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UNIVERSITY
OF
PENNSYLVANIA



W. J. Harris

UNIVERSITIES AND THEIR SONS

UNIVERSITY
OF
PENNSYLVANIA

ITS HISTORY, INFLUENCE, EQUIPMENT AND
CHARACTERISTICS

WITH

BIOGRAPHICAL SKETCHES AND PORTRAITS OF FOUNDERS,
BENEFACTORS, OFFICERS AND ALUMNI

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INTRODUCTION BY

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UNITED STATES COMMISSIONER OF EDUCATION

ILLUSTRATED

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THE CONCORD, WASHINGTON, D. C., April 1, 1897

R. HERNDON COMPANY,

SIRS,—Your plan for “Universities and their Sons” greatly interests me. An effort was made by the United States Bureau of Education in preparing for the exhibition at the Centennial in Philadelphia to arouse among these institutions an interest in their own history and in the work accomplished by their alumni; plans were carefully prepared and circulars issued, and gentlemen specially qualified were employed to visit and confer with trustees and faculties of a considerable number of institutions. This effort, in connection with that previously made, to make such study of the lives of the alumni as would enable us to find the true value of this grade of instruction, brought out surprising deficiencies in the records of many institutions. Some had no complete set of their catalogues, much less could they give any satisfactory account of the lives of their alumni.

Much has been done since, by the publishers of college books and journals, and specially by the issue of college histories by the Bureau, to disseminate this information. These results have been increased by the multiplication of alumni associations. But all that has been done does not set forth the needs which remain, which your plan will so far meet. The struggle to do the most imperative work has forced omissions which it would seem should now cease.

How often do both the faculty and the students of a generation fail to gain the inspiration justly theirs, by reason of the lack of knowledge of the sacrifices and triumphs of those who have gone before them? How many fail to bestow their wealth in aid of this instruction, and how many sons fail to take advantage of it, because they, or those advising them, do not know what those receiving it have thereby gained to themselves, or what they have contributed to the uplift of mankind and the advancement of civilization? If every man is a debtor to his profession, how much more is every “University Son” indebted to his education?

May the whole body of “Universities’ Sons” respond in the fullest measure of co-operation to the promotion of your purpose so well planned, and whose execution is so well assured by the character of your Editor-in-Chief and his associates.

Sincerely yours,

John Eaton

INTRODUCTORY

THE short sketches which are presented in this volume are not intended as biographies of the persons who are made the subjects of representation. The purpose is to bring together in a single group the names, faces and condensed records of the wise founders, generous benefactors, earnest teachers and faithful officers who have established, fostered and developed the great institution of learning to which this historical record is devoted. The number of men who have at one time or another filled positions which entitle them to a place in this galaxy is so very great, that merely to record their names would itself fill several hundred printed pages. Hence not only is the collective representation which has been attempted in these pages necessarily incomplete, but from similar necessity the life-records given are in the main very brief. Yet it is believed, at least is hoped, that the work of selection and presentation has been done with a sufficient degree of intelligent judgment, painstaking thoroughness and historical accuracy, to fulfill the plan outlined with reasonable completeness, and to secure results both interesting and valuable to all University of Pennsylvania Sons.

From the very nature of the work herein attempted, any omissions or shortcomings must be too palpably evident and conspicuous to escape notice. Criticism as to general incompleteness, methods of selection, manner of treatment and matter treated of, is therefore anticipated; in fact, is inevitable. That the strictures of the critics may be based upon just grounds, with a clear understanding of the limitations of the undertaking and the difficulties involved in its performance, this brief prefatory statement is made. It may also properly be added that, while authors may write and publishers may print whatever they please about the dead, they are debarred from taking such liberties with the living. Hence it is that the non-representation in this volume of a number of eminent teachers, and

the exceedingly meager treatment accorded certain others, whose attainments and official connections make them conspicuous subjects, are due solely to the excessive modesty of these men of learning, which would not permit them to sanction the publication of anything whatever relating to their personal or official careers. For these omissions the publishers can only express regret, while disclaiming responsibility. The Public has certain claims upon every citizen which it can and does enforce at times in various ways; but with the Publisher, who is but a servant of the Public, the personal wishes of the Teachers of Men must be respected.

THE PUBLISHERS.

EDITOR'S PREFACE

PERSONAL influence has large place among the factors of education. Some minds indeed by force of will or stress of circumstance will put themselves in direct contact with what we may call the "raw material" of knowledge, and by this discipline may acquire a mastery of facts and a strength of command over them which mark, if they do not make, greatness of character. But those charged with the care of youth see the need of other aids and influences to secure the best conditions for their mental growth and culture. And the far-seeing founders of States have made it one of the first measures for the public welfare to provide local centers of instruction, and to organize systems for the harmonious development of the minds and characters of their youth. These are among the cherished institutions of a Country.

But the ancient libraries and museums, depositories of the materials for learning, were availing only for the few who could profit by them single-handed. For some time those so initiated into the mysteries of knowledge were regarded, or at least regarded themselves, as a class of superior rank and pretensions. A part of their dignity seemed to be to hold themselves inaccessible to the common mind. Among more favored races, or in more liberal spirit of the times, those who had achieved intellectual mastery by their personal efforts were prompted by a generous impulse to communicate their treasures to those capable of receiving them. This met an equal impulse on the part of aspiring minds to look for guidance and sympathy in fulfilment of their wishes by entering into personal relations with the living master. For there is that instinct in the ingenuous mind of youth to seek the sympathetic aid of a superior. The presence of one who has himself achieved, is a quickening and an inspiration; and living contact with a spirit that finds pleasure in communicating to those able to receive, not only its material acquirements, but also its experience in acquiring, both points the way and gives strength and cheer in following.

This contact with maturer minds and superior natures brings out deeper meanings in things, deeper truths and deeper thoughts, than could be evident to the unassisted spirit, however earnest. "Understandest thou what thou readest?" was the bold but kindly question of Philip to the powerful treasure-keeper of Candace, Queen of Ethiopia, riding in his chariot and reading, for something more than pastime surely, the Prophecy of Esaias. "How can I, except some man should guide me?" was the answer of a sincere and modest spirit intent on truth.

Striking illustrations of this influence of the personal superior, both in science and in art, are familiar in history. The "Old Masters" in grammar, logic, rhetoric or dialectics, — in knowledge of nature's works and ways, once called philosophy, and later, science, — and in the rich fields of sculpture, painting and architecture, are shining lights in history. Disciples thronged around them in the Academy, the Lyceum, the Porch or the Garden, or in the studios and laboratories, or traversed with them the open fields of earth and sky, quickened to newness of life by drinking of the master's spirit.

The affection which sprang up from this personal intercourse, especially on the part of the pupil towards the master, was itself no unimportant part of a liberal education, — if this means the harmonious development of all the powers and susceptibilities of the mind.

"And what delights can equal those
That stir the spirit's inner deeps,
When one that loves but knows not reaps
A truth from one that loves and knows."

A curious illustration of the strength of such a feeling in the hearts of pupils, and in the acceptance of the community, appears in the habit among the pupils of the great masters of music in Italy and Germany a century or more ago, of calling themselves by their masters' surnames; — thus almost sinking their selfhood in the great communion of the master's spirit and ideal. That might indeed be giving too much way to adventitious or accessory influence, even though the spring of such action were in the wish to crave a portion of the master's merit, or on the other hand, to waive all other merit than that which belongs to him, — both not unworthy motives; for after all there can be no true personality without self-assertion and self-responsibility, and such personality is the highest estate in art, as in ethics, and in life itself.

But it may be fairly doubted if something has not been lost in the modern tendency to introduce machine systems of classifications, rank-lists, and paper tests of proficiency, to dis-

place that old relation of pupil and master which carried along with growth of knowledge and skill that of the heart and soul. We shall surely miss something from the balance and symmetry of educational influences, if we do not make an effort to countervail or supplement existing tendencies in education by bringing students into contact with men of experience and noble character and personal magnetism, as well as of scholarly attainments. It is not multiplication of electives, however attractive, throwing the student back upon himself for choices in his most inexperienced and uncritical years, — it is not merely multiplication of tutors, or increased personal inculcation and drill of faithful teachers, nor even of specialists in research on single lines or in narrow limits, which can best bring out the powers and aptitudes of personality, or the practical value of knowledge as something better than earning power.

What is of most importance in any large view of the subject is to secure for the youthful student the personal contact, or even presence, of a noble character, a mature mind, an experienced sensibility, a large and sympathetic personality, which takes hold on the impressionable and nobly-tending spirit of youth, and draws it, as well as directs it, to its best. Such privilege of discipleship is a great boon. It is held beyond price by those capable of truly apprehending it. The importance of this element of education cannot be overestimated by those who are entrusted with the vital office of providing the best conditions for the training and culture of youth. It was President Garfield who said: "To sit on the other end of a log and talk with Mark Hopkins is a liberal education."

