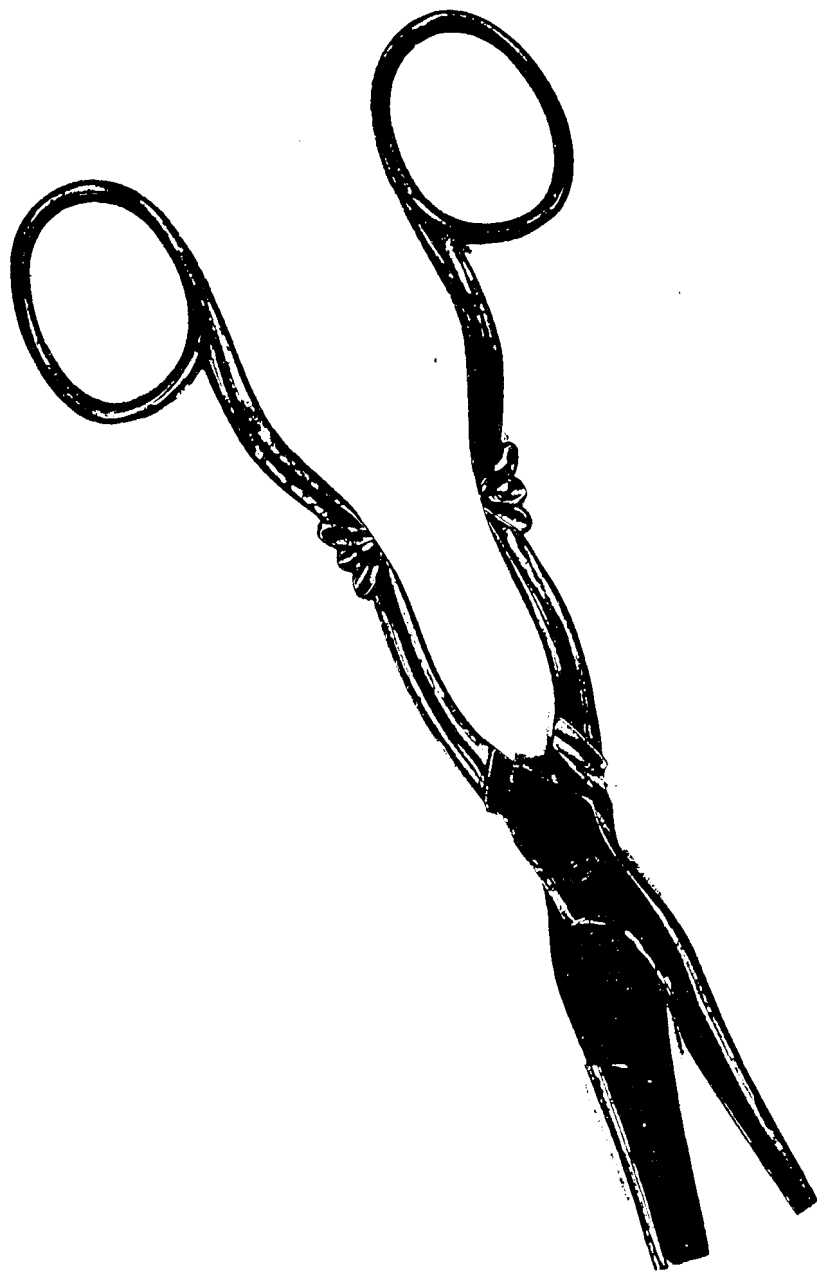
CAN YOU IDENTIFY THIS

Material:

Maker:

Presumed Use:

Date:



I think this is a:

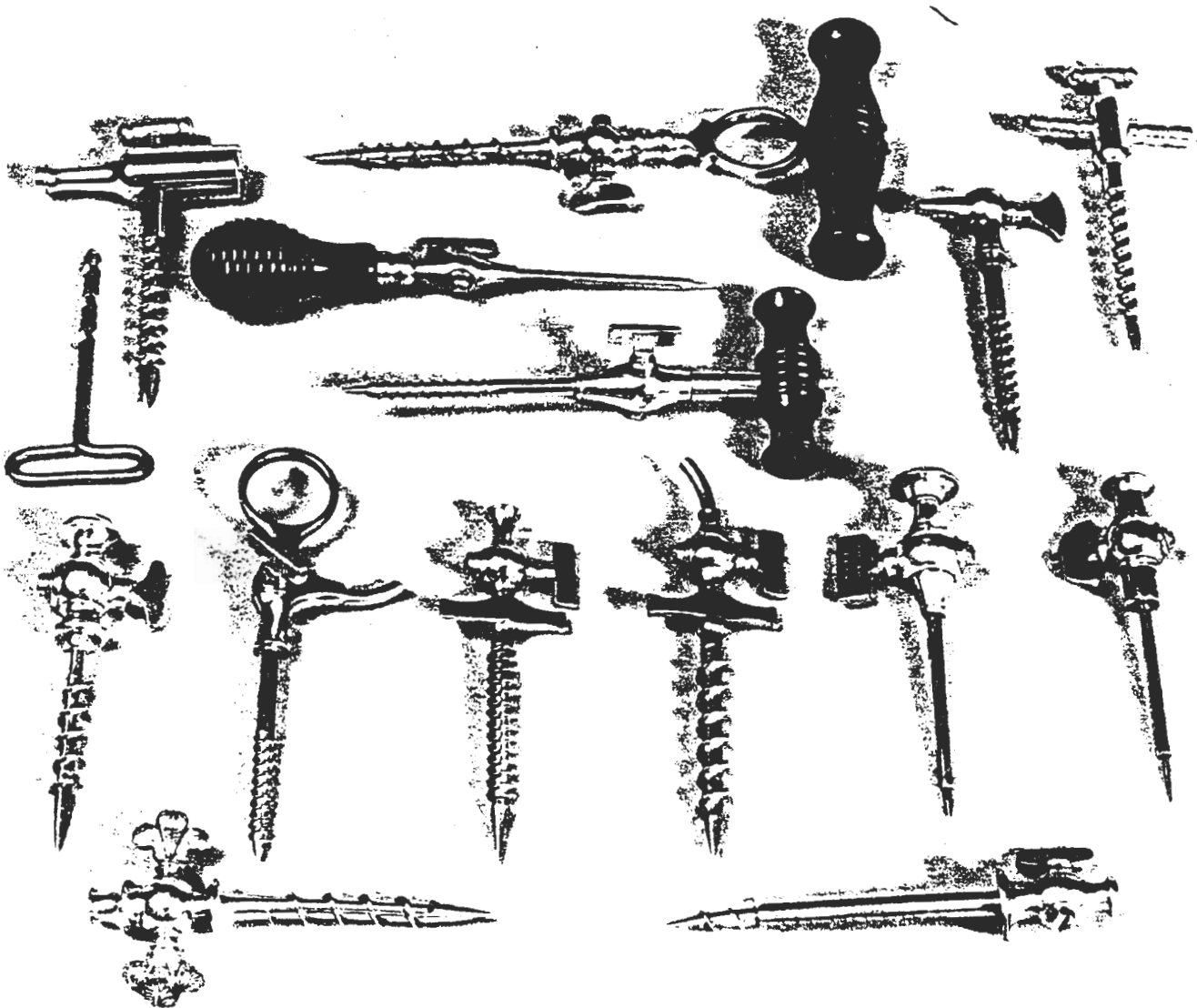
From:

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

*Corkscrews*  
*for collectors*

Bernard M Watney and Homer D Babbidge

Sotheby Parke Bernet  
London & New York



158. Champagne taps and screws, late nineteenth and early twentieth century.

Above, left, *The American 'New Century' tap and gimlet*, by C. T. Williamson of Newark, New Jersey.

Centre, right, *two Abyssinian taps*, one marked AYLESBURY DAIRY COMPY.

Below, left to right, *marked 'S. Maw & Son, London'*; *marked EXCELSIOR* and *'Coppard Patentee'*.

*Francis Day & Hunter Limited.*  
REGD. NO. 257748. *Sixpence. Nett.*

№1938.

