1912

The Daniel Baugh Institute of Anatomy of the Jefferson Medical College of Philadelphia: History of its Foundation, Description of the Building and of its Adaptability to Teaching Anatomy

Jefferson Medical College

Follow this and additional works at: http://jdc.jefferson.edu/jeffersonhistorybooks

Part of the American Art and Architecture Commons, and the History of Science, Technology, and Medicine Commons

Recommended Citation

http://jdc.jefferson.edu/jeffersonhistorybooks/4
The Daniel Baugh Institute of Anatomy of the Jefferson Medical College of Philadelphia

History of its Foundation
Description of the Building and of its Adaptability to Teaching Anatomy

DEDICATION EXERCISES

PHILADELPHIA, 1912
THE DANIEL BAUGH INSTITUTE OF ANATOMY OF THE
JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA
is administered by the Board of Trustees of the College. The
details of instruction, examination and discipline are delegated to
the Director of the Institute, who is also Professor of General
Anatomy, subject to the approval of the Board of Trustees.

Staff of Department of General Anatomy

EDW. ANTHONY SPITZKA, M. D., Professor of General Anatomy and
Director of the Institute.

HOWARD DEHONEY, M. D., Demonstrator of Anatomy.

H. E. RADASCH, M. Sc., M. D., Assistant Professor of Histology and
Embryology.

W. C. PRITCHARD, M. D., Demonstrator of Histology and Embryology.

D. GREGG METHENY, M. D., L. R. C. P. & S. (Edinburgh), L. F. P. S. (Glasgow).
Demonstrator of Osteology and Syndesmology.

W. J. ROE, M. D., Assistant Demonstrator of Anatomy.

C. W. BONNEY, M. D., Assistant Demonstrator of Anatomy.

J. F. LITTLE, M. D., Assistant Demonstrator of Anatomy.

F. C. ABBOTT, M. D., Assistant Demonstrator of Anatomy.

J. LESLIE DAVIS, M. D., Assistant Demonstrator of Anatomy.

GEORGE W. MILLER, M. D., Assistant Demonstrator of Anatomy.

GEORGE P. PILLING, M. D., Assistant Demonstrator of Anatomy.

NATHAN BLUMBERG, M. D., Assistant Demonstrator of Anatomy.

WARREN B. DAVIS, M. D., Assistant Demonstrator of Anatomy.

(Resigned since Dedication)

ROBERT W. BRACE, M. D., Assistant Demonstrator of Anatomy and Prosector.

MISS M. BREMERMAN, Secretary and Librarian.

J. WESLEY SMITH, Preparator.
The Daniel Baugh Institute of Anatomy
of
The Jefferson Medical College of Philadelphia

History of its Foundation
Description of the Building and of its Adaptability to Teaching Anatomy

DEDICATION EXERCISES

PHILADELPHIA, 1912
The Daniel Baugh Institute of Anatomy

THROUGH a generous gift by Mr. Daniel Baugh, a member of the Board of Trustees of The Jefferson Medical College, the building at Eleventh and Clinton Streets, recently the Pennsylvania College of Dental Surgery, was purchased and extensively altered to suit the needs of the Department of General Anatomy, including its divisions of Histology and Embryology.

The alterations were begun in February, 1911, and were practically completed on the day of the dedication and opening of the Institute on September 26th of the same year.

The establishment of this Institute of Anatomy as an important adjunct to The Jefferson Medical College and Hospital, and estimated to have cost over $150,000, is in line with the trend of the recent advances that have taken place in the character of medical teaching evolved in the best schools of America and Europe, and emphasizes the cardinal part which Anatomy plays in the medical curriculum.

The architect supervising the alterations was Mr. John T. Windrim, while the major part of the contract work was done by Jacob Myers & Sons.

LOCATION AND DESCRIPTION.

The building is situated at the northeast corner of Eleventh and Clinton Streets, with a wing extending north to Cypress Street. It extends 115 feet along Clinton Street, 40 feet along Eleventh, while the wing is 100 feet deep with a frontage of 40 feet on Cypress Street, so that the ground floor space is 7,000 square feet. The total floor space in the entire building, including the basement, is about 29,350 square feet.