Not only do the true masters wake new ideals and inspire new zeal for action in their followers, but by their sympathetic apprehension of the pupil's individuality, they bring out his best powers and help to build him up on his own foundations. One good thing about those old times of master and pupil was the close personal intimacy between them; the daily contact of mind with mind, in questions and answers, the searching interest which detected weaknesses or disadvantages of habit or temperament, and offered correctives which would tend to a balance and symmetry, and afforded discipline which makes one master of himself, ready for any action to which the chances of life may call. For often we cannot follow choices, but must act as exigencies demand. It is one thing to flatter the wish, but quite another to discipline the will. Systems of education which offer to a student what is most to his liking, even when they are supported by written examinations and conventional tests for rank, which things cannot disclose lacks and weaknesses that must be overcome if one would win in the battle of life, do not make good the place of personal interest and friendly criticism of a large-hearted master, who fits one to meet things he does not like, even in the high career of the "learned professions."

Recognizing the importance of the principles here adverted to, the publishers of this work have followed their stereoscopic presentation of the University of Pennsylvania which constitutes the first half of this volume by a supplementary one, which sets forth in some detail the characters of the men who have had part in moulding the characters of the University's Sons, and possibly in forecasting their careers. And these careers in the history of our Country, following them out in their branches and sequences, have had much to do in the active, formative and directive powers which have made the nation what it is. At all events these Presidents and Professors and Teachers noted here are the men whose spirit in their respective times has vitalized the educational system and carried forward the organic life of the institution which has now become a great University that is an honor and a power which the whole Country holds high, and which has sent its light over all the world.

It is surely a worthy object to turn attention to the noble characters which have wrought their worth into the very fiber of the nation's life.

A handwritten signature in black ink, reading "Joshua L. Doerflinger". The signature is written in a cursive style with a large, sweeping initial 'J' and a long, horizontal flourish at the end.

INTRODUCTION

DEPARTMENT OF THE INTERIOR

BUREAU OF EDUCATION

WASHINGTON, D. C., January 23, 1897.

R. HERNDON COMPANY, Boston, Massachusetts.

GENTLEMEN, — I am glad to learn from you that you are undertaking the publication of a series of volumes containing studies on the universities, colleges, and higher institutions of learning in the United States, paying special attention to the biographies of the alumni of these institutions. It seems to me that this is an important field to occupy. It will interest not only the alumni of a college or university to study the influence of the institution in the careers of its graduates, but it will interest all people. It will answer the question: What practical influence does the higher education of the country have upon its business and politics and literature, and, in general, upon the directive power of the nation? I trust you may prove entirely successful in carrying out your plans.

Very respectfully,



Commissioner of Education.

HIGHER EDUCATION IN THE UNITED STATES

By W. T. HARRIS, PH.D., LL.D.

UNITED STATES COMMISSIONER OF EDUCATION

HIGHER education in the United States is given chiefly in institutions that bear the name of college or university, numbering 486 separate institutions in the several States and Territories. A portion of the work is given in separate professional schools of law, medicine and theology, and also in schools of engineering and technology. According to the returns for the scholastic year ending July 1, 1897, there were 76,204 students in colleges and universities; 10,449 students in the law; 24,377 students in medicine; 8,173 students in theology; 10,001 students in engineering and technology. The total number of students in higher education for the United States is thus 129,204. About one for each 486 of the population is enrolled in schools for higher education.

In order to understand these figures one must know accurately the meaning of the term "higher education." It may be said loosely that the first eight years' work of the child, say from six to fourteen years of age, is devoted to an elementary course of study. The next four years (fourteen to eighteen) is given to what is called "secondary education," conducted in public high schools (409,433 pupils), in private academies and preparatory schools (107,633 pupils),—a total of 517,066. Of pupils in secondary studies there is approximately one in 121 of the population. Higher education counts from the thirteenth to the sixteenth year (inclusive) of the course of study, and counting in with it the post-graduate work it extends to the nineteenth year of the course of study (from eighteen to twenty-one or to twenty-four years of age).

It would appear that of the undergraduates in universities and colleges about fifty-five per cent (a little more than one-half), are pursuing courses of study leading to the degree of Bachelor of Arts, while nearly twenty per cent (or one-fifth of all) are candidates for the degree of Bachelor of Science. The total number of degrees conferred during the year 1895-96 was, for the Bachelor of Arts degree, 4,456 men and 706 women; for the degree of Bachelor of Science, 1,381 men and 277 women.

UNIVERSITIES AND THEIR SONS

The total benefactions reported by the several higher institutions as having been received during the year 1895-96 was \$8,342,728.

EDUCATIONAL BENEFACTIONS, 1871 to 1896

YEAR.	Universities and colleges.	Colleges for women.	Professional schools.	Schools of technology.
1871	\$3,432,190		\$547,000	
1872	6,282,462		1,176,279	\$482,000
1873	8,238,141	\$252,005	698,401	780,658
1874	1,845,354	241,420	1,156,160	481,804
1875	2,703,650	217,887	476,751	147,112
1876	2,743,248	79,950	293,774	48,634
1877	1,273,991	163,976	448,703	201,205
1878	1,389,633	241,820	516,414	49,280
1879	3,878,648	543,900	386,417	59,778
1880	2,666,571	92,372	839,681	1,371,445
1881	4,601,069	334,688	972,710	177,058
1882-83	3,522,467	373,412	762,771	639,655
1883-84	5,688,043	310,506	1,307,416	520,723
1884-85	5,134,460	322,813	776,255	562,371
1885-86	2,530,948	266,285	857,096	188,699
1886-87	3,659,113	154,680	1,355,295	334,760
1887-88	4,545,655	425,752	772,349	203,465
1888-89	4,728,901	447,677	768,413	110,950
1889-90	6,006,474	303,257		
1890-91	6,849,208	725,885	1,466,399	
1891-92	6,464,438	220,147	1,905,342	
1892-93	6,532,157	182,781	1,225,799	
1893-94	9,025,240	369,183	1,460,942	
1894-95	5,350,963	625,734	1,480,812	21,530
1895-96	8,342,728	611,245	1,159,287	96,133
Total,	\$117,435,752	\$7,507,375	\$22,810,466	\$6,477,260

The following comparative table will show the item of income for the past five years. In 1896 the income to the universities and colleges (not including colleges for women) from all sources, excluding benefactions, was \$17,918,174; thirty-seven per cent of this was received in the form of tuition fees, twenty-nine per cent from productive funds, sixteen per cent from State and municipal appropriations, five per cent from endowments by the United States. The total of productive funds for the colleges and universities in 1895-96 was \$109,562,433.

INCOME OF UNIVERSITIES AND COLLEGES

STATE OR TERRITORY.	1891-92	1892-93	1893-94	1894-95	1895-96
United States	\$15,075,016	\$15,660,374	\$16,687,174	\$17,965,433	\$19,108,107
North Atlantic Division	6,497,227	6,790,028	7,328,091	7,765,251	8,477,872
South Atlantic Division	1,312,890	1,446,695	1,395,970	1,541,373	1,589,973
South Central Division .	1,233,982	1,125,359	1,203,350	1,290,534	1,504,301
North Central Division .	4,890,267	5,049,578	5,479,015	6,035,159	6,170,650
Western Division . .	1,140,650	1,248,714	1,280,748	1,333,116	1,365,311

Of students admitted to universities and colleges in 1895-96, forty-one per cent came from public high schools, forty per cent from preparatory departments of colleges, seventeen per cent from private preparatory schools.

AMERICAN AND EUROPEAN STANDARDS COMPARED

The American standard of what is called "Higher Education" is not precisely the same as that of Europe; there is a little more thoroughness of preparation, due perhaps to an earlier beginning in the strictly preparatory studies, in Europe as compared with America. In order to reduce the returns of higher education in the United States to the European standard it is necessary to omit the college students in the Freshman and Sophomore classes, and also omit all first year students in the professional schools except those that have received the degree of A. B., or its equivalent.

The following table prepared on this basis from a study of the catalogues of the several States for 1896, shows a total for the United States of 62,974 university students, measured by the European standard:

STUDENTS IN UNIVERSITIES, COLLEGES AND PROFESSIONAL SCHOOLS IN THE UNITED STATES, CORRESPONDING IN DEGREE OF ADVANCEMENT TO STUDENTS IN GERMAN OR FRENCH UNIVERSITIES

It includes the undergraduates in the senior and junior classes, all students of theology, students of medicine and law in second and subsequent years, with all in the first year having the degree of B. A.