# THERMOGENE

BURLESQUE BALLAD.

*Written and Composed*  
*by*

*R.P. WESTON*  
*and BERT LEE.*

*Sung by*

# NIXON GREY.



*Photo by*  
*Fielding, Leeds.*



PRINTED IN ENGLAND

FRANCIS. DAY & HUNTER LTD  
138-140. CHARING CROSS ROAD,  
LONDON, W.C.2.  
Copyright 1925. by Francis Day & Hunter Ltd

# Historical Images of the Drug Market—XXVIII

*by William H. Helfand*

NEVER a popular dosage form in the United States, Thermogene has been on the European market since about the turn of the century. Composed of soft cotton wadding, it is meant to be applied as a plaster to any part of the body where heat would be beneficial. Capsicum, which makes up 4% of the product by weight, is the active ingredient. While Thermogene has been actively promoted since early in the century, no advertisement in its history has had greater impact than a poster by Lionetto Cappiello first published in 1907; it showed a fire-eating circus performer, his arms holding the product close to his chest, along with claims for cough and rheumatism. Cappiello's poster became one of the best known of all commercial posters published in the twentieth century, and brought Thermogene to a world-wide audience. But Thermogene inspired other creative endeavors such as a popular song by Weston and Lee published in 1925. While there are many

songs for proprietary medicines and other commercial products sponsored by their manufacturers, only a few have had sufficient popular appeal to be used in this manner. In Thermogene's case, the singer compares the product's activity to his feelings towards his love:

Ever so close to my heart, dear,  
You cling to me all the while;  
You stick to me and I stick to you  
And we both stick together as lovers should  
do.

Thermogene! Thermogene! My beautiful  
Thermogene:  
You're pink and fluffy and soft to the touch.  
You're the nicest bit of fluff I've seen.  
Tho', now and then, you've clung to other  
men,  
I've not been all I might have been;  
So when I'm at rest, just lay on my chest,  
And tickle me, Thermogene.

Not Top 40 material, to be sure, but memorable in its own unique way.

# UNITED STATES PATENT OFFICE.

CURT SCHMIDT, OF FREIENWALDE-ON-THE-ODER, GERMANY.

## RADIO-ACTIVE MATERIAL.

1,032,951.

Specification of Letters Patent.

Patented July 16, 1912.

No Drawing. Original application filed January 10, 1911, Serial No. 601,927. Divided and this application filed December 8, 1911. Serial No. 604,572.

*To all whom it may concern:*

Be it known that I, CURT SCHMIDT, a subject of the German Emperor, works director of Alum Works, near Freienwalde-on-the-Oder, Germany, have invented certain new and useful Improvements in Radio-Active Materials; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a radio-active material, and is designed to render other solid bodies, gases or liquids radio-active by emanation, and is a division of my application Serial No. 601,927, filed January 10, 1911.

Radio-active materials already exist, in which the radio-active substance proper is mixed with inert bodies and forms together with said bodies a porous whole. These masses have the disadvantage, that many radio-active substances consist of ores or powdered residues obtained in the treatment of uranium compounds, which under ordinary circumstances are easily dissolved by liquids and color said liquids. This is obviated by the invention described in my above-named application by mixing the radio-active substances with a binding agent such as clay or loam, which, when subjected to a burning process, forms with the radio-active substances solid radio-active bodies of a highly porous structure, from which said substances are not dissolved by ordinary liquids.

The essential feature of the present invention consists in a process of forming porous bodies of clay, or a substance containing clay, as loam, or coating vessels with such binding agents and then washing the same with a liquid having radio-active substances dissolved therein, before proceeding to the burning process. The advantage of this process is, that such bodies, especially such vessel coatings can be produced in an extremely simple and cheap manner, and such a material has the advantage that the radio-active substance proper cannot be dissolved out of the porous mass after firing

by ordinary liquids, and that the liquid is not colored, which is desirable if such liquid is to be used as a drink or for the exterior treatment of the human body. By placing liquids or medicaments, to be taken internally, in the vessels they are rendered active without being colored by or dissolving the radio-active substance of the vessel.

The radio-active material is produced as follows: A portion of clay, loam or other earthy substance is shaped or formed into a body having a large surface adapted to be put into a vessel or into a bottle, or is shaped to some similar body or vessel; or a bottle or other vessel is coated with it. If it is desired to obtain a high degree of porosity, carbon or saw-dust may be mixed with the clay or loam, which is driven off in the burning process. After that the porous body so formed is rinsed or washed with a liquid in which the radio-active substance is dissolved, so that the material of which the vessel or the like or the coating is formed will absorb such substance. If walls or baths or other vessels are made of tiles or plates, these can be treated in the manner described. Finally, these bodies are subjected to a burning process in well known manner. If entire vessels, such as bottles, tumblers, jugs or the like are produced, their exterior surfaces can be glazed. Further, the stoppers or lids can be produced from this substance.

In such cases in which, for example, clay or loam-like materials have themselves a radio-active property, it is of course not necessary to wash them with other radio-active liquids before burning.

The bodies may receive a different degree of radio-activity by suitably choosing the concentration of the radio-active solution.

Claims—

1. Process for producing radio-active materials, which comprises forming argillaceous substances into suitable forms, then rinsing or washing the same with radio-active liquids and finally burning them.
2. Process for producing radio-active materials, which comprises washing a vessel of an argillaceous substance with a radio-active liquid and finally burning the vessel and glazing its exterior.



# UNITED STATES PATENT OFFICE.

CURT SCHMIDT, OF FREIENWALDE-ON-THE-ODEE, GERMANY.

RADIO-ACTIVE MATERIAL.

2

1,032,951

3. Process for producing radio-active materials, which comprises washing a vessel of an argillaceous substance with a radio-active liquid and burning the vessel to cause the radio-active substance of the liquid to be fire-united to the vessel.

In testimony that I claim the foregoing

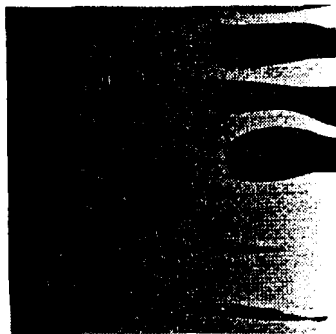
as my invention, I have signed my name in presence of two subscribing witnesses.

CURT SCHMIDT.

Witnesses:

WOLDEMAR HAUPT,  
HENRY HABER.

You are cordially invited  
to an opening reception for an exhibition



## “Radium and Radiation, 1896-1993”

Wednesday, October 14, 1992

3pm to 4:30pm

Opening remarks at 3:30pm

Library Exhibition Gallery

The University of Medicine and Dentistry of New Jersey

George F. Smith Library of the Health Sciences

30 Twelfth Avenue, Newark, NJ

RSVP acceptances only: (201) 456-4353

To all People to whom these Presents shall come, Greeting :

WHEREAS I, ELISHA PERKINS, of PLAINFIELD, in the State of CONNECTICUT, have, by virtue of an Act of Congress, entitled "An Act to promote the progress of useful Arts, and to repeal the act heretofore made for that purpose," obtained a Patent in the form following, viz.

THE UNITED STATES OF AMERICA.

To all to whom these Letters Patent shall come :

WHEREAS ELISHA PERKINS, a citizen of the State of Connecticut, in the United States, hath alleged that he has invented a new and useful improvement in the method of removing pains and inflammations from the human body, by the application of metallic substances; which improvement has not been known or used before his application; has made oath, that he does verily believe that he is the true inventor or discoverer of the said improvement; has paid into the Treasury of the United States, the sum of thirty dollars, delivered a receipt for the same, and presented a petition to the Secretary of State, signifying a desire of obtaining an exclusive property in the said improvement, and praying that a Patent may be granted for that purpose: THESE ARE THEREFORE to grant, according to law, to the said Elisha Perkins, his heirs, administrators, or assigns, for the term of fourteen years, from the seventeenth day of the prestat month of February, the full and exclusive right and liberty of making, constructing, using and vending to others to be used the said improvement, a description whereof is given in the words of the said Elisha Perkins himself, in the schedule hereto annexed, and is made a part of these presents.