The following is a general description of the building:
BASEMENT FLOOR.

Here are situated (1) a cadaver box 60 feet long, 20 feet wide and 9 feet high, insulated by layers of concrete, nonpareil cork, waterproof paper, wood and cement. A series of six overhead tracks and rolling hangers accommodate over 350 cadavers. Access to the interior is afforded by a vestibule guarded by regulation refrigerator doors to insure against undue loss of cold through opening the door. The refrigeration is accomplished by means of an ammonia gas compression and expansion plant, operated by an electric motor. (2) A commodious preparation room, affording convenient access to the cadaver box and to the prosecting rooms and incinerating plant, is provided with tables, air-compressor, gravity-injecting apparatus, appliances for making the injecting fluids and macerating tanks fitted with steam coils. (3) An incinerator, devised by T. Gamon, which has proven to be very satisfactory for the reduction of refuse without noisome odor or smoke. (4) A steam boiler for supplying the building with heat. (5) A hot water generator, (6) a water supply pump and (7) a coal bin holding over twenty tons.
Along the Clinton Street side, west of the preparation room, there are two prosecting rooms, suitable for accommodating three dissecting tables each, provided with overhead lights of special design, and with lavatories and other conveniences for the staff assistants working there. Further west is a room for the storage of vats, containers and tanks to hold the special dissected material. Toward Eleventh Street, three rooms and several closets serve for general storage purposes. A small vault built under the sidewalk and provided with vents, serves for the storage of alcohol and other combustibles, while a fireproof vault is used for the safe keeping of valuable documents, drawings and specimens. The floor is of cement throughout.

An elevator shaft with a power-driven elevator, rises to all floors from the basement.

FIRST FLOOR.

On the Eleventh Street side a private entrance of marble, with a memorial inscription in the vestibule, leads to a hall with the Professor's Office and a chart drawing room on the right, while on the left are the Library and Staff Room. All the rooms are handsomely furnished. The Library contains the Professor's collection of books, pamphlets and journals, at the disposal of the students, and in charge of the Institute's Secretary, whose desks and telephones are also situated in this room. A handsome portrait of Mr. Baugh by Raditz adorns the north wall of the Library.

The Staff Room contains sixteen commodious metal wardrobes for the use of the members of the Staff.

MUSEUM.

This hall leads beyond the above-mentioned rooms to a well-lighted museum, 60 x 20 feet, in which wall cases, specially constructed table cases, contain the Department's collections, including notable preparations of skulls and other bones, models of dissections of various kinds, the Ziegler collection of models of embryos of man and other vertebrates, the Sabin models of the oblongata, casts of brains of various individuals and races, corrosion preparations and two models of the spinal cord devised by Prof. Gaylord P. Clark and placed in specially built cases and of easy access.
LOCKER ROOM AND LAVATORY.

North of the Museum is a Locker Room, with pressed steel metal lockers sufficient for 336 students. Adjacent to the Locker Room and also accessible to the main corridor, is a commodious Lavatory for the students.

CLINTON STREET ENTRANCE.

The main corridor is approached by the students through a decorated marble entrance of handsome design. A small room flanking the entrance serves for the storage of janitorial supplies, such as brooms, brushes, towels, soap, etc. This corridor leads to the Museum, the Locker Room, the Students' Lavatory, the Preparation and other basement rooms and,—for the instructors only,—to the Lower Amphitheatre.

LOWER AMPHITHEATRE.

The Lower Amphitheatre measures 37 x 43 feet and is 20 feet high. The seats accommodate 160 students and are fitted with arm rests for note-taking. It is fitted with a fireproof projectoscope box in which is placed the latest type of Balopticon apparatus, together with suitable cases for permanently holding lantern slides and specimens and capable of being locked up when not in use. This amphitheatre is fitted with large blackboards, a chart rack, a projection screen and illuminating reflectors. Two 18 inch electric fans can be used for refreshing the room by exhausting foul air after each session.
SECOND FLOOR.

(1) LABORATORY OF HISTOLOGY AND EMBRYOLOGY.