STATE OR TERRITORY.	STUDENTS.						
	Juniors.	Seniors.	Post-graduates.	Law.	Medicine.	Theology.	Total.
UNITED STATES	15,025	12,249	5,316	5,541	16,772	8,071	62,974
North Atlantic Division	5,293	4,690	2,148	2,234	6,155	2,891	23,411
South Atlantic Division	2,095	1,482	501	786	1,829	886	7,579
South Central Division	1,915	1,314	305	242	1,675	1,054	6,505
North Central Division	4,902	4,198	2,068	2,074	6,591	3,149	22,982
Western Division . .	820	565	294	205	522	91	2,497

STUDENTS IN UNIVERSITIES, COLLEGES, ETC.—*Continued*

STATE OR TERRITORY.	STUDENTS.						
	Juniors.	Seniors.	Post- graduates.	Law.	Medicine.	Theology.	Total.
North Atlantic Division.¹							
Maine	205	172	4		70	79	530
New Hampshire	120	112	6		87		325
Vermont	82	81	4		105		272
Massachusetts	1,415	1,260	692	624	893	417	5,301
Rhode Island	169	121	126				416
Connecticut	535	566	239	161	91	189	1,781
New York	1,191	1,000	626	1,134	2,863	924	7,738
New Jersey	319	324	123			479	1,245
Pennsylvania	1,257	1,054	328	315	2,046	803	5,803
South Atlantic Division.							
Delaware	11	14					25
Maryland	361	313	260	83	962	375	2,354
District of Columbia . .	63	49	93	515	314	95	1,129
Virginia	405	235	56	113	270	164	1,243
West Virginia	55	38	1	47			141
North Carolina	393	288	54	10	57	85	887
South Carolina	307	188	24	11	45	55	630
Georgia	467	326	10	7	181	112	1,103
Florida	33	31	3				67
South Central Division.							
Kentucky	335	191	7	24	612	564	1,733
Tennessee	490	355	90	83	568	385	1,971
Alabama	370	303	14	13	71	53	824
Mississippi	240	150	63	25			478
Louisiana	122	84	92	28	254	20	600
Texas	227	160	22	63	126	32	630
Arkansas	120	69	17	6	44		256
Oklahoma	9						9
Indian Territory	2	2					4
North Central Division.							
Ohio	910	865	415	165	1,179	492	4,026
Indiana	510	468	166	100	250	178	1,672
Illinois	763	649	740	584	2,332	1,281	6,349
Michigan	505	455	124	454	586	79	2,203
Wisconsin	314	262	112	170	72	223	1,153
Minnesota	310	231	140	190	224	282	1,377

¹ To avoid misapprehension it should be noted that many students of this grade from the smaller States attend the great universities of Harvard, Yale, Princeton and Columbia.

STUDENTS IN UNIVERSITIES, COLLEGES, ETC.— *Concluded*

STATE OR TERRITORY.	STUDENTS.						
	Juniors.	Seniors.	Post- graduates.	Law.	Medicine.	Theology.	Total.
Iowa	450	369	122	162	451	153	1,707
Missouri	584	415	56	142	1,346	400	2,943
North Dakota	21	19	2				42
South Dakota	50	36	23				109
Nebraska	202	157	76	60	122	47	664
Kansas	283	272	92	47	29	14	737
Western Division.							
Montana	8	7					15
Wyoming		4	1				5
Colorado	110	60	40	30	135	16	391
New Mexico	3	6					9
Arizona	1	1	1				3
Utah	25	14	3				42
Nevada	19	18	6				43
Idaho	4	4					8
Washington	48	39	2				89
Oregon	121	50	23	51	21		266
California	481	362	218	124	366	75	1,626

THE PRE-EMINENCE OF THE COLLEGE GRADUATE

President Charles F. Thwing, of Western Reserve University at Cleveland, Ohio, has taken some pains ("Within College Walls," pp. 156 to 184) to ascertain the facts with regard to the proportion of men of directive power who have come into the community from the college or university. Taking the six volumes of Appleton's Cyclopædia of American Biography he finds sketches of 15,138 persons; of these 5,322 are college men. One out of every three persons of sufficient distinction to claim a place in a biographical cyclopædia is a college graduate. These 5,322 form, according to his estimate, one out of each forty graduates now living; while only one out of ten thousand of the population that has not received higher education has found a place in the Cyclopædia named. "Into one group gather together ten thousand infants and send no one to college; one person out of that great group will attain through some work a certain fame; into another group gather forty college men on the day of their graduation and out of these forty, one will attain recognition. The proportion is in favor of the college men two hundred and fifty times." See Dr. Thwing's table on page 6.

In view of the influence of higher education to secure success in life, it is of great interest to inquire what it is that gives higher education this value. Is it the branches of study chosen,

or is it the association with learned men as professors and with one's fellow-students in early manhood, or is it the discipline of work and obedience to prescribed regulations?

Upon a little consideration it is evident that it is not a mere will training, not a life of obedience to regulations that gives its distinctive value to higher education. In elementary education a training in regularity, punctuality, self-restraint and industry, is perhaps the most important thing, but higher education gives directive power and this depends upon insight rather than upon a habit of obedience. This insight may relate to human nature, and a knowl-

CLASSIFICATION OF 15,138 CONSPICUOUS AMERICANS¹

	College Graduates.	From Academies.	Non-College.	Total.	Per cent representing college graduates.
Clergy	1,505	59	1,080	2,644	56.92
Soldier	252	436	1,264	1,952	12.91
Lawyer	841	68	769	1,678	50.12
Statesman	464	65	811	1,340	34.63
Business	171	60	884	1,115	15.34
Navy	15	34	466	515	2.91
Author	415	39	668	1,122	36.99
Physician	427	36	449	912	46.82
Artist	66	39	525	630	10.46
Educator	625	42	345	1,012	61.76
Scientist	341	25	164	530	64.34
Journalist	96	11	206	313	30.67
Public Man	145	15	605	765	18.95
Inventor	19	3	144	166	11.45
Actor	4	4	99	107	3.74
Explorer, Pioneer	9	7	233	249	3.61
Philanthropist	29	6	145	180	16.11
Whole Number of Persons } named in Cyclopædia }	5,322	949	8,867	15,138	35.16

edge of human nature is gained by association with one's fellow-students and with professors and teachers; but it is gained more especially from books of science and literature. Or the insight may relate to physical nature, and in this case it is the man who re-enforces his own observations by the records of others, that attains eminence. It is in fact the course of study in higher education that contributes the chief factor of this influence which college graduates exercise upon the community.

Higher education in the Middle Ages was limited to the *Trivium* (grammar, rhetoric and logic) and *Quadrivium* (arithmetic, geometry, music and astronomy). Grammar as the science of language reveals the structure of the instrument of human reason; rhetoric deals with the art of persuasion and studies the structure of the written discourse; while logic deals directly

¹ By C. F. Thwing

with the structure of thought. The structure of thought, the structure of language and the structure of the written discourse furnish a proper study for the training of a critic of thought or of its exposition.

Arithmetic was mathematics as understood in the Middle Ages; while geometry in the Quadrivium signified an abridgement of Pliny's geography with a few definitions of geometric figures. Music signified poetry.

Grammar, rhetoric, logic and music, dealt with language and literature and the laws of thought; their study could not but result in giving to the youth an intimate kind of self-knowledge.

Three branches, arithmetic, geometry and astronomy, made the student acquainted with the world of nature in its mathematical structure and in its accidental features.

The course of study in higher education has endeavored to make the youth acquainted with human nature and physical nature, and this more especially in their logical condition or permanent structure rather than in their accidental features. Directive power has for its function to combine human beings with a view to realize institutions or to accomplish great undertakings. It makes combinations in matter directing the current of the world's forces into channels useful for man. To make these human combinations and these physical combinations possible the studies of the higher education are chosen.

To realize how the colleges of this country have from the earliest times kept this in view, although perhaps unconsciously, a few examples of the requirements for admission are here offered.

REQUIREMENTS FOR ADMISSION

I. — HARVARD UNIVERSITY, 1642. — When scholars had so far profited at the grammar schools, that they could read any classical author into English, and readily make and speak true Latin, and write it in verse as well as prose; and perfectly decline the paradigms of nouns and verbs in the Greek tongue, they were judged capable of admission to Harvard College. — Peirce's History of Harvard, Appendix, p. 42.

II. — PRINCETON UNIVERSITY, 1748. — None may be admitted into college but such as being examined by the President and Tutors shall be found able to render Virgil and Tully's Orations into English; and to turn English into true and grammatical Latin; and to be so well acquainted with the Greek as to render any part of the four Evangelists in that language into Latin or English; and to give the grammatical connection of the words. — Princeton Book, 5.

III. — BOWDOIN COLLEGE, 1802. — Principles of the Latin and Greek languages, ability to translate English into Latin, to read the Select Orations of Cicero, the *Æneid* of Virgil, and an acquaintance with arithmetic as far as the rule of three. — History of Bowdoin, XXXII.

IV. — SOUTH CAROLINA COLLEGE, 1804. — For admission to the Freshman Class, a candidate shall be able to render from Latin into English, Cornelius Nepos, Sallust, Cæsar's Commentaries, and Virgil's *Æneid*; to make grammatical Latin of the exercises in Mairs' Introduction; to translate into English any passage from the Evangelist St. John, in the Greek Testament; to give a grammatical analysis of

the words, and have a general knowledge of the English Grammar; write a good, legible hand, spell correctly, and be well acquainted with Arithmetic as far as includes the Rule of Proportion. — History of South Carolina College, by Laborde, p. 19.

V. — DARTMOUTH COLLEGE, 1811. — 1. Virgil; 2. Cicero's Select Orations; 3. Greek Testament; 4. Translate English into Latin; 5. Fundamental rules of Arithmetic. — Dartmouth College, by Smith, p. 83.

