

FIFTH
ANNUAL CIRCULAR

AND

Catalogue of Matriculants,

MARYLAND COLLEGE OF PHARMACY.

Session of 1860—1.

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No. 212 BALTIMORE STREET, NEAR CHARLES.

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No. 34 Franklin Street.
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S. E. corner of Paca and Pratt Streets.

CIRCULAR.

No pursuit has profited more by scientific discoveries, during the last twenty years, than practical Pharmacy. Its empirical processes are rapidly giving way to such as are based on scientific laws, which ensure certain and stable results. The pharmacist, in consequence, becomes better satisfied with his calling as free from the taint of empiricism, while he feels an increasing interest in its pursuit. But as each day introduces some improvement in the science of Pharmacy, it also demands changes in Pharmacy as an art, and the cultivator of this profession finds himself under the constant necessity of diligent study and experimentation in order to keep pace with its progress. Such labor, however, brings its own reward in the pleasure that an increase of knowledge always gives to the student. Hence preliminary training that will enable him to undertake this labor, will make it all the simpler and more pleasant, and will ensure satisfactory results. Colleges of Pharmacy have arisen from the necessities of the times. They have as their object the grounding of the student in the principles of his calling and the communication of those principles that are indispensable to its proper prosecution. Every new discovery,—every new application of chemistry and physics makes it more and more necessary that the pharmaceutical apprentice should have the benefits derivable from collegiate instruction thrown open to him. These will make him more useful to his employers during his apprenticeship, and better fitted to take the duties of head of an establishment upon himself.

The numerous accidents, resulting from the ignorance of those who have the dispensing of medicines in charge, have not only stimulated the experienced pharmacist to make efforts for the removal of this ignorance, but have also created that kind of interest with the people which favors the establishment and support of colleges for its removal.

The Trustees of the Maryland College of Pharmacy feeling encouraged by the favorable notice which their efforts, to furnish a thorough course of theoretical and practical instruction to young pharmacists, have received from their brethren and the community generally, hope, by the facilities which the College offers to the Student of Pharmacy, to aid him

in becoming fitted for its practical duties, and thus to contribute in elevating Pharmacy to the proud position of assistant to Medicine in the alleviation of human suffering. Lectures are delivered on those subjects,—Chemistry, Materia Medica and Pharmacy,—which experience has demonstrated, are most important and necessary. An effort is made in these lectures to ground the student thoroughly in principles, accompanying the lectures with examinations, as continual tests of his attention and comprehension of the subject. These two methods of instruction, lectures and recitations, have been found well adapted to insure thorough knowledge; and the experience of four sessions has convinced the officers of the College that, only by the employment of both these methods, can such be obtained. The interest shown by the class, in attendance on these lectures, and the growing reputation of their graduates, satisfy the Trustees that the College is doing a good work in the education of pharmacutists.

The Fifth Session will be entered upon with increased advantages. The experience of the Faculty, as to the precise nature of the wants of the students, will enable its members to give fuller and more thorough instruction; and the improvements which Scientific Pharmacy has introduced during the past year will be presented with due reference to their value. Especial efforts have been made towards securing a Cabinet of Specimens, which shall fully illustrate the departments of Chemistry and Materia Medica. During the past year large accessions have been made, and a complete suite of specimens, illustrating the commercial characters of the pure and impure drugs brought into our market, has been obtained for the use of the College.

No labor will be spared to make the teachings of the College eminently practical. It is only by a combination of theory with practice, that the best results can be obtained. The Faculty, composed of experienced teachers in their respective Departments, have devoted themselves to their Specialities, with the hope of, in this way, securing the greatest good to the community of which they are members, and of aiding in the overthrow of pharmaceutical empiricism.

The Faculty, as has been before stated, in teaching their respective branches, will employ both lectures and examinations, desiring not only to impart information, but to stimulate students to careful investigation and thorough study of the principles of their chosen calling. The examinations answer as recapitulatory lectures, enabling the Professor to detect where he has been misunderstood, and to elucidate subjects that may not have been fully noticed in his lectures. Much account is made of

this portion of the course of instruction in the Maryland College of Pharmacy.

The number of Professors is three, which admits of such division of the subjects of study as has been found convenient in well-regulated Colleges of Pharmacy. From experience, however, it has been deemed expedient for the Professors not to confine themselves exclusively to any one-sided view of a subject that might properly belong to the three chairs, but rather to illustrate it, when under consideration, from all points of view. In this way, some of the subjects may possibly be considered by each of the Faculty during the course, certainly, not to the detriment but rather, to the advantage of the student.

The chair of CHEMISTRY considers the nature of Caloric and its laws as a necessary introduction to the subject, because so many of the practical processes of Pharmacy are facilitated or effected by its aid. The laws which regulate the combinations of bodies and the doctrine of equivalent proportions are next dwelt upon with special care. Symbols and formulæ are then explained and required to be thoroughly learned by the students. Modern discoveries in this science demand that this mode of expressing its facts should be fully understood by all, who desire a practical acquaintance with them. Unless the language of symbols is thoroughly known, modern treatises on Chemistry seem to be little else than meaningless jargon to the reader. This class of subjects is followed by a consideration of the elementary bodies and their compounds, reference being always had to the therapeutic value of the same, and the necessary antidotes in the case of those that are of a poisonous character. In Organic Chemistry, all that can be done at present is the examination of the starch, gum, and sugar series, with the laws and results of fermentation, the compound radicals contained in officinal preparations, and such other subjects as particularly interest the apothecary from their direct connection with substances that daily come under his notice.