IN TESTIMONY WHEREOF I have caused these Letters to be made Patent, and the Seal of the United States to be hereunto affixed.

(L.S.)

GIVEN under my hand, at the City of Philadelphia, this nineteenth day of February, in the year of our Lord, one thousand seven hundred and ninety-six, and of the Independence of the United States of America the twentieth.

G<sup>o</sup>. WASHINGTON.

By the President,

TIMOTHY PICKERING, Secretary of State.

City of Philadelphia, To wit :

I DO HEREBY CERTIFY, That the foregoing Letters Patent, were delivered to me on the nineteenth day of February, in the year of our Lord one thousand seven hundred and ninety-six, to be examined; that I have examined the same, and find them conformable to law. And I do hereby return the same to the Secretary of State, within fifteen days from the date of the said, to wit, on this nineteenth day of February, in the year of our Lord one thousand seven hundred and ninety-six.

CHARLES LEE, Attorney General.

A new and expeditious Method of removing pains and inflammations from the human body by the application of Metallic Substances. By ELISHA PERKINS, PHYSICIAN, Connecticut.

THE method which I have generally practised, and which I have found most successful in removing pains and inflammations from the human body, though I have sometimes varied the application as the circumstances of the case might be, is by applying a pointed piece of metal to the part affected, and drawing it across and from the part to some of the more muscular parts, continuing the application of the instrument a distance from the complaint; in some cases the pain is with greater facility removed by drawing the instrument from the pained part to the extremities; in some few oblique cases it will be necessary to use friction upon the part till it produces a redness and final degree of inflammation; in Erysipelas the friction should be very light and gentle. In removing pains from the head, the part should be free from powder and pomatum; the hair should be separated by a comb, and the instrument drawn upon the skin from the forehead to the back of the head, and down the neck; sometimes it may be removed by operating only on the forehead, back of the neck, or pit of the stomach. The head-ach which arises from drinking to excess, it does not always cure. Pains in the breast are removed by operating on the breast, or the back opposite the part affected; in the hip, by operating on the thigh and leg; in the shoulder, by drawing the instrument from the shoulder, or arm, to the hand. Where there is a soreness, and pain in consequence of motion, it does not generally relieve. The complaints, in which this operation has been most useful, are pains in the head, face, teeth, breast, side, stomach, back, rheumatism, and some gouts. Venereal pains are apt to return and require a different treatment. It is unsafe to operate on the back during the existence of the Catarrh menia. The efficacy of the means is prevented by all oily or greasy substances.

NOW KNOW YE, That I the said ELISHA PERKINS, for the consideration of \_\_\_\_\_ dollars, received to my full satisfaction, do hereby sell and assign to the said \_\_\_\_\_ and to \_\_\_\_\_ give and grant liberty and licence to use and practise the said improvement of removing pains and inflammations from the human body, by pointed metallic substances, in the manner secured to me by Patent. Provided nevertheless, and it is the true intent and meaning of this contract, that the said \_\_\_\_\_ shall have the privilege of practising said improvement in his own family, either by himself or any others who are members of his family; but that he only shall have the right of operating with said pointed metallic substances on any persons not members of his own family: And the said \_\_\_\_\_ shall not have the right to lend the instruments by which such operation is performed, to persons out of his family; nor to suffer any operation to be performed with the same by any person but himself excepting in his own family. And the said \_\_\_\_\_ shall have the power to assign and transfer his right to one person only, in which case his own right shall cease and determine: and he shall have the power to dispose of said right to no more than one person by will.

In witness whereof I have hereunto set my Hand and Seal, in the year of our Lord 1796

Elisha Perkins (L.S.)

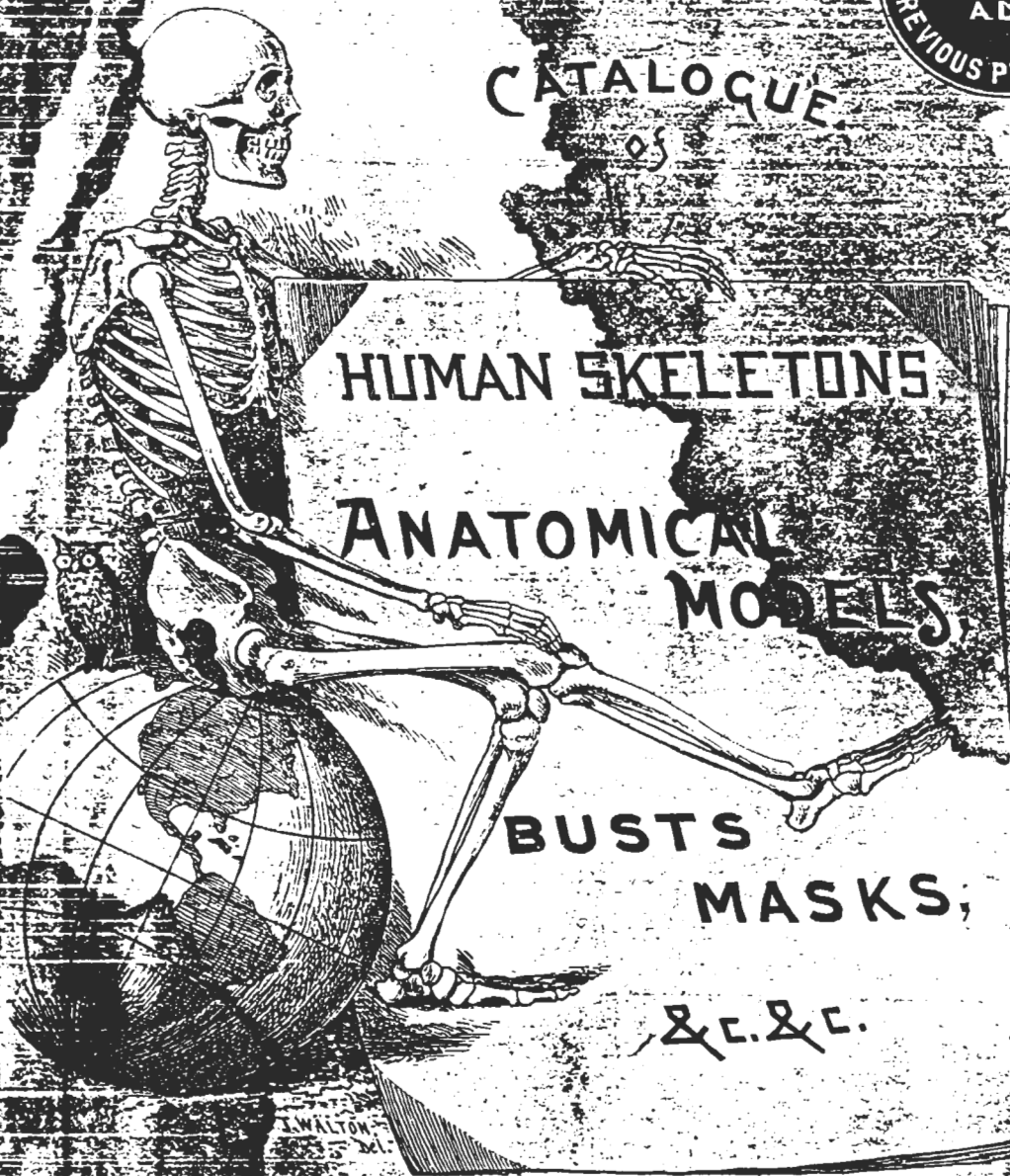
Witness present, Benjamin Perkins

1893 95<sup>00</sup> (15)  
07

Department of Human Anatomy.

THIS CATALOGUE  
CANCELS  
ALL  
PREVIOUS PRICES

CATALOGUE



HUMAN SKELETONS

ANATOMICAL  
MODELS,

BUSTS  
MASKS,

&c. &c.