It would seem that the main point in the entrance examination to Harvard University in the seventeenth century was to secure such facility in the Latin tongue that one could use it as the instrument for pursuing higher studies. One should be able to read any classical author and also be able to speak the Latin tongue. Some knowledge of Greek also was required even from the beginning. Princeton, a hundred years later than Harvard, makes the same requirements in Latin and insists on a little more in Greek. Half a century later still, Bowdoin, South Carolina and Dartmouth colleges have practically the same requirements for admission as Princeton in 1748.

THE COURSE OF STUDY

Some of the earliest courses of study in American colleges show the prominence of the studies of the Trivium and the Quadrivium insisted on in the Middle Ages. In Harvard, for instance, in 1642 there were logic, algebra and grammar, besides the study of natural philosophy. Assuming that the course of study as given is complete, it is interesting to note that in this college Latin is supposed to have been completed before entering, and that the student takes up both Greek and Hebrew in his first year. This inference, however, may not be accurate. If the students were of the same age on entrance to college in 1642 as in 1897, it could be said that their studies in Freshman year were so difficult that one would hardly expect more than a verbal memorizing of the text. It is noticeable that mathematics begins to be studied in the third year and that arithmetic, geography and astronomy make their appearance at that time, the third and last year. Some branches of natural science and history belong also to this third year. Yale in 1702 required a strong course in Latin and Hebrew. And in 1726 it seems that Harvard had included Latin with its languages to be studied in college. One hundred years later South Carolina College had a course of study very much like that laid down at the present day. But Dartmouth at that time had arithmetic rather than algebra or geometry in its Freshman year and continued it even into the Sophomore year.

SAMPLE COURSES OF STUDY

HARVARD UNIVERSITY, 1642. — *First Year.* — 1. Logick; 2. Physicks; 3. Disputes; 4. Greek — Etymologie and syntax; grammar; 5. Hebrew — Grammar; Bible; 6. Rhetoric.

Second Year. — 1. Ethics and politics; 2. Disputes; 3. Greek — Prosodia and dialects; Poesy, Nonnus, Duport; 4. Hebrew, etc.; Chaldee; Ezra and Daniel; 5. Rhetoric.

Third Year. — 1. Arithmetic; Geometry; Astronomy; 2. Greek — Theory, style, composition, imitation epitome, both in prose and verse; 3. Hebrew, &c.; Syriak; Trostius New Testament; 4. Rhetoric; 5. History; 6. Nature of plants. — Peirce's History of Harvard, Appendix, 6, 7.

YALE, 1702.—1. Latin; five or six orations of Cicero; five or six books of Virgil; Talking College Latin; 2. Greek; Reading a portion of New Testament; 3. Hebrew; Psalter; 4. Some instruction in mathematics and surveying; 5. Physics (Pierson); 6. Logic (Ramus).—Yale Book, 25.

HARVARD UNIVERSITY, 1726.—While the students are Freshmen, they commonly recite the Grammars, and with them a recitation in Tully, Virgil, and the Greek Testament, on Mondays, Tuesdays, Wednesdays, and Thursdays, in the morning and forenoon; on Friday morning Dugard's or Farnaby's Rhetoric, and on Saturday morning the Greek Testament; and, towards the latter end of the year, they dispute on Ramus's Definitions, Mondays and Tuesdays in the forenoon.

The Sophomores recite Burgersdicius's Logic, and a manuscript called New Logic, in the mornings and forenoons; and towards the latter end of the year Heereboord's Meletemata, and dispute Mondays and Tuesdays in the forenoon, continuing also to recite the classic authors, with Logic and Natural Philosophy; on Saturday mornings they recite Wollebius's Divinity.

The Junior Sophisters recite Heereboord's Meletemata, Mr. Morton's Physics, More's Ethics, Geography, Metaphysics, in the mornings and forenoons; Wollebius on Saturday morning; and dispute Mondays and Tuesdays in the forenoons.

The Senior Sophisters, besides Arithmetic, recite Allsted's Geometry, Gassendus's Astronomy, in the morning; go over the Arts towards the latter end of the year, Ames's Medulla on Saturdays, and dispute once a week.—History of Harvard University, by Quincy, p. 441.

SOUTH CAROLINA COLLEGE, 1804.—The studies of the Freshman year shall be the Greek Testament, Xenophon's Cyropedia, Mairs' Introduction, Virgil, Cicero's Orations, Roman Antiquities, Arithmetic, English Grammar, and Sherridan's Lectures on Elocution. A part of every day's Latin lesson shall be written in a fair hand, with an English translation, and correctly spelled.

The studies of the Sophomore year shall be Homer's Iliad, Horace, Vulgar, and Decimal Fractions, with the extraction of Roots, Geography, Watts' Logic, Blairs' Lectures, Algebra, the French Language, and Roman Antiquities.

The studies of the Junior year shall be Elements of Criticism, Geometry, Theoretical and Practical, Astronomy, Natural and Moral Philosophy, French, Longinus de Sublimitate, and Cicero de Oratore.

The studies of the Senior year shall be Millots' Elements of History, Demosthenes' Select Orations, and such parts of Locke's Essay as shall be prescribed by the Faculty. The Seniors, also, shall review such parts of the studies of the preceding year, and perform such exercises in the higher branches of the Mathematics, as the Faculty may direct.

From the time of their admission into College, the students shall be exercised in composition and public speaking, for which purpose such a number as the Faculty shall direct shall daily, in rotation, deliver orations in the College Hall. There shall also be public exhibitions, and competition in speaking, and other exercises, held at such times and under such regulations as the Faculty shall require; and every member of the Senior Class shall, at least once each month, deliver an oration of his own composition, after submitting it to be perused and corrected by the President.—History of South Carolina College, by Laborde, p. 19.

DARTMOUTH COLLEGE, 1811.—*Freshman Class*: 1. Latin and Greek Classics; 2. Arithmetic; 3. English Grammar; 4. Rhetoric.

Sophomore Class: 1. Latin and Greek Classics; 2. Logic; 3. Geography; 4. Arithmetic; 5. Geometry; 6. Trigonometry; 7. Algebra; 8. Conic Sections; 9. Surveying; 10. Belles-lettres; 11. Criticism.

Junior Class: 1. Latin and Greek Classics; 2. Geometry; 3. Natural and Moral Philosophy, 4. Astronomy.

Senior Class: 1. Metaphysics; 2. Theology; 3. Natural and Political Law.

—Dartmouth College, by Smith, pp. 83, 84.

WHY LATIN AND GREEK ARE STUDIED

But what is noteworthy in regard to the course of study for the higher education is the place occupied by the classic languages, Latin and Greek. Inasmuch as these are dead languages and not useful for oral communication in any part of the world, it would naturally be thought that a knowledge of them would have little practical value. Further, when we learn that the great works in these languages are all accessible in the various modern tongues of Europe, there would seem to be no excuse for retaining them in the course of study for higher education. One would adopt the word of Mr. Adams and call them "college fetiches."

In the Middle Ages, it is true, the Latin was the language of learning and was the only language used at an institution of higher education. Moreover all learned people wrote their books in Latin. It was a matter of necessity that a student in higher education should begin his course of study by learning to read, speak and write the Latin; but this condition exists no longer, very few books are now written in Latin and few colleges or universities conduct their class exercises in Latin.

Notwithstanding all this it remains a fact that the higher education of all modern civilized nations has devoted the lion's share in the course of study to the mastery of the Latin and Greek languages. The few persons who attain national and international reputation for directive power in various departments come from the small quota of society that studies these dead languages. Out of a million of persons who have come from our colleges and universities more than two hundred times as many persons attain distinction as from a million of people who have not entered them. The presumption therefore must be in favor of the study of these classic languages. It is therefore probable that they contain some educative element not to be found in other languages, ancient or modern,—it is likely in fact that the study of these languages gives to the student some peculiar insight into himself or his civilization. Looking at it from this point of view we discover the cause of the potency of these languages in higher education. For it occurs at once to any one acquainted with the history of the world that Rome and Greece hold an altogether unique relation to the civilization of Europe.

The dead languages Latin and Greek are the tongues once spoken by the two peoples who originated the two threads united in our modern civilization. The study of Greek puts one into the atmosphere of art, literature and science in which the people of Athens lived. It is not merely the effect of Greek literature; it is also the effect of the language itself, in its idioms and grammatical structure, for these are adapted to express the literary and artistic point of view of the mind. The Greek mind looks upon nature and seizes its spiritual meaning; it expresses this in the art forms of sculpture, architecture and poetry.

It is not an accidental frame of mind out of a great number of possible mental attitudes held by that people, but it is the supreme form, the highest potency, of the Greek mind. Whenever it comes to its flower it blossoms into art and poetry; if it is arrested in lower stages, as in Sparta or Thebes, still it manifests an æsthetic individualism, a sort of germinal form of the art-consciousness. For all Greeks celebrated the games and strove to attain gracefulness and beauty of body. Moreover the science and philosophy of the Greeks are merely a sequel to their art and literature. This will appear from a consideration of the chief trait of the Greek mind, namely the genius for portrayal.