Along the Clinton Street side stretches a fine laboratory for the practical work in Histology and Embryology, as well as in Visceral Anatomy as it is treated from biologic view-points. This laboratory is 100 feet long and 20 feet wide. It is fitted with Albarene tables, affording each student a table top 36 x 30 inches, and accommodating a total of 60 students at a time. Between each pair of students is a two-way gas-cock for Bunsen burners, an electric light with d'Olier reflector and waste basket of wire.

LABORATORY OF HISTOLOGY AND EMBRYOLOGY

Each student is provided with a locker and a full equipment of microscopes, dissecting microscopes, stains, reagents, etc., which in addition to the sinks, basins, wash-bowls and other appliances, makes this one of the best equipped laboratories of its kind. At the eastern end of the laboratory there is an office for the Assistant Professor of Histology and Embryology.

(2) RESEARCH ROOM.

The Research Room faces on Eleventh Street and is fitted with Albarene tables and metal shelves for all the necessary
reagents, stains, microtomes and other laboratory appliances. This room is intended for the pursuit of advanced researches in various fields of investigation, other than those in the morphologic study on the brain, which will be carried on in the Professor’s private laboratory.

(3) Fireproof Incubating and Imbedding Chamber.

Adjacent to the Research Room is a commodious chamber, 17½ by 20 feet, of brick protected by a 4 inch thickness of magnesia block, finished with magnesia-lith, Macite block, wire lath and plaster with a concrete and cement floor and is fitted with an independent flue, fire-door and an exhaust blower. Here are placed the incubators and paraffin imbedding baths supplied by gas, and an Edinger projection apparatus for demonstrations to sections and for reconstruction work.

(4) Storage Room.

This room is 26 by 19 feet and contains metal shelves and closets for the storage of dyes, chemicals, apparatus and specimens.

(5) Professor’s Private Laboratory.

This room is adjacent to the main corridor and its windows open upon the rear light well. It is fitted with metal shelves and cabinets, repositories for the Professor’s collection of brains and other rare specimens and for the instruments specially used in advanced work, such as in the preparation of museum specimens, corrosion preparations, etc.

(6) Janitor’s Room—Bone Room, etc.

In the Cypress Street wing there is ample space for the preparator’s tool-room and for the bone collection. Each student is loaned a full set of the bones of the human skeleton, in a box resembling a microscope case, mahogany finished for the more leisurely study of the bones at his home. These as well as locker keys, etc., are issued from the Janitor’s Room.

All of the flooring is of the finest maple, except in the fireproof incubator room, the laboratory tables are fitted with vertebraled electric light stands with d’Olier reflectors, and the heating and ventilating systems are of the best modern type.

Great care was exercised in the selection of the colors of the paint used on the walls of the laboratories with the view of best subserving the demands of microscopic work.

THIRD FLOOR.

(1) Dissecting and Demonstrating Rooms.

On the third floor a space measuring 115 feet along Clinton Street and 40 feet along Eleventh Street has been divided by a corridor into two rows of rooms, separated from each other by substantial partitions seven and a half feet high and finished with white enamel paint. Along the Clinton Street side extend eight dissecting rooms capable of comfortably holding three or four dissecting tables each. Each table is illuminated by an electric light fixture of special design, fitted with Mazda lamps and with a ground glass base, giving a beautiful diffused light which is not glaring and, therefore, not tiring to the eye. Each room is provided with a blackboard and contains a wash-bowl with knee-acting valves and a drain in the asphalt floor, permitting of thorough flushing with the hose stream.
On the other side of the corridor there are four demonstrating rooms with raised platforms for the students and a table, blackboard, wash-bowl and floor drain in each. Above each demonstration room is a large skylight admitting north light. One of these demonstration rooms is used by the Assistant Professor of Pathology in morning hours for instruction in post-mortem technic.

Each of the dissecting and demonstration rooms is provided with large sliding doors and the whole series is excellently ventilated by an exhaust-blower system.

(2) Study Collection Room.

At the east end of the Clinton Street side is a Study Collection Room, an equivalent of the German "Lernsammlung" for the more careful and leisure examination of properly prepared specimens, dissections, etc. This is an auxiliary to the Museum, where wet specimens cannot well be handled.