Ward's Natural Science Establishment

16-26 COLLEGE AVENUE

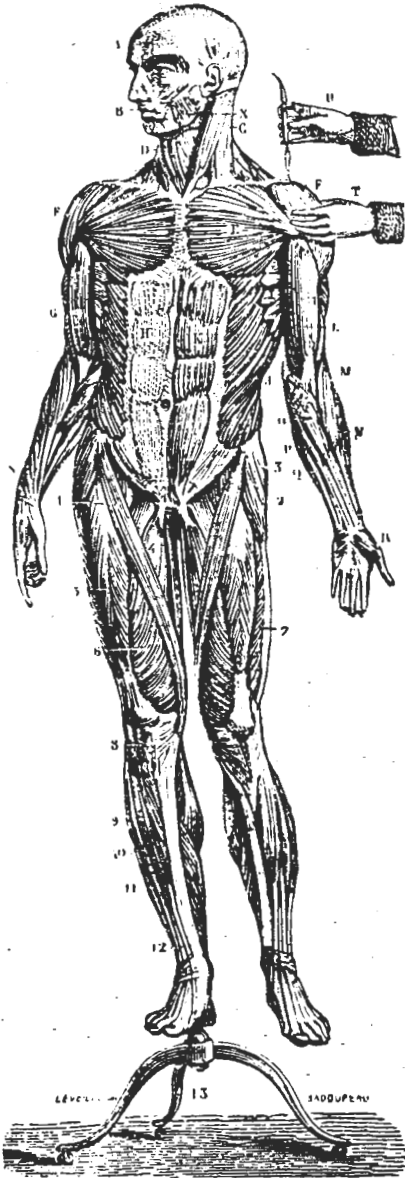
ROCHESTER N. Y.

1893

# Auzoux Anatomical Preparations.

## CLASTIC ANATOMY.

N. B.—The word "clastic" is derived from the Greek *κλάω*—signifying to break or separate—that is to say, Anatomical Models which are composed of solid pieces which can be easily taken apart and put together: one part lifting from the other, as in a real dissection.



No. 1.—Man, Entire.

1. **Man, complete, 5 ft. 10½ in. high, with the nerves, veins and arteries; detachable and dissecting viscera and muscles, showing about 2,000 parts in detail (see cut on opposite page), and designed for the profound study of descriptive anatomy. A complete description accompanies each model. (See cuts.)**

Price, \$690

2. **Man, complete, 3 ft. 9 in. high, with same details as No. 1.**

Price, \$345

3. **Man, incomplete, 5 ft. 10½ in. high, for the use of institutions not making a specialty of medicine. This model represents on one side the superficial muscles and blood-vessels: on the other side, the muscles, nerves and blood-vessels of the deeper layer, and containing in the splanchnic cavities the same organs as the complete model, equally separable and dissecting.**

Price, \$288

4. **Man, incomplete, 3 ft. 9 in. high, arranged like the preceding.**

Price, \$180

5. **Model of Woman, of the same size and attitude as the Venus de Medicis, showing the superficial muscles, veins and arteries, and internal and external generative apparatus. The anterior wall of the abdomen is detachable, exhibiting beneath all the organs contained in the thoracic and abdominal cavities, the organs of generation, the muscles, nerves, arteries, veins and all the viscera. These latter can be removed separately.**

Price, \$240

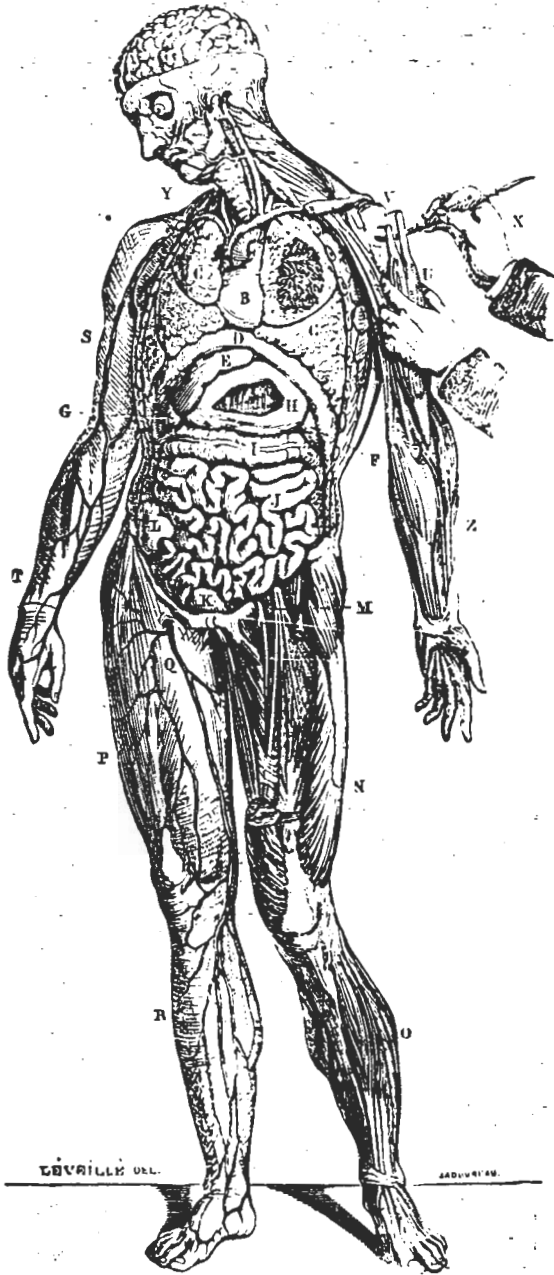
6. **Pelvis of Woman**, with the external and internal organs of generation, lumbar vertebræ, diaphragm, muscles, the aponeuroses of the perineum, arteries, veins and nerves. Price, \$72

7. **Pubis of Woman**, with the external and internal organs of generation, and two uteri, showing the fœtus at 1 and 3 months. Price, \$36

8. **Ovology: Development of the Germ in Mammals.** A collection of more than 20 pieces, greatly enlarged, showing the formation of the ovule in the ovary, its passage into the Fallopian tubes, and its fecundation, thus permitting one to follow day by day almost all the modifications which the germ and its envelopes undergo; the vitelline vesicle, the allantoïd vesicle, the blastodermic spot and leaves, from the first day to the thirtieth; that is to say, from the appearance of the ovule in the ovary to the formation of the embryo. The model gives a summary of all the modern works upon this subject. Price, \$72

9. **Set of Eight Uteri**, showing the fœtus at 1, 2, 3, 5, 8 and 9 months, with examples of ovarian and tubary gestation. Price, \$72

10. **Egg of the Hen**, enlarged 148 times (dimensions of the *Æpiornis* egg. Is. Geoffroy Saint-Hilaire), upon which, by means of four different sections, can be studied the structure and development of the egg in the class *Aves*. This immense preparation displays the metamorphoses of the vitellus, the vitelline vesicle and the formation of the allantois, and renders easy the study of embryology in birds. Price, \$36



No. 1.—Man, partially dissected.

11. Pelvis of Man, with external and internal organs of generation, muscles, aponeuroses of the perineum, arteries, veins and nerves. Price, \$72

12. Brain of Man, showing cerebrum, cerebellum, annular protuberance and spinal bulb; a preparation upon which, by means of sections made after the manner of Vieq d'Azyr, one can follow the medullary fasciculi of

the bulb, and demonstrate the form of each constituent part of the encephalic mass, the annular protuberance, the medulla oblongata, and origin of the cranial nerves.

Price, \$36

13. Cerebellum and Entire Spinal Cord, with the anterior and posterior roots of all the spinal nerves. Price, \$14.40

NOTE.—Nos. 12 and 13 adjusted, and with a single cerebellum, constitute No. 64a.