The human mind in its attitude of artist is able to seize and portray an object by a few lines; it can neglect the thousands of other lines or traits, which do not count because they do not individualize, and it can select out with felicity just the lines which portray character. The Greek can do this both in sculpture and in poetry. It is clear that this ability to seize the characteristics of an object is a power that needs only a little modification to produce the scientific mind. For science also discovers the essential characteristics and unites scattered individuals into species and genera. For it is the classifying intellect.

More than this, the ethical intellect is simply a further developed poetic intellect. For the poet has a unital world-view. Homer, Sophocles and Æschylus are able to describe the infinite multiplicity of human personages and events, unifying them by an ethical world-view. Carry this ethical world-view over into prosaic reflection and we have philosophy. Philosophy discovers how the fragmentary things and events of the world should be pieced together in order to form a whole. It discovers how they can be made consistent as explained by the ethical principle of the world. Both their genesis and their ultimate purpose are contained in the world-principle.

That this æsthetic, philosophic and scientific principle should be indigenous in the Greek mind and that it should be manifested not only in the prose, scientific and philosophic literature of the Greeks, and more especially in their poetic literature and in their sculpture and architecture, should be a reason for giving a unique place to the study of the Greek language in higher education. But the case becomes still stronger when one sees that the language is itself a primary and immediate expression of the idiosyncrasy of the Greek mind. No one could study the grammar of the language and become acquainted with the words in its vocabulary without inducing upon his mental activity some of the proclivities and tendencies of that beauty-loving people.

So on the other hand the study of Latin puts the mind in a similar manner into the stern, self-sacrificing, political atmosphere of Rome. The Romans invented laws for the protection of life and property and also the forms of social combination known as corporations and city governments. To study Latin makes the pupil more attentive to the side

of his civilization that deals with combinations of men into social organizations. It makes him conscious of this institution-forming instinct which has been inherited from Rome and exists now as an unconscious proclivity in all the races that enter modern civilization.

The raw material of our civilization, our national stocks, Celtic, Teutonic, Norse, Gothic, Scythian, Slavic, or whatever we call them, enter into civilization only by adopting the forms of art and literature, science and philosophy, borrowed directly or indirectly from the Greeks, and assuming forms of government and codes of laws (civil and criminal) borrowed directly or indirectly from Rome.

To know one's self has two meanings, the Socratic and the Sophistic. According to the Sophist, to know one's self is to know one's individual idiosyncrasies; it is to know one's whims and caprices. But according to Socrates, to know one's self is to know the substantial elements of our human personality. It is to know ethical principles and see them as necessities of human nature, uniting individuals into institutions or social wholes. For by moral principles alone are social institutions, such as the family, the state, the church, and the industrial community, able to exist. The logical principles which form the structure of mental activity, these as well as the ethical structure of conscience have to be known if man would know his deeper self in a Socratic sense. The study of the classic languages is therefore a sort of revelation of our deeper selves, the self which forms our civilization and which gives rhythm to our social life.

But the study of the classics does not give one a world-view about which he can discourse in simple and plain language to uncultured persons. The initiated cannot explain the mysteries to the uninitiated. Higher education with its Greek and Latin is a process of initiation which enables the individual to enter into this kind of self-knowledge. He comes, only through this, to know his deeper social self, the institutional self-hood of his civilization.

If this view, which I have here traced in outline with some difficulty, is the true one, it will explain why it is that Latin and Greek (and no other language, ancient or modern) have so prominent a place in higher education, and why higher education has been and is so potent in preparing the individual for the office of social leader and director of his fellow-men.

At the risk of many repetitions I venture to expand this thought with the (perhaps vain) hope of making it clear.

LATIN AND GREEK—THEIR PECULIAR FUNCTION IN EDUCATION FURTHER EXPLAINED

Modern civilization is derivative; resting upon the ancient Roman civilization on the one hand, and upon the Greek civilization on the other. All European civilization borrows from these two sources. To the Greek we owe the elementary standards of æsthetic art and literature. They have transmitted to us the so-called perfect forms. All culture, all taste,

bases itself upon familiarity with Greek models. More than this, the flesh and blood of literature, the means of its expression, the vehicles in which elevated sentiment and ideal convictions are conveyed, largely consist of trope and metaphor derived from Greek mythology.

Before science and the forms of reflection existed, the first method of seizing and expressing spiritual facts consisted of poetic metaphor and personification. Images of sense were taken in a double meaning; a material and a spiritual meaning in inseparable union. Not only Anglo-Saxons but all European nations, even the ancient Romans, are indebted to Greek genius for this elementary form of seizing and expressing the subtle, invisible activities of our common spiritual self-hood. One can never be at home in the realm of literature without an acquaintance with this original production of the Greek people.

More than this, the Greek people, essentially a theoretically inclined race, advanced themselves historically from this poetic personification of nature towards a more definite, abstract seizing of the same in scientific forms. And hence with the Greek race philosophy and science are also indigenous. The Greek language is specially adapted to the function of expressing theoretical reflections, and in the time of the historical culmination of the Greek race, appeared the philosophical thinkers, who classified and formulated the great divisions of the two worlds; man and nature.

All subsequent science among European peoples has followed in the wake of Greek science; availing itself of Greek insight, and using the very technical designations invented by the Greek mind for the expression of those insights. This may be realized by looking over the works of Aristotle and taking note of the technical terms and the names of sciences derived from him.

The theoretical survey of the world in its two phases of development, æsthetical or literary, and reflective or scientific, is therefore Greek in its genesis; and a clear consciousness of the details and of the entire scope of that side of our activity, requires the use of the elementary facts—the primitive points of view that belong to the genesis or history of the development of this theoretical survey; just as a biological science explains the later forms as metamorphoses of the earlier. A knowledge of Greek life and literature is a knowledge of the embryonic forms of this great and important factor (the philosophy and poetry) in modern civilization.

The Roman contribution to modern civilization is widely different from that of the Greeks. Instead of æsthetic or theoretic contemplation, the Roman chooses the forms of activity of the will for his field of view. He has formulated the rules of civil activity in his code of laws. He has seen the mode and manner in which man must limit his practical activity in order to be free. He must act in such a manner as to reinforce his fellow-men and not lame or paralyze their efforts, and thereby also destroy the products of his own activity by cutting himself off from the help of his neighbors.

Let each one act so that his deed will not be self-destructive if adopted by all men. This is the Kantian formula for free moral activity. Man is placed in this world as a race, and is not complete as a single individual. Each individual is a fragment of the race, and his solution of the problem of life is to be found in a proper combination with his fellow-men, so as to avail himself of their help, theoretical and practical. Theoretically they will help by giving him the results of their experience in life; of their pains and pleasures; of their mistakes and successes; of the theoretical inventory which they have taken of the world in its infinite details; and of the principles they have discovered as the units which reduce those details to a system. Without this combination with his fellows he remains an outcast, a mere rudimentary possibility of man.

How important, then, is this invention of the civil forms which make possible this combination and co-operation! Other people, before the Romans or contemporary with them, may lay claim to this invention of the civil code. But their claims cannot be sustained. Moral and ethical forms, in sufficiency, they have; but the civil form which gives and secures to the individual the circle wherein he shall exercise supremely his free will, and beyond the limits of which he shall submerge his individuality utterly in that of the State — the supreme civil institution — such a civil form elaborated into a complete code of written laws, we do not find elsewhere.

It is, moreover, a settled fact in history that modern nations have received their jurisprudence from the Roman peoples, modifying the same, more or less, to accommodate it to the developed spirit of the Christian religion. It is essential for a correct view of this subject to consider carefully the nature of the forms of expression which must be used in order to define the limits of the free will. The code which expresses such limits must deal with prohibitions only, in so far as it defines crime. But it must furnish positive forms in which all agreements and contracts are to be defined. The full exercise of free-will within the sphere allotted to the individual is accomplished only by means of the institution of property. The complete idea of property renders necessary the possibility of its alienation, or transference to others. Contract is the form in which two or more wills combine, constituting a higher will. The Roman law furnishes the varied forms in which this higher will, essentially a corporate will, is realized. This is the most important contribution of Rome to the civilization of the world. So important is contract to the Roman mind, that, it defies soulless abstractions in which it sees incorporated civil powers. Its Jupiter, Mars, Juno, Venus, each personifies Rome. The word *religio* (binding obligation) etymologically expresses the highest spiritual relation as conceived by the Roman. He makes a vow, proposes a contract to his gods, and the gift of the god being obtained he will faithfully fulfil his vow.

The Roman people possess, as individuals, a sort of double consciousness, as it were a consciousness of two selves, a private and a public self: first, the self as supremely free within the circle of what it owns as its personal property, its "dominium;" second, the self as utterly

submerged in a higher will, that of the State, beyond its personal limit. All modern civilization, rooting as it does in that of Rome which had conquered the world, receives as its heritage this double consciousness, and can never lapse back into the naïve, childish consciousness of pre-Roman civilization. Just as the technical terms and expressions, the very categories in which literary and art forms or philosophical and scientific forms are possible, are derived from a Greek source, so too, on the other hand, these most important civil forms of contract, corporation, and criminal definition, are borrowed from Rome, and were originally expressed in Latin words, and Latin derivatives in most of the European languages still name and define these distinctions. Seventy-five per cent of the words of the English language are of Latin origin, those expressing refinements of thought and emotion, and deliberate acts of the will. As soon as one begins to be cultured he requires the Latin part of the English vocabulary to express himself.