The entire third floor is covered with concrete, asphalt and lithoplast, and water-taps are so arranged that the entire floor may be thoroughly flushed clean with a hose stream.
UPPER AMPHITHEATRE.

This amphitheatre is illuminated by a skylight, large windows and electric lights. The chart rack and the drawing boards (white and black) are illuminated by reflectors and an electric light fixture of special design, which may be raised or lowered at will, is employed to illuminate the specimen table in the pit. The seats, 188 in number, are fitted with arm rests for note-taking. Under the amphitheatre, convenient to the lecturers' approach to the pit, are situated the chart cases. The Department possesses over 600 charts of recent make.
FOURTH FLOOR.

Operative Surgery Room.

A commodious and well lighted room, situated over the Upper Amphitheatre, 35 x 37 feet, accommodates 18 dissecting tables and other equipments. The work in Operative Surgery, under the direction of the Gross Professor of Surgery and the Associate in Surgery, is done here. The floor is covered with concrete, asphalt and lithoplast, a large sink and several washbasins are provided and each table is illuminated with the specially designed electric light fixtures.

The Laboratory of Operative Surgery with two 18-inch fans and the Incubator Room is ventilated by a 12-inch fan. The heating plant is designed to maintain a temperature of 70 degrees F. in the severest winter weather, and is devoid of hammering or cracking in the pipes.

The foregoing is a description chiefly of the new quarters in which the Department of General Anatomy will continue its work. Little mention is made of the material and apparatus already in the Department's possession and removed from the College Building. That they are ample may be judged from the general statement that there are thousands of specimens for use in gross anatomy, thousands of specimens in the bone collection, hundreds of specimens for the course in Visceral Anatomy, many series of sections of embryos, brains of eminent men, of various races, of murderers, etc., many models and casts and over six hundred charts drawn by the professor and others. A series of corrosion preparations has had its beginning and will be amplified under the more favorable conditions afforded by this new Institute.

The entire building has been painted inside and out and a new cement pavement has been laid along the entire frontage of the building. Ample fire exits and fire escapes have been provided, and fire extinguishers and axes have been placed under an expert's directions. A most elaborate system of electric wiring has been installed, as well as a complete inter-communicating telephone system. All rooms are ventilated with galvanized iron ducts. One 48-inch Sirocco fan is capable of exhausting 600,000 cubic feet of air an hour. Each of the amphitheatres is provided with two 18-inch fans and the Incubator Room is ventilated by a 12-inch fan. The heating plant is designed to maintain a temperature of 70 degrees F. in the severest winter weather, and is devoid of hammering or cracking in the pipes.

The foregoing is a description chiefly of the new quarters in which the Department of General Anatomy will continue its work. Little mention is made of the material and apparatus already in the Department's possession and removed from the College Building. That they are ample may be judged from the general statement that there are thousands of specimens for use in gross anatomy, thousands of specimens in the bone collection, hundreds of specimens for the course in Visceral Anatomy, many series of sections of embryos, brains of eminent men, of various races, of murderers, etc., many models and casts and over six hundred charts drawn by the professor and others. A series of corrosion preparations has had its beginning and will be amplified under the more favorable conditions afforded by this new Institute.
The number of students taught Anatomy and the ancillary branches—Histology and Embryology—enrolled in the Freshman and Sophomore Classes have been:

<table>
<thead>
<tr>
<th>Session</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1906-1907</td>
<td>158</td>
<td>139</td>
<td>297</td>
</tr>
<tr>
<td>1907-1908</td>
<td>168</td>
<td>159</td>
<td>327</td>
</tr>
<tr>
<td>1908-1909</td>
<td>130</td>
<td>144</td>
<td>274</td>
</tr>
<tr>
<td>1909-1910</td>
<td>126</td>
<td>115</td>
<td>241</td>
</tr>
<tr>
<td>1910-1911</td>
<td>181</td>
<td>113</td>
<td>294</td>
</tr>
<tr>
<td>In the D. B. I</td>
<td>179</td>
<td>157</td>
<td>336</td>
</tr>
</tbody>
</table>

In addition, the Junior Class, in sections, receives instruction in post-mortem technic (Department of Pathology) and in Operative Surgery (Department of Surgery) at the Institute.