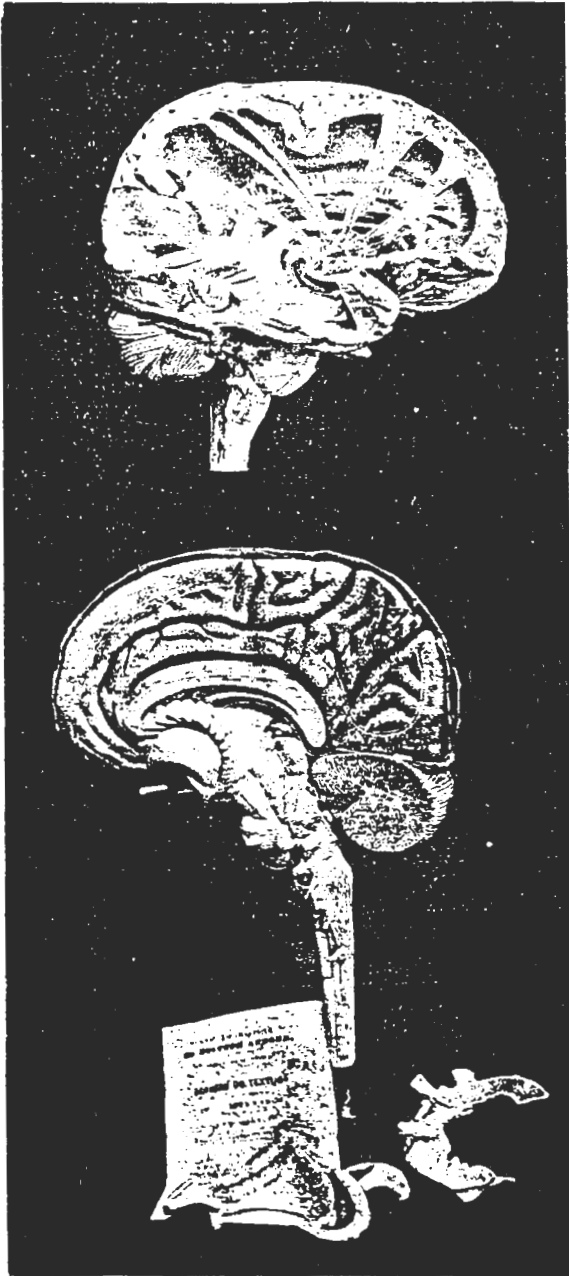
13a. Isthmus of the Encephalon, or *Medulla Oblongata*.

This piece, made of large proportions and according to the most recent works, follows the passage of the fibres of the spinal cord across the bulb, the annular protuberance and the cerebral peduncles to within the cerebrum. It also traces the gray substance or horns of the medulla to its blossoming from the floor of the fourth ventricle; and shows the origin of the cranial nerves, the parts adjacent to the bulb, the peduncles of the cerebellum, their passage, etc.

Price, \$38.40

14. Brain of Man greatly enlarged. (See cut.)

Upon this piece one can follow the course of the nerve fibres in every part of the encephalic mass. This model,



Auzoux Brain. No. 14.

designed after dissections made upon brains hardened with chromic acid according to the directions of Dr. Luys, sums up the labor of the ancient and modern anatomists. Not only does it enable one to see the form of each peculiarity remarked in the cerebrum, cerebellum, bulb and upper part of the spinal cord, but it places within the comprehension of all the mechanism by which impressions arrive at certain portions of the brain and by which the will is transmitted to each of our organs. This entirely new method of studying the brain opens a great career of discovery and observation to philosophers and physicians.

Price, \$72

*This is the finest model of the brain with which we are acquainted.*

15. **Brain of Man of natural size**, showing upon one of the hemispheres the anatomy of structure; upon the other, the dissections of Vicq d'Azyr, which enable one to see each anatomical peculiarity noted in the older authors.

Price, \$54

**NOTE.**—These different models of the brain show all the volutions and anfractures which are at the present time described.

16. **Dura Mater**, with a portion of the base of the skull (twice the natural size) exhibiting this membrane in its entire extent, its folds, all the venous sinuses, glands of Pachioni, etc.

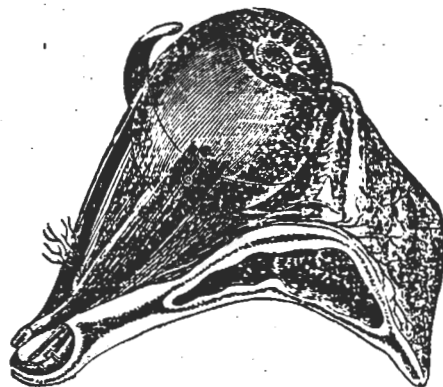
Price, \$19.20

17. **Heart of Adult**, separable into two portions, showing the arrangement of the cavities, muscular fibres, arteries and veins, with their orifices, valves and nerves.

Price, \$12

18. **Heart of Fœtus**, arranged like the preceding, and showing besides, the disposition of the orifice of Botal (*foramen ovale*), Eustachian valve, arterial canal, etc.

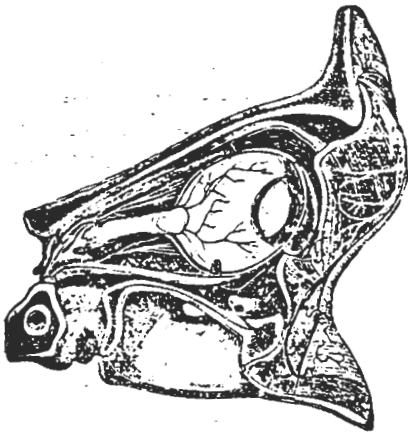
Price, \$12



Auzoux Eye. No. 19.

19. **Eye complete, greatly enlarged** (see cut). Upon this new edition are found, as upon the preceding ones, the muscles, arteries, veins, nerves, membranes, vitreous humor, crystalline lens, etc., each part detachable; and besides, the model shows the various microscopic layers of the retina, choroid coat and iris as demonstrated by the modern anatomists.

Price, \$18



Auzoux Eye, No. 20.

20. Eye, same as preceding, *cut vertically* (internal half only), with a portion of the orbit, exhibiting the muscles, arteries, veins, nerves, membranes, humors, disposition of the anterior and posterior chambers, *conjunctiva*, the structure of the eyelids, glands of Meibomius, the lachrymal points (*puncta lacrimalis*) and canals, the membrane of Horner, etc.: and, as in the complete eye, it displays the microscopic details of the iris, choroid and retina. An excellent and interesting model.

Price, \$19.20

21. Ear (temporal, 2 feet long), new edition, showing the external, middle and internal parts in their smallest details, the expansion of the auditory nerves, etc. A preparation upon which have been reproduced the recent observations of Corti, Rosenthal, Lewenberg and Reisner. This enlarged model facilitates the comprehension of the play of the ossicles, the function of the round and oval windows, of the membranous canals, of the endo-lymph, of the peri-lymph, of the double flight of the cochlea, of the infundibulum, of the action of the air contained in the middle ear, and places within the understanding of all the marvelous mechanism of hearing. Price, \$48
22. Ear (temporal, 1 foot long), offering only the principal details reproduced upon the preceding. Price, \$24
23. Ear of Bird, greatly enlarged. Price, \$19.20
24. Ear of Fish, greatly enlarged. Price, \$19.20
25. Half of Head, enlarged, showing in their smallest details all parts found at the base of the skull, the divisions and anastomoses of the fifth and seventh pair of nerves, the nervous ganglia, the eye, ear, nasal fossa, mouth, tongue, pharynx and larynx, with the muscles and blood-vessels. Price, \$72
26. Larynx, twice natural size, with the cartilages, muscles, blood-vessels and nerves. Price, \$6
27. Larynx, showing same details as the preceding, and besides, the artery of the trachea and the divisions of the bronchi to their smallest ramifications. Price, \$12
- 27a. Larynx, twice natural size, cartilages and vocal cords only. Movable articulated so as to demonstrate the glottis, the play of the vocal cords, and the marvelous mechanism for the production of sound. Price, \$6
28. Larynx, greatly enlarged (1 foot long), all the portions, muscles and cartilages separably removable. This model shows the action of each muscle, of the vocal cords, and the mechanism by which the voice is produced. Price, \$36