To study Latin, just the mere language and its grammar, is to study the revelation of this Roman spirit in its most intimate and characteristic form. Language is the clothing of the invisible spiritual self of the people, a revelation of its primary attitude towards the universe. A study of the politics, history, religion and law-making of the Roman people is a still further initiation into the mysteries of this phase of modern civilization, but not so effective as the immediate influence of the language itself.

Comparative philology and sociology owe to us the duty of investigating the Greek and Latin languages with a view to discover (what must certainly exist) a grammatical and logical adaptation of those languages not only to express the fundamental point of view of those peoples, the one theoretical and the other practical, but to explain also how those languages stimulate by their reaction upon the minds of those using them, the original theoretical or practical tendency of the people who spoke them. The modern youth, by common consent in all civilized countries, is trained upon Latin and Greek as special discipline studies. Little or no mention is made of the rationale of this process, to the pupil. Very little is done to point out the relation between the facts seen through the Roman world-view and the facts which surround him. Nevertheless these ancient facts concern in one way or another the genesis of the modern facts, and the experience of life subsequent to school goes to the constructing of bridges of relation from the one fact to the other.

Merely by thinking the modern facts through the colored spectra of the ancient facts, the classically educated man is able to decompose the compound rays united in the modern. All unconscious that the classical material of his education performs the function of a decomposing prism, or that the ancient facts are embryonic stages of the modern facts, the student finds that he has a superior power of analysis and generalization, that he is able to divide his complex life and to fix his attention upon a single strand of modern civilization, its political and legal forms, or its theoretical or æsthetical forms. He, by this, learns how to direct the same practically. This ability is a real possession of the highest practical value, but he may

not have any true theory of its existence or of its origin. He may even call the source of his talent "a college fetich."

It is this subtlest and least observed, or most rarely formulated expression of the spirit of the Greek and Roman peoples, namely, their impression upon the grammatical forms and categorical terms of their languages, that exercises the surest and most powerful effect on the classical student.

One may say that of a hundred boys, fifty of whom had studied Latin for six months and fifty of whom had not studied Latin at all, the fifty with the smattering of Latin would possess some slight impulse towards analyzing the legal and political view of human life, and surpass the other fifty in this direction. Placed on the distant frontier, with the task of building a new civilization, the fifty with the smattering of Latin would furnish most of the law-makers and political rulers, legislators and builders of the State.

In the same way a slight smattering of Greek through the subtle effect of the vocabulary and forms of grammar would give some slight impulse not otherwise obtained towards theoretical or æsthetical contemplation of the world. On the highest mountain ridge a pebble thrown into a rill may divide the tiny stream so that one portion of it shall descend a watershed and finally reach the Pacific Ocean while the other portion following its course shall reach the Atlantic. It requires only a small impulse to direct the attention of the immature mind of youth in any given direction. A direction once given, the subsequent activity of the mind follows it as the line of least resistance, and it soon becomes a great power, or even what we may call a faculty. Certainly it will follow that the busying of the mind of youth with one form or phase of Roman life will give it some impulse towards directing its view to laws and institutions or the forms of the will, and that the occupation with the Greek language and life will communicate an impulse towards literary and philosophical views of the world.

The specialist in snakes and turtles would not deserve the title of profound naturalist, if he had happened to neglect entirely the study of the embryology of these reptiles. A knowledge that takes in a vast treasury of facts, but knows not the relation of those facts so as to bring them into systems of genesis and evolution does not deserve to be called profound. It is replete with information, doubtless, but not with the most valuable part, even, of information.

It cannot be too carefully noticed that one fact differs from another in its educative value, and that a knowledge of German or French is not a knowledge of a language which belongs to the embryology of English-speaking peoples, and hence is not educative in that particular respect, although it may be educative in many other ways. The revelation of man to himself is certain to be found in the history of the race. He who will comprehend literature and art and philosophy must study their evolution by peoples with whom they are or were indigenious.

The study of Latin and Greek therefore prepares the mind of the European or American to recognize and comprehend the most important element in his civilization. What these studies do for human nature, mathematics does for physical nature. The mathematics studied

in college enable him to comprehend quantity as it exists in time and space. All material existence in time and space is subject to mathematical laws. These laws can be discovered in advance of experience. The study of geometry, trigonometry, the calculus, and mechanics, in our colleges furnishes the mind of the student with a number of powerful tools of thought with which he can subdue nature.

ELEMENTARY, SECONDARY AND HIGHER STUDIES

A comparison of the methods of instruction and the course of study in the three grades of school, elementary, secondary and higher, will show us more clearly in what the special advantages of higher education consist. The child enters the elementary school when he is of proper age to learn how to read. He has not yet acquired an experience of life sufficient for him to understand very much of human nature. He has a quick grasp of isolated things and events, but he has very small power of synthesis. He cannot combine things and events in his little mind so as to perceive processes and principles and laws,—in short, he has little insight into the trend of human events or into logical conclusions which follow from convictions and principles. This is the characteristic of primary or elementary instruction, that it must take the world of human learning in fragments and fail to see the intercommunication of things. The education in high schools and academies, which we call secondary education, begins to correct this inadequacy of elementary education; it begins to study processes; it begins to see how things and events are produced; it begins to study causes and productive forces. But secondary education fails, in a marked manner, to arrive at any complete and final standard for human conduct, or at any insight into a principle that can serve as a standard of measure. It is the glory of higher education that it lays chief stress on the comparative method of study; that it makes philosophy its leading discipline; that it gives an ethical bent to all its branches of study. Higher education seeks as its goal the unity of human learning. Each branch can be thoroughly understood only in the light of all other branches. The best definition of science is, that it is the presentation of facts in such a system that each fact throws light upon all the others and is in turn illuminated by all the others.

The youth of proper age to enter upon higher education has already experienced much of human life, and has arrived at the point where he begins to feel the necessity for a regulative and guiding principle of his own, with which he may decide the endless questions that press themselves upon him for settlement. Taking the youth at this moment, when the appetite for principles is beginning to develop, the college gives him the benefit of the experience of the race. It shows him the verdict of the earliest and latest great thinkers on the trend of world history. It gathers into one focus the results of the vast labors in natural science, in history, in sociology, in philology, and political science in modern times.

The person who has had merely an elementary schooling has laid stress on the mechanical means of culture,—the arts of reading, writing, computing, and the like. He has

trained his mind for the acquirement of isolated details. But he has not been disciplined in comparative study. He has not learned how to compare each fact with other facts, nor how to compare each science with other sciences. He has never inquired, What is the trend of this science? He has never inquired, What is the lesson of all human learning as regards the conduct of life? We should say that he has never learned the difference between knowledge and wisdom, or what is better, the method of converting knowledge into wisdom. The college has for its function the teaching of this great lesson,—how to convert knowledge into wisdom, how to discern the bearing of all departments of knowledge upon each.

It is evident that the individual who has received only an elementary education is at a great disadvantage as compared with the person who has received a higher education in the college or university, making all allowance for imperfections in existing institutions. The individual is prone to move on in the same direction, and in the same channel, which he has taken under the guidance of his teacher. Very few persons change their methods after leaving school. It requires something like a cataclysm to produce a change in method. All of the influences of the university, its distinguished professors, its ages of reputation, the organization of the students and professors as a whole, these and like influences, combined with the isolation of the pupil from the strong tie of family and polite society, are able to effect this change in method when they work upon the mind of a youth for three or four years.

The graduate of the college or university is, as a general thing, in possession of a new method of study and thinking. His attitude is a comparative one. Perhaps he does not carry this far enough to make it vital; perhaps he does not readjust all that he has before learned by this new method; but, placing him side by side with the graduate of the common school, we see readily the difference in types of educated mind. The mind trained according to elementary method is surprised and captivated by superficial combinations. It has no power of resistance against shallow critical views. It is swept away by specious arguments for reform, and it must be admitted that these agitators are the better minds, rather than the weaker ones, which elementary education sends forth. The duller minds do not even go so far as to be interested in reforms, or to take a critical attitude toward what exists.

The duller, commonplace intellect follows use and wont, and does not question the established order. The commonplace intellect has no adaptability, no power of readjustment in view of new circumstances. The disuse of hand labor and the adoption of machine labor, for instance, finds the common laborer unable to substitute brain labor for hand labor, and it leaves him in the path of poverty, wending his way to the almshouse.