Experience has shown that the methods in vogue in the Department of General Anatomy at The Jefferson Medical College during the past five years discourage the unworthy from continuing to pursue a course for which they prove unfit, and each year a score or more Freshman students drop out of the class before the mid-year examinations take place. The discouragement imparted to these delinquents comes from the odium of failure to keep up to the set standard in the exercises and rigid requirements of laboratory work, in dissecting as well as in Histology and Embryology. This process of natural elimination has for its result an exceedingly small percentage of failures among members of the same class in their Sophomore year. Although a definite program of work exists, one with which at least all students must keep pace, an able student is not debarred from surpassing such a fixed, perhaps arbitrary, schedule. A student who proves clever with scalpel, microscope, the brush and pencil, is given relief from the tedium of mere routine and is allowed sufficient latitude to do advanced work. The proportion of such talented and ambitious students has gradually increased with the raise of entrance requirement standards, but a sane limit has now been attained, and should not be over-reached.

The Dedication

of

The Daniel Baugh Institute of Anatomy

of

THE JEFFERSON MEDICAL COLLEGE

September Twenty-sixth, Nineteen Hundred and Eleven

The Trustees, Faculty and Students assembled at the College a little before noon and proceeded in a body to the Institute, assembling in its Lower Amphitheatre. Fully three hundred persons, as many as could gain admittance, witnessed the ceremonies. Mr. Potter, President of the Board of Trustees, said:

"Mr. Daniel Baugh, a trustee of The Jefferson Medical College and chairman of its hospital, has authorized me to formally hand over to the College authorities this splendid Institute of Anatomy.

"Mr. Baugh purchased and remodeled this property, and equipped it so scientifically and thoroughly that it is second to none other like Institution in the country.

"The trustees of The Jefferson College have, as a token of their appreciation of this munificent gift, named it in perpetuity, ‘The Daniel Baugh Institute of Anatomy of the Jefferson Medical College.

"Mr. Baugh's gift is a most important event in the history of this great College. Together with the recent endowment of the Samuel D. Gross Chair of General Surgery by Mrs. Orville Horwitz, we believe it to be the beginning of a notable movement to endow medical education in Philadelphia through future gifts to this College.

"The Jefferson Medical College needs an endowment of at least a million dollars, so that her distinguished teachers may be better paid and to meet the ever-increasing cost of medical teaching and hospital service."
"Our teaching has always been famous, our hospital facilities unrivalled. We have the largest medical alumni in the United States and with our unbeatable State Board records of recent years all that is now needed is an endowment to make Philadelphia and this college indifferent to the friendly rivalry of other medical institutions of the country. For this important reason, the dedication to-day of The Daniel Baugh Institute of Anatomy is an action that marks a great epoch in our history."

ADDRESS BY DOCTOR SPITZKA.

"Mr. President, Gentlemen of the Board of Trustees, members of the Faculty, Honored Guests and Gentlemen:—I regret exceedingly that owing to the great pressure of work in completing this Institute, it has been impossible for me to prepare an address that would befit this auspicious occasion. All that I can do is to relate the facts of the foundation of this magnificent Institute, what has been accomplished and what we hope in the future to do with it.

"I shall never forget that day over a year ago when Mr. Baugh, accompanied by Professor Coplin and myself,—and I mention Professor Coplin in grateful remembrance, for he was the instigator of this project,—as I say, Professor Coplin, Mr. Baugh and myself visited this building and found it in chaotic disorder as it was left by the Pennsylvania College of Dental Surgery. After going through the building, Mr. Baugh turned to me and said, 'Will this meet the demands of your department?' I said 'Yes,' with just a little hesitation in my mind because I did not dream that it was possible to accomplish what has been accomplished in the reconstruction of this building to make it the magnificent Institute it is to-day.