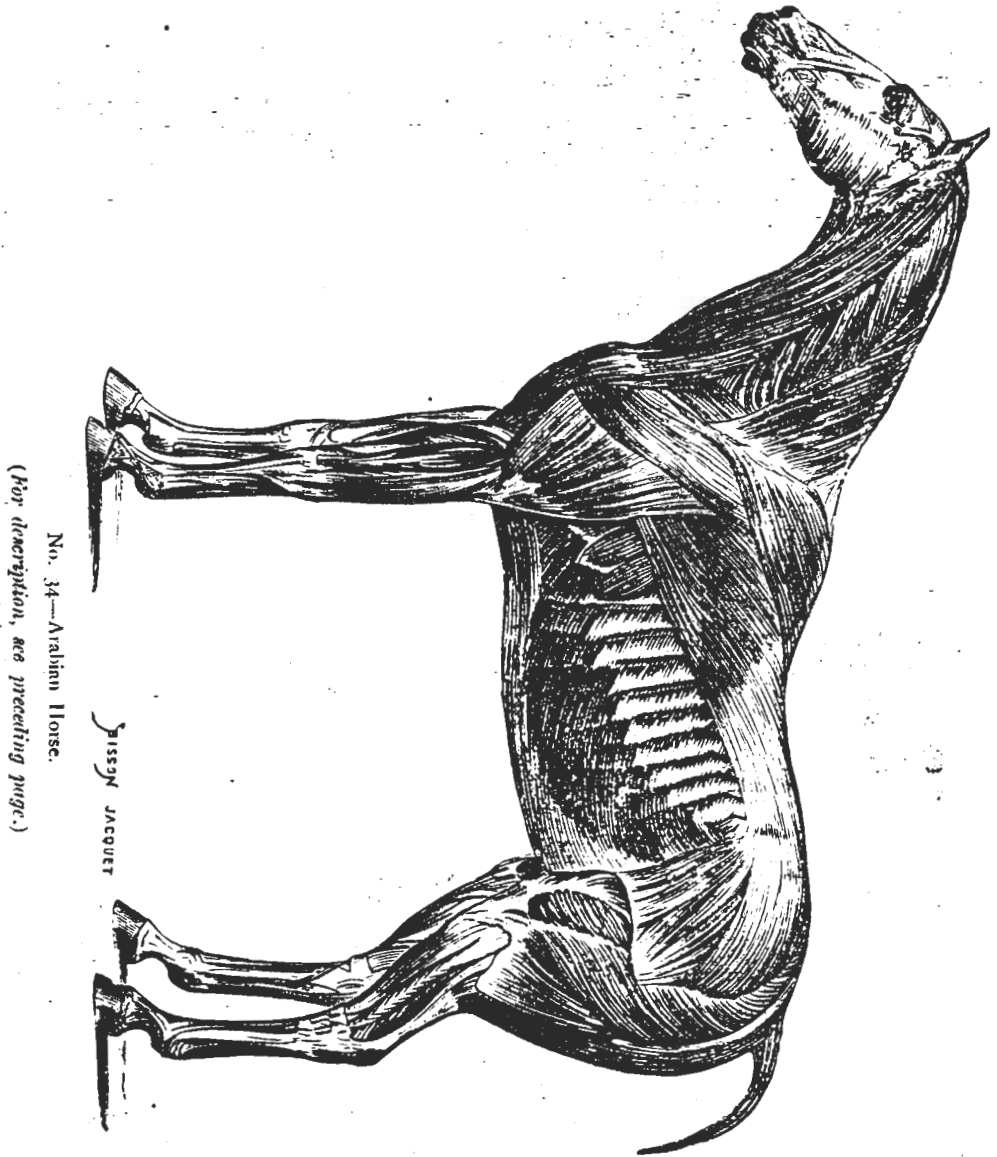


29. **Tongue** (same proportion as preceding) which can be adjusted to the larynx, showing in their smallest details the muscles, glands, nerves and blood-vessels. Price, \$36
- 29a. **Larynx and Tongue**, being the last two combined. Price, \$72
30. **Hand** (twice natural size), with muscles, tendons and tendinous sheaths disposed in such manner as to show the action of the interosseus and lumbrical muscles indicated by Dr. Duchenne, of Boulogne; the arteries, veins, nerves, corpuscles of Pacini, and a portion of the skin with its various layers. Price, \$48
31. **Gorilla**. The largest of all the apes, native of the Gaboon, 5 ft. 2½ in. high, showing the complete anatomy, viz.: bones, muscles, veins and arteries, nerves, and viscera. All the organs, reproduced according to nature and arranged in the same manner as the complete man (p. 52), are removable. The gorilla is one of the most interesting, as well as one of the rarest of the anthropoids, and is destined to figure prominently in future anthropological deductions. Price, complete, \$690
32. **Gorilla**, with bones, muscles and viscera only. Price, \$480
33. **Gorilla**. Skeleton (elastic). Price, \$120
- For actual skeleton, see our *Catalogue of Comparative Osteology*.

### VETERINARY MODELS.

34. **Arab Horse, complete** (4 ft. 3 in. high), offering in detail more than 3,000 objects, and separating into 97 pieces, showing upon one side the muscles, nerves and blood-vessels of the superficial layer, which are not removable; and upon the other side the muscles, nerves, arteries and veins, detaching one by one, as in dissection, from the superficial layer to the skeleton. In the splanchnic cavities are found all the organs contained therein, which can be removed and studied separately. This model of the horse, which leaves nothing to be desired, has been adopted by the Cavalry Corp. Veterinary and Agricultural Schools of France, and has been procured by many foreign governments (also by our own), as a means of popularizing the ideas of anatomy and physiology necessary for the amelioration of the equine race, and for the choice, employment, and preservation of the horse. (See cut on next page.) Price, \$920
35. **Horse, incomplete**, exhibiting upon one side the muscles, nerves, arteries and veins of the superficial layer; and on the opposite side those of the inner layer only. In the splanchnic cavities all the organs are separately removable as in the complete model. Price, \$460
36. **Jaws of Horse**, showing clearly the age at various epochs of life, from birth to the most advanced age, with examples of dentition of orbiting horses, etc. Set of 30 models in handsome chest. Price, \$96
37. **Diagram of Horse's Teeth**, showing in relief their form and organization. Price, \$1.80

38. **Jaws of Ox**, showing clearly the age at various epochs of life. The collection is composed of 14 models in handsome chest. Price, \$36



(For description, see preceding page.)  
No. 34—Arabian Horse.

J. ISSON  
JACQUET

39. **Leg of Horse**, from eight inches above the hock downward, with skin removed. The portion of the hock on which disease occurs is removable and can be replaced by portions of diseased bone, showing, by means of 13 different pieces, the various bony maladies known as *spavin*, *curb*, *splint*, *ring-bone*, etc., in different stages of development. Price, \$36
40. **Leg of Horse**, with skin removed, showing diseased bone; not detachable. Price, \$12
41. **Leg of Horse**, with examples of bony diseases. Price, \$12
42. **Leg of Horse** in state of health, covered with skin. Price, \$12

# DR. CHISOLM'S INHALER: A RARE CONFEDERATE MEDICAL INVENTION\*

F. T. HAMBRECHT, M.D.\*\*  
M. RHODE  
A. HAWK

Despite romantic tales about biting bullets, soldiers during the American Civil War were almost always anesthetized with either chloroform or ether during major surgical procedures such as limb amputations and joint excisions. Chloroform was generally preferred because unlike ether, it was non-flammable. This was especially important when operating at night with illumination by an open flame. Unfortunately for the Confederate States of America, a blockade was imposed along its coasts by the Union Navy making importation of chloroform increasingly difficult as the war progressed. To conserve this scarce drug, Confederate surgeon J.J. Chisolm invented an ingenious portable inhaler.<sup>1</sup> Recently, new information has been discovered about the value of this inhaler, how it was used, and how its reputation spread, leading to its being marketed throughout the United States for many years after the war.

## THE INVENTOR

Julian John Chisolm was born in Charleston, South Carolina, in 1830 and received his medical degree from the Medical College of the State of South Carolina in 1850. Pertinent to the invention of the inhaler was Chisolm's interest in military medicine.