The Professor of MATERIA MEDICA considers, in his course of instruction, such articles, belonging to the *animal* and *vegetable* kingdoms, as are considered *officinal* by the U. S. Pharmacopœia, and also those which constitute part of the stock of every complete shop. The physical and therapeutic qualities of these articles, adulterations made through the dishonesty of dealers or preparers, with the best means of detecting the same, and all matters of interest, whether historic or commercial, connected with the department, constitute the subjects which occupy his attention. The botanical characters of the growing plant are exhibited; either by specimen or by accurately colored illustrations. In addition to

the illustrations already in possession of this department, further accessions may be expected by the commencement of the session. The Microscope will be employed throughout the course, whenever available, to demonstrate to the class the minute histological structure of many of the articles of the *Materia Medica*, but more especially of those where it affords a delicate and reliable test of their genuineness; and as a general aid to the pharmacist.

The Lectures on PHARMACY will be of a practical character, commencing with those elementary and manipulatory operations necessary to be learned as the groundwork to the preparation of medicines, such as weights, measures, and specific gravity; the sources and management of heat, the proper manipulations to be observed in the processes of comminution, filtration, solution, evaporation, distillation, sublimation, crystallization, &c., duly illustrated by appropriate diagrams and apparatus. The preparations in the organic department of the subject, will be so classified and arranged, as to render it intelligible to the student, each preparation being considered with reference to the chemical character of the substance or substances entering into its composition. Many of the processes will be conducted in the presence of the class, with instructions as to the necessary precautions to be observed in order to insure successful results.

Inasmuch as the Lectures in either of these departments are of interest to students of medicine and others, it has been determined by the Trustees to admit such as are not looking forward to Pharmacy as their calling, to attend *either* of the courses of lectures they may wish, by paying the matriculation fee and that of the Professor. Such persons will be ineligible for a degree from the College, but in all other particulars will have the same advantages as regular students of Pharmacy.

Persons engaged in the *Wholesale Drug business*, may attend the lectures on complying with the regular terms, and, after having attended two courses, presented an original Thesis on some subject connected with the branches lectured upon, shown testimonials of good moral character, on passing an examination before a committee of the Board of Trustees, will receive a *Certificate* of proficiency signed by the officers and Faculty of the College.

The Terms of Graduation are:—Attendance upon two full courses of Lectures in a respectable College of Pharmacy, the last of which shall be in this College, good moral character, the age of twenty-one years, an apprenticeship of four years to the Drug and Apothecary business, the presentation of an original Thesis on some subject connected with the

branches taught here, and the passing of an examination before the Faculty in the presence of a committee of the Trustees. It is deemed proper to state here that the examination is conducted by the Professors, but the decision is made by the votes of the committee. To the successful candidate the *College Diploma* will be awarded, at the Annual Commencement, which is held about the first of March.

LECTURE ROOM.—The Lectures will be delivered in the Hall of the College, second story of building owned by the Medical and Chirurgical Society of Maryland, No. 47 N. Calvert Street, according to the following arrangement:

<i>Pharmacy, 7 to 8 o'clock,</i>	} <i>On Wednesday and Friday evenings.</i>
<i>Materia Medica, 8 to 9 "</i>	
<i>Chemistry, 3 to 4 o'clock on Monday and Thursday afternoons.</i>	

The regular Lectures will commence on Monday, October 15th, at 3 P. M.

Students should be present at the commencement of the course, in order to derive full benefit from the Lectures. Tickets can be obtained from the Professors at their residences. It will be necessary for the students first to obtain matriculation tickets from J. Jacob Smith, Secretary of the Board of Trustees, corner of Eutaw and Lexington sts., in order to exhibit them to the Professors when they apply for tickets to the different courses.

FEES.—For each Professor's Ticket	\$8 00
Matriculation Ticket, (paid but once,)	2.00
Graduating Fee	5.00

Graduates.

1857.

LOUIS DOHME,
J. C. O'BRIEN,
E. W. RUSSELL,
J. EMORY WEATHERBY.

1858.

W. T. CHANDLER,
THOS. A. HEBB,
SAML. F. POWELL.

1859.

GEORGE H. BLICKHAHN,
EDWARD G. MEDINGER.

1860.

JOHN H. BOLTON,
J. S. CONRAD,
GUSTAVUS DOHME,
SAMUEL FAIRBANK,
JOHN F. HANCOCK,
JOHN H. B. JEFFERSON.

Students in attendance on Lectures.

1859—60.

J. W. BENZINGER,	JNO. H. B. JEFFERSON,
J. H. BOLTON,	ROBERT LAUTENBACH,
R. C. BROWN,	ALONZO LILLY, JR.
HENRY CAMERON,	J. E. MCDANIEL,
J. S. CONRAD,	J. W. MCDANIEL,
EDWARD H. COURTENAY,	JAMES W. MINIFIE,
CHARLES E. DOHME.	JOHN C. NAGLE,
GUSTAVUS DOHME,	SAMUEL NICHOLLS,
LEWIS H. EASTMAN, M. D.	CHAS. C. SEARS,
SAMUEL FAIRBANK,	JOHN SOHL,
WILLIAM P. FLEMING,	N. H. THAYER,
GEORGE W. GOLDSMITH,	JOHN TURNER,
J. P. GRICE,	CLINTON WAGNER, M. D.
J. F. HANCOCK,	B. GILPIN WILSON.
DAVID HARRIS,	