"Anatomy at Jefferson Medical College has always flourished and kept abreast of the times from the time of Nathan Smith, first Professor of Anatomy, the two McClellans, George and Samuel, Granville Sharp Pattison, the renowned Joseph Pancoast, his son, William Pancoast, and lastly in that of my predecessor, William S. Forbes, a martyr to the cause of the promotion of the science of Anatomy, but successful in achieving that great boon to the medical schools of this state, the Anatomy Act of 1883.

"The building now at Tenth and Walnut Streets was erected in 1899 and was provided with a beautiful dissecting room and some small accessory rooms sufficient according to the plans of that time; but unfortunately for the Institution it was not large enough to meet the demands of the growth of the department. Anatomy is a progressive science. To be sure, the anatomy of man was probably the same a thousand years ago, with the same range of variations that it is to-day, but the knowledge of Anatomy has increased tremendously. It is a far cry from the Anatomy of Galen to the Anatomy of Gray or Cunningham or Piersol,—and I am very glad to see that Professor Piersol is here to-day at this dedication. Not only Anatomy but the ancillary sciences, Histology and Embryology, have developed tremendously. Embryology as it was known in the time of Karl Ernst v. Baer could be compressed into one small volume. To-day the latest comprehensive work upon Embryology comprises six volumes in condensed type of the most abstruse German. So it was that with the passage of time, Anatomy needed more room in the building. We were acquiring material all the time, we were extending our teaching course, we were increasing also the size of the staff, we were endeavoring to individualize the teaching, we believed more in the teaching of small sections of the class rather than in exclusively didactic lectures to large classes.

"To be sure we had a magnificent dissecting room, but we cried for more elbow room, we wanted to be productive and wanted to make Anatomy at Jefferson as famous as it deserved to be, for we possessed material that no other institution in the world has and Mr. Baugh becoming aware of our troubles, generously came to our aid and this is the result. He has handed to us a princely palace of science, and it is a most efficient plant for teaching and the students that come in now to enjoy the teaching here, cannot help but realize and appreciate what has been done for them.

"There is so much in my mind that I am really at a loss to know what to say about the generosity, kindness and sympathy that Mr. Baugh has brought to us in this work. No undertaking of Mr. Baugh is half done or slip-shod. He goes at it with vim and vigor. It may be that in his Oriental travels he has found the Lamp of Aladdin; however that may be, this Institute is evidence that he has rubbed it vigorously and well. Throughout the time that he was present with us after his return from his voyage, he has evinced a warm sympathy and warm interest and has always
encouraged us in all that we have attempted to do. Words really fail me to fully express my appreciation of his great help.”

Here followed a general description of the building and its equipment, already described. In conclusion, Prof. Spitzka said:

“I merely wish to add that Mr. Potter has fittingly dedicated this Institute, but I would like, if I may, to further dedicate the building to all human kind, to the entire medical profession that its knowledge and skill may be added to, to all anatomists of the country who must feel encouraged at its magnificent capacity, to all students who are going to profit by the splendid equipment here made available, but above all I would dedicate this Institute—not to a man who is dead, but who, thank God, lives and is well, and let us hope he may have many years of health and happiness—I would dedicate it as a memorial to Mr. Daniel Baugh as a man who is true, generous, sympathetic and a prince among men.”

Hereupon, President Potter called on Professor Piersol for a few remarks.

PROFESSOR PIERSOL’S ADDRESS.

“Mr. President and Gentlemen:—As Mr. Potter has said, this is an entirely unexpected honor, but I cannot refrain from saying a few words on an occasion such as this.

“Jefferson is certainly to be congratulated on having an institution for the study of one of the most important fundamental branches of medicine, but if we may take a broader view, this occasion is an important event, not only for Philadelphia, but for American Anatomy. As many of you know, we have for many years, as a matter of fact, been compelled to turn to the old country for the study of the purely scientific phases of medicine and surgery, but the time is coming, if it is not already here, when the old world must turn to America and an occasion like this, the establishing of a magnificent institute devoted to the study of Anatomy certainly marks a stride and a step forward.

“I thank you, gentlemen, for the honor of having the opportunity of expressing these sentiments, which I know are those of every far-seeing physician.”

After these exercises the building was opened for inspection for the rest of the day, fully six hundred persons viewing the various rooms and equipment.