Before the Civil War he spent time in European military hospitals during the Crimean War studying treatment techniques.<sup>2</sup> This experience served as the basis for the first Con-

federate surgical manual which he published in 1861 with subsequent editions in 1862 and 1864.<sup>3</sup> The exposure also made him a valuable asset to the newly formed Confederate Medical Department which had few physicians with firsthand knowledge of military medicine. During the war, after a brief period in Richmond, Virginia, setting up hospitals, Dr. Chisolm served as a surgeon and as a medical purveyor for the medical department, first in Charleston and later in Columbia, South Carolina. Also with Dr. Joseph LeConte, he set up a Confederate medical laboratory for preparing and testing drugs in Columbia.

## THE INVENTION

Soon after the war, Dr. Chisolm and Dr. George Alexander Otis, the curator of the recently founded Army Medical Museum in Washington, began a correspondence which would continue until Dr. Otis' death in 1881. Chisolm sent Otis one of his inhalers which is believed to be the actual device illustrated in Figure 1 and is probably the only surviving Confederate manufactured Chisolm inhaler. In late 1866, Otis informed Chisolm that he had "referred the ingenious inhaler to Bvt. Major Wm. M. Notson, Asst. Post Surgeon in Washington, D.C. who plans to employ your instrument for induction of anaesthesia in several surgical cases. I will ask Asst. Surgeon Wm. Thomson, in charge of the Post Hospital here to experiment with it also."<sup>4</sup>

Although no written reports could be found, these experiments must have been successful because Dr. George F. Shrady, editor of the *Medical Record* in New York wrote a glowing editorial in 1867 claiming that "those who tried this inhaler speak of it in unqualified praise."<sup>5</sup>

During the war, George Tiemann & Company was a major supplier of surgical instru-

\* From the Neural Prosthesis Program, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, Maryland; and the National Museum of Health and Medicine, Armed Forces Institute of Pathology, Washington, D.C.

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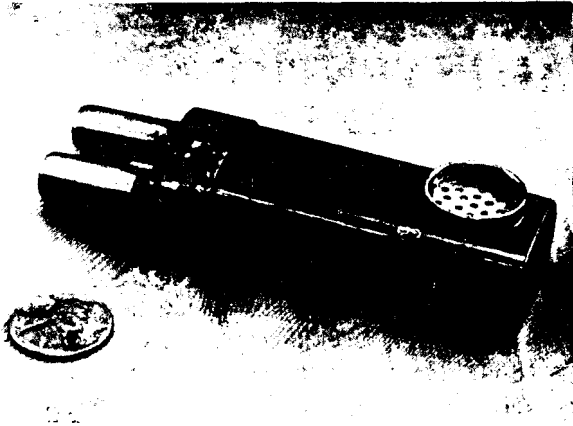


Figure 1a



Figure 1b

**FIGURE 1a & b.** Handmade Chisolm inhaler fabricated of brass with a black painted finish and a piece of sponge inside the flattened cylinder. This is believed to be the original model sent by Dr. Chisolm to Dr. George Otis of the Army Medical Museum in 1865 or 1866. It is shown in both its operational (a) and compact configurations (b). Dimensions in the operational configuration are  $3\frac{3}{4}$  inches (length),  $1\frac{1}{4}$  inches (width),  $\frac{7}{8}$  inches (thickness), while in the compact configuration the length is reduced to  $2\frac{1}{2}$  inches. The flattened cylinder, alone, is  $2\frac{1}{2}$  inches long and  $1\frac{1}{4}$  inches wide which are very close to the dimensions cited by Otis in the MSHWR. (Courtesy of the Historical Collections, National Museum of Health & Medicine, Armed Forces Institute of Pathology, Washington, DC. The original artifact number was AMM 4910 but is now M-710-00004.)

ments to the Union Army and, indirectly through captured and smuggled supplies, to the Confederate Army. After the war, George Tiemann was quick to realize the commercial potential of Chisolm's inhaler. The illustration of the inhaler accompanying Dr. Shrady's editorial reveals the G. Tiemann Co. imprint stamped on the case which implies that Tiemann was manufacturing the instrument in early 1867 just a year and a half after the end of hostilities.

As part of its advertising, Tiemann & Co. republished Shrady's article on the inhaler in a collection of promotional brochures.<sup>6</sup> This probably expanded sales because Shrady pointed out that "Dr. Chisolm has long used it as a chloroform inhaler, but we see no reason why its usefulness should not be extended to include the administration by inhalation of any of those volatile preparations which are now deservedly considered remedies of no small value in treatment of affections of the throat." Dr. Shrady explained that the principle of the instrument was similar to a surgeon pouring anesthetic on "the folded handkerchief or towel which we have always considered the most convenient and safe method of administering chloroform" without the disadvantage of having been made to "take chlo-

roform whilst administering it to our patients; and as the greater part of the chloroform poured upon the cloth evaporates into the air of the room, all persons around the patient are more or less influenced by the evaporation. The object of the inhaler is to confine the volatile fluid to the patient alone." In operation "the patient inhales through the nose alone; and should any of the annoying sensations about the throat be experienced, he can immediately relieve himself by opening his mouth. As by its use the patient quietly passes into sleep, all struggling is avoided."

The Tiemann brochure made the following claims for the inhaler, "1st, its simplicity; 2d, safety in its use as a mode of administering chloroform, as the patient must always get a diluted vapor, sufficiently mixed with atmospheric air; 3d, economy in the use of chloroform, as one drachm [ $1/8$  ounce] is made to do the full work of one or two ounces upon the handkerchief; 4th, the unassuming appearance of the instrument, which does not frighten timid patients . . . 5th, Portability. The entire instrument is not much larger than an ordinary lancet case, and can be readily carried in the vest pocket, without inconvenience." Such a Chisolm inhaler, manufactured by Tiemann, after the war, is shown



Figure 2a

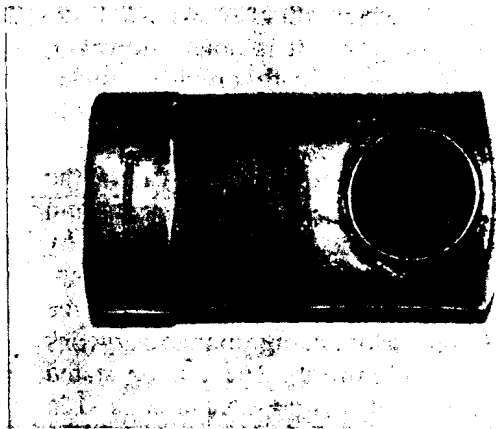


Figure 2b

**FIGURE 2a & b.** Chisolm inhaler manufactured by George Tiemann & Co., New York, after the Civil War. This model appears to have a German silver body and hard rubber nose pieces. The original sponge or folded cloth is missing from the inside. Dimensions in the operational configuration (a) are 3 inches (length), 1 1/4 inches (width), and 3/8 inches (thickness). In the compact configuration (b) the length is reduced to 2 3/4 inches. (Courtesy of the Waring Historical Library of the Medical University of South Carolina, Charleston, SC.)

in Figure 2.

A major effort was made by the Surgeon General's Office of the United States Army both during and for about 15 years after the Civil War to collect case reports, medical statistics, details on surgical instruments, etc. for publication in the six volume *Medical and Surgical History of the War of the Rebellion* (MSHWR). Dr. Otis assumed major responsibility for the three surgical volumes. In doing so he wrote to Chisolm in 1879 inquiring, "Where you speak of chloroform at page 427 of the third edition of the Manual you make no allusion to the apparatus for chloroform inhalation devised by you. . . . Please tell me whether this inhaler was much employed in the Confederate Army practice and by what maker it was fabricated prior to the conclusion of the war." Although Chisolm's reply has been lost, there are clues that suggest possible answers to Dr. Otis' questions. Since Chisolm did not mention the inhaler in the 3rd edition of his manual which was published in 1864 and the editing of this edition was probably completed by the end of 1863, the inhaler was most likely invented in 1864 or early 1865. As to the first maker of the inhaler, it couldn't have been George Tiemann because he was in the North. However, Chisolm often used Frederick W. Thauss in Charleston, to make surgical instruments such as bullet forceps.<sup>8</sup> Since Mr. Thauss was a

locksmith by trade, there is a good chance that he made the original inhaler. The question of whether the inhaler was much used in Confederate practice is harder to answer. The fact that only one Confederate manufactured model has been found and the presumed late invention of the device would suggest that it saw very limited use. Also there was no mention of the instrument in the *Confederate States Medical and Surgical Journal* which was published from January 1864 to February 1865.