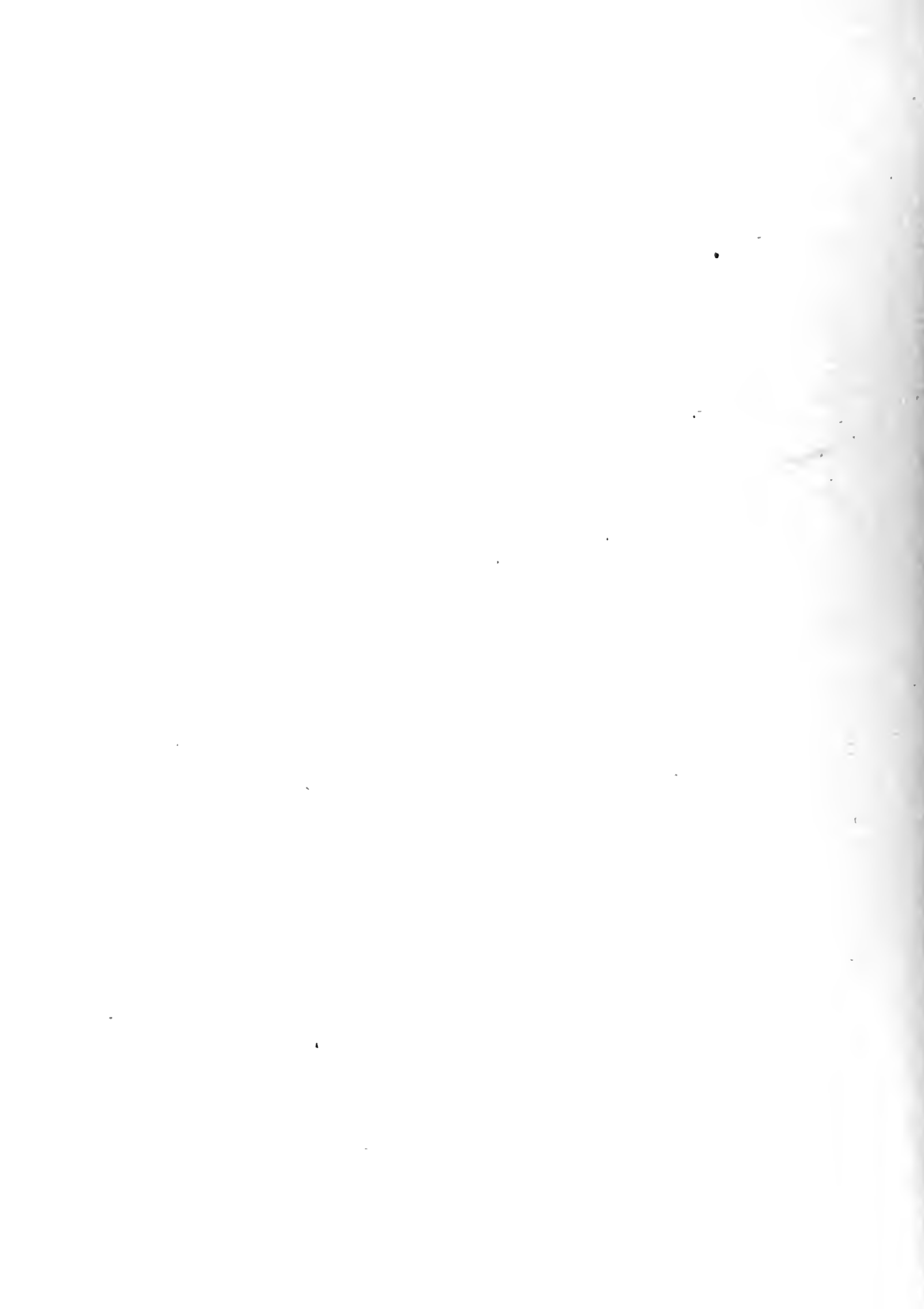
The so-called self-educated man, of whom we are so proud in America, is quite often one who has never advanced far beyond these elementary methods. He has been warped out of his orbit by some shallow critical idea, which is not born of a comparison of each department of human learning with all departments. He is necessarily one-sided and defective

in his training. He has often made a great accumulation of isolated scraps of information. His memory pouch is precociously developed. In German literature such a man is called a "Philistine." He lays undue stress on some insignificant phase of human affairs. He advocates with great vigor the importance of some local centre, some partial human interest, as the great centre of all human life. He is like an astronomer who opposes the heliocentric theory, and advocates the claims of some planet, or some satellite, as the centre of the solar system.

There is a conspicuous lack of knowledge of the history of the development of social institutions in many of the revolutionary theories urged upon the public. The individual has not learned the slow development of the ideas of private property in Roman history, and he does not see the real function of property in land. Again, he does not know the history of the development of human society. He has not studied the place of the village community and its form of socialism in the long road which the State has travelled in order to arrive at freedom for the individual.

The self-educated man, full of the trend which the elementary school has given him, comes perhaps into the directorship over the entire education of a State. He signalizes his career by attacking the study of the classic languages, the study of logic and philosophy, the study of literature and the humanities. It is to be expected of him that he will prefer the dead results of education to an investigation of the total process of the evolution of human culture. The traditional course of study in the college takes the individual back to the Latin and Greek languages in order to give him a survey of the origins of his art and literature and science and jurisprudence. In the study of Greece and Rome he finds the embryology of modern civilization, and develops in his mind a power of discrimination in regard to elements which enter the concrete life of the present age. It is not to be expected that the commonplace mind, which is armed and equipped only with the methods of elementary instruction, shall understand the importance of seeing every institution, every custom, every statute in the light of its evolution.

In this series of volumes which contain studies on universities, colleges and higher institutions of learning in the United States, with special attention to the biographies of the Sons of these institutions, ample opportunity will be afforded to investigate this great question of the nature and influence of the course of study adopted in our higher education. Only in the careers of graduates of a college may one trace with clearness the influence of its teachings. These volumes will do more than any other instrumentality to demonstrate what the higher education of this country has done to give shape to its business, its politics and its literature, and to show how it has furnished the directive power of the nation.



UNIVERSITIES OF LEARNING

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By JOSHUA L. CHAMBERLAIN, LL. D.

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CORRESPONDING with the desire of the human mind for knowledge, either to give it enlarged consciousness of its capacities or enlarged scope of positive power, is the impulse to preserve its acquisitions and communicate them to other minds. This disposition has been manifest in the institutions which have marked the flourishing epochs of nations and the ascendancy of great minds. In the earlier times of history of which there are records,—these very records in fact being examples of this tendency,—some nation has appeared to have an acknowledged eminence above others in this regard, more than commensurate with its relative extent or physical power. This would betoken the exercise and enjoyment of a mastery more than the merely material. But this supremacy has not held its place and power. It seems to have passed from time to time from nation to nation, until in more modern times communication has been more free, and the human sympathies and rivalries stronger, so that knowledge has been more quickly and more evenly diffused.

Perhaps it would be impossible to trace in determinate lines a vital relation between the great schools and centers of learning which have illustrated the prominent ages and places in the progress of civilization. Still there has been a certain continuity in the history of educational institutions, either by inheritance, or adoption, or imitation. All along the dim horizon of history the lights of learning are reflected on the clouds, a brooding token of moving yet continuous life. The torch of knowledge passing from people to people and from shore to shore, might seem to the casual observer to have but a broken and fitful course, yet when these points of radiance are joined by closer attention and deeper intelligence, they disclose the pathway of a persistent motion, in curves not wanting in grace or significance, and a sequence suggestive at least of continuity of influence, if not of the more intimate relations of cause and effect.

ASSYRIA AND EGYPT

In the early civilization of the East, the libraries were the centers of learning. They were also symbols of political power, or of national glory. Their prestige was such that although sometimes made objects of the vengeance of contending dynasties and races, they were oftener

borne away as spoils and trophies of war, or served as royal gifts between friendly powers. We are astonished to read of the vast libraries which adorned the splendid civilizations of Babylon and Assyria, in that long period from the time of Sargon of Akkad 3800 years before Christ, to that of Sardanapalus more than thirty centuries later. In ancient Egypt the temples were seats of learning and literary activity; the sacred books gathered in them connecting human things with the divine with so liberal a scope that they have been called "an encyclopædia of religion and science." Here too the great kings signalized their magnificence by the collection of treasures of literature and science and art in libraries and museums, which became schools of learning and culture. The library of Rameses I, in the fourteenth century before Christ, showed the scope of its purpose in the inscription it bore over its gates, "The Dispensary of the Soul." In the times of the Ptolemies the library at Alexandria was one of the wonders of the world. This was a working school as well, where with breadth of vision as well as of scholarship, many choice works of old Egyptian or Hebrew lore were translated into the Greek language.

GREEK AND SARACEN LEARNING

The Greek in turn gave to the Arabian. We can scarcely help associating the Academy and Lyceum where Plato and Aristotle held their delighted followers in familiar though deep discourse, with those centers and circles of learning which from the eighth century marked the course of Saracen domination on three continents, with the declared purpose of enabling and attracting its subjects to share the treasures of philosophy and science then the patrimony and the glory of the Greek language. Whether this movement was in response to a clearly indicated intellectual demand of the Arabian mind, or as it is most probable, a measure of good government and regard for the general welfare, — not without some aspiration for glory, — on the part of those memorable caliphs Haroun Al-Raschid and his son Al-Mamoun, it must be confessed that this impulse had reached a remarkable height when, — if we may believe the Moslem records of those times, — the latter of these ambitious spirits offered to the Emperor at Constantinople, with whom he and his predecessors had been waging fierce wars, a treaty of perpetual peace and a payment of five tons of gold, for the services of the philosopher Leo, if he would impart to him the mysteries of knowledge then in the keeping of the Greek.