Dr. Otis felt that the inhaler was a significant medical advancement resulting from the Civil War and included both a description of it and an illustration in the MSHWR.<sup>9</sup> He noted "In the southern armies, where chloroform was scarce, Surgeon JJ Chisolm, finding that much chloroform was wasted" by conventional methods "employed a flattened cylinder two and half inches long and one inch wide in its broadest diameter, having in one of its broadest surface a perforated plate. Attached to the cover are two nose pieces. When the instrument is not in use these projections can be pressed into the cylinder, thus diminishing the size of the instrument. In the interior of the cylinder is found a piece of sponge or what is much better a bent wire, over which is folded a piece of cotton cloth. The chloroform when dropped through the perforated plate is received upon the sponge

or folded cloth, which offers an extended surface for evaporation." It is noted, however, that Otis did not specifically provide answers to the questions he addressed to Chisolm in 1879.

Twenty-four years after the war in the 1889 issue of the *American Armamentarium Chirurgicum*, a trade catalog published by George Tiemann & Co., the inhaler was touted as an ether inhaler, perhaps reflecting the increased popularity among civilian surgeons of ether over chloroform. The catalog stated that the instrument was now manufactured in either German silver or nickel-plated brass.

As necessity is the mother of invention so this ingenious and truly useful inhaler was invented by Dr. J.J. Chisolm during the Confederacy's period of greatest need. Fortunately, its concept survived the war to serve the populations of both of the combatants. □

#### ACKNOWLEDGEMENTS

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## ANTIQUES

BY ANN MC CUTCHAN

# Collectibles are lifted to new status

Whiskey decanters, pillboxes, cough syrup bottles, ashtrays, cocktail shakers... these items have enjoyed "collectible" status for years.

Now they're considered important enough to be featured in a major exhibition — as cultural artifacts, not antiques.

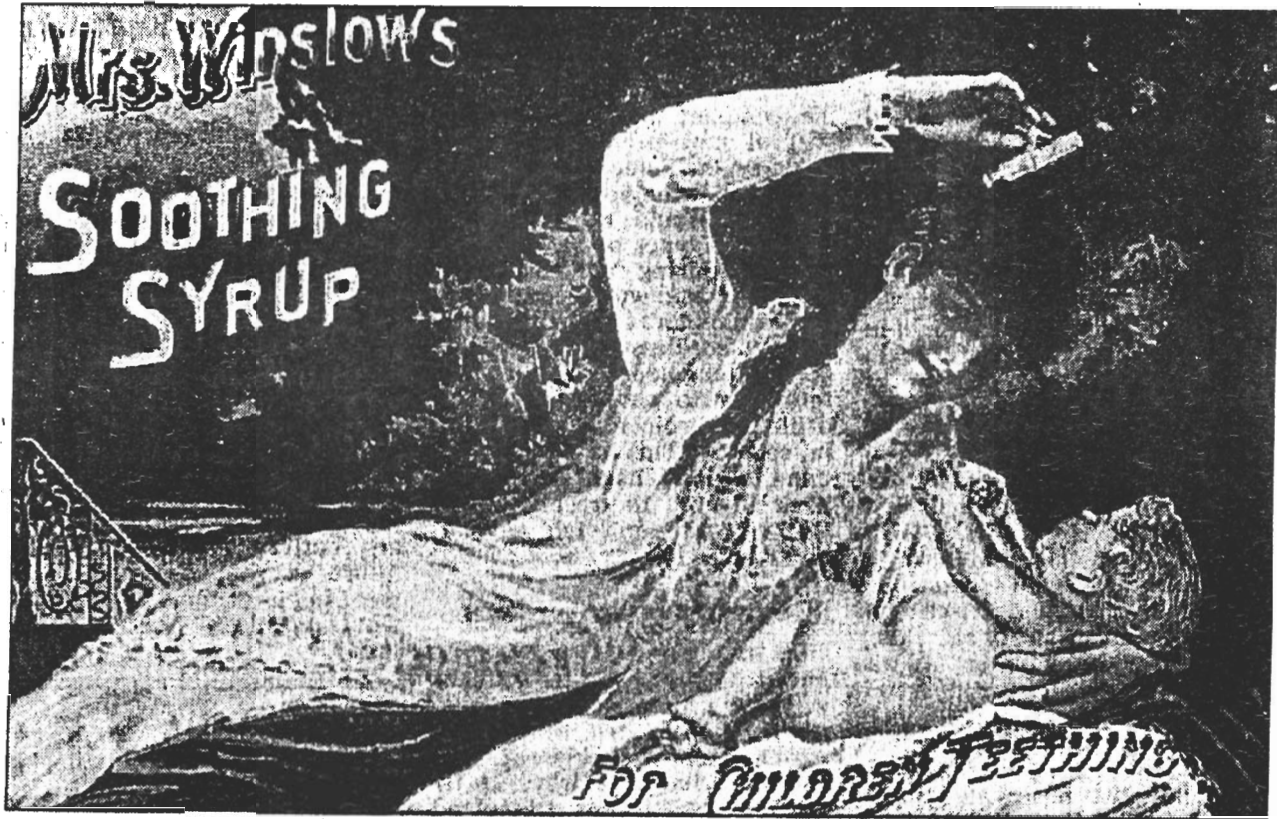
The venue is "Altered States: Alcohol and Other Drugs in America," a new multimedia exhibit at the Strong Museum in Rochester that contains one of the most comprehensive displays of substance abuse memorabilia ever assembled. The exhibit is set to open Oct. 24.

There are about 400 drug-related artifacts in the show, gathered from more than 50 institutions and private collectors. Among them are drug paraphernalia, a 1790 whiskey still, an 1898 medical model of a heroin addict's arm, advertising, posters, and medicine bottles.

There is even a crack house door, on loan from the Rochester Police Department.

From the first planting of tobacco in Jamestown in 1611 through the distribution of heroin in the '90s, American society has always maintained "drugs of choice."

Some are relatively innocent, like coffee. But even highly dan-



**Mrs. Winslow's Soothing Syrup, an opium-laced syrup used to quiet the little ones, is part of the exhibition 'Altered States: Alcohol and Other Drugs in America,' at the Strong Museum in Rochester.**

gerous substances have enjoyed periods of acceptability; the all-American beverage Coca-Cola once contained cocaine, and Bayer once sold a cough syrup laced with heroin.

Bottle experts have long chuckled over the high booze content of bitters, a popular late-19th century aid to digestion that contained as much as 42 percent (84 proof) alcohol, depending on the brand.

The most unusual bitters bottles, such as the "Indian Queen" figure of Brown's Celebrated Indian Herb Bitters, now bring

hundreds of dollars apiece at auction.

And as the 1950s recedes from memory, an increasing number of sentimentalists are combing shops and thrift stores for souvenirs of the nights they couldn't sleep because Mommy and Daddy were serving martinis to the neighbors downstairs.

Chrome drink shakers start at \$30 and climb, depending on design and condition. Swizzle sticks are not to be ignored; they have their own club (International Swizzle Stick Collectors Association, P.O. Box 1117, Bellingham,

Wash. 98227-1117).

Even the day-glo marijuana posters of the late '60s and early '70s attract collectors.

"Altered States" will be of interest to all devotees of American kitsch and culture.

The exhibit is also accompanied by a significant drug education component and a national symposium on drug use and abuse. For more information and future exhibition sites, write Strong Museum, One Manhattan Square, Rochester, N.Y. 14607.

*Ann McCutchan writes for Gannett News Service.*