Whatever may have been the exact truth in this instance, a brilliant fame remains to the Saracen in such great schools as those at Bagdad and Bokhara and their offshoots; in the rich libraries in these places and at Cairo, and the restored library at Alexandria, rivalling that of Ptolemy, in which in turn were preserved in translations into Arabic many valuable works whose originals have been lost in the wave and fire of war, or through the discouragement and degeneracy of the peoples in their ancient home; in the schools also which followed its conquests in Europe, — first in Sicily, reacting on the shores of Italy to quicken the impulse

towards classic learning scarcely then reviving there, and finally in Cordova in Spain, which became a powerful attraction and example for all Europe.

Thus the spirit of learning, having passed down the eastern end of the Mediterranean and illumined the shores of Asia and Africa for a season, while Europe lay under a shadow which has given to that period the penitential name of "the dark ages," now returned again by the western end of that sea, in something like an ecliptic path. Having made that circuit and passed on that torch, the Saracen genius, overborne by the dark power of the Turk, relapsed into shadow not even yet lifted, while a new day was dawning on Europe in the "revival of learning" led by Petrarch and Boccaccio, and broadening into the "renaissance" of all the arts, even that of recovering the ancient liberties of Rome, as was attempted by the high-souled but ill-fated Rienzi and Bussolari.

Whether this wavering path of the light and dark ages is by force of some "natural law in the spiritual world," or perchance by a force acting in the converse of this order,—the natural being but the manifestation of the spiritual,—a certain autonomic will, akin to instinct, dominating amidst the seeming play of the vibrations of human motive and circumstance which covers the linking of the iron chain of hidden cause and effect,—we cannot fail to discern beneath all the successions of phases and transitions, dissolution and reconstitution, a certain transmitted influence, or high, transcendent ruling, which determines the persistent ongoing and identity of human life. Nothing seems to be lost to man; we live from all the past, and for all the future.

And there may be in this course of learning a closer continuity than that of influence and stimulus. The very words we employ to mark the rise of modern conceptions of methods of study in the arts and sciences, in history and literature,— "revival" and "renaissance,"— imply something like a resurrection—a continuity, but also newness, of life. The vital germs planted long before, held in darkness and inert, and seeming lost, were only slumbering until the times were ripe for taking on the new life. Humble means were sometimes working out greater ends. It was for no momentary satisfaction that those recluse scholars in the ancient libraries busied themselves in translating precious works otherwise lost. It was not without some forecast that treasures of ancient lore were guarded in the seclusion and sanctity of cathedral and monastery, while the clergy and monks were forbidden or unable to read them. Truly the cloisters held some rare and chosen spirits, touched with higher lights than those by which they went their daily round.

THE MEDIÆVAL SCHOOLS

When the schools of the Roman Empire were swept away before the flood of Barbarian invasion, their places were taken by the cathedral and monastic schools. The conquerors thought it good policy to respect the Church, which held the prestige of a divine authority.

But the old Roman schools, after which the new schools patterned, devoted chiefly to the study of grammar and rhetoric, thus preserving the fame and influence of the Greek and Roman masters, opened also to a literature full of the praises of heathen gods, and the recitals of heathen mythology; and hence these studies did not find much favor with the Church authorities, and were not pursued far. Still this buried life was preserved and carried over. Out of it rose mighty institutions.

Thus the little school of Salerno, kept alive by peculiar monastic care, when touched by the genial influences of the Saracens on the neighboring shores of Sicily in the ninth century, rose rapidly into a vigorous medical school and university. Bologna also, a great law school at the beginning of the twelfth century, and a university of world-wide fame within the two centuries following, is said to have taken its rise under the fostering hand of Theodosius II, in the fifth century, and recognized by Charlemagne three hundred years later, to have been finally "established" by Irnerius three centuries later still. So too, there are positive and lasting results of that characteristic measure of the broad-minded Charlemagne, when he invited to his court at Aix-la-Chapelle the English scholar, Alcuin, the most accomplished man of his time. In the school he set up in his palace, this great master of men made himself and all his family pupils of Alcuin, who doubtless imparted to them what they were able to receive of his learning, and quickened their spirits for greater things. From this example, and the force of edicts from time to time issued by him requiring that candidates for orders in the church should be well instructed in all the knowledge then available, and that they should no longer be admitted from a servile class, but be sons of freemen, with a counter-balancing provision that gratuitous instruction should be given to the children of the laity in all schools, a mighty impulse was given to the character, the honor and the extension of education, through all his vast empire. One particular result appears in the school which grew up to become the renowned University of Paris. This, in turn, became prototype of many others, among which we may no doubt count the University of Oxford, and afterwards of Cambridge.

But here again appears a thread which indicates the continuous working of purposes and efforts, although in long obscurity and slow of result. It is not improbable that the first seeds of the higher learning were sown at Oxford by the illustrious Alfred, and it is well established that a school of arts, as then understood, existed there in the time of Edward the Confessor, in about the year 1050. And to the influence of these universities we know how much our early educational institutions in America are indebted.

Thus, even when the close connection of steps cannot be traced, we can see from the high ground of the present that all the paths of the past, small or great, direct or circuitous, lead into our own; and that we are made sharers of the knowledge, as well as of the spirit and impulse, which have quickened and strengthened other minds wide and far away in place and time.

The mediæval schools, following the traditions of the Roman, had for their type and measure a curriculum then supposed to comprehend the arts and sciences, the former division of which was the "trivium," regarded as elementary, consisting of grammar, rhetoric and logic; and the latter "quadrivium," embracing arithmetic, geometry, music and astronomy. The first of these divisions represented what we call in our day, language and literature. In the second group, the subjects classed as sciences seem to have been treated chiefly in an abstract manner, as mental concepts more than positive knowledge, which now determines what we regard as the peculiar field of science. These, indeed, had been treated only in the most elementary and superficial manner. Even astronomy, the earliest of the sciences, passing from Chaldea through Egypt to the Greeks, had, after the grand guesses at truth by Pythagoras, been suffered to fall into neglect, scarcely broken by the discoveries of Hipparchus and Ptolemy, until revived by the Arabians in the eighth century, and received no adequate attention until the advent of Copernicus nearly seven centuries afterwards.

THE UNIVERSITIES

The advance in the spirit as well as in the subjects of learning which marked the twelfth and thirteenth centuries, demanded great extension and indeed complete transformation. At about the beginning of the thirteenth century, the whole old curriculum, termed the "liberal arts," was gathered under a new general title,— "philosophy," and we find the universities starting out with four "faculties,"—philosophy, theology, jurisprudence and medicine. All these departments now took new depth and scope.

The sphere of medicine was wide indeed. There was no other science which comprehended any of the branches afterwards embraced in "natural history," including a description of all the phenomena of the animal, vegetable and mineral world. Under the name of "physics," these formed the basis of the science applied in the art of the practitioner of medicine, the tradition of which survives among English-speaking peoples in the title of "physician" among the learned professions of the present day.

It seems not a little strange that Europe owes to a race or order of the Oriental mind combining poetic tendencies, almost amounting to the romantic, with an active and positive temper, the impulse which led to the wide-spread and eager study of the more practical sciences so deep in their reaches and useful in their effects,—chemistry, physics and medicine,—in the very nomenclature of which lies a lasting recognition of obligation to Arabian genius and achievement.

The studies of theology and law were pursued with such vigor that they came to dominate the minds of almost all Christendom. The two positive, interpenetrating, almost rival powers,—the prestige of the old Roman Empire, and the actual, potent authority of

the Roman Church,—demanded of their intelligent subjects accurate knowledge of at least their positive edicts. There were thus two branches of the law,—the civil and the ecclesiastical. We can well understand why the study of the civil law, tracing not only the literal, positive precepts of the imperial codes, and their historic origin in the “twelve tables,” but also the application of the principles of natural equity as applied to the conditions of a growing civilization, comprising thus both the constitution and the law, and lying at the very foundation of the social order, should be regarded as of the highest dignity and importance. We can also understand why the study of theology, deriving its authority from the express sanctions of God himself, and claiming jurisdiction over every act and faculty of the human mind, and formally declared in the creeds of the church and the edicts of its recognized head,—a power commissioned from the spiritual spheres, rival, if not arbiter, of human law,—should assert itself as supreme in rank among the studies possible to man. Well may it be said that “these studies of the civil and canon law did more during the middle ages than all others put together, to shape and control the opinions of mankind.”

SCHOLASTICISM

In connection with this, one branch of the old “trivium,” that of logic, now embraced under “philosophy,” received remarkable extension. The habit of limiting this sphere of study to the powers of words was not wholly unreasonable nor without profit. For if all the meanings and relations of words are followed out, the mind cannot but advance in its powers both of definition and of comprehension. But when it comes to deal with abstract terms and general concepts, the mind wanders in a world of its own creation. Words are names of things; and what are “things”? This speculative application of logic was adopted as a method of ascertaining truth; and under the title of “dialectics” became the master-science of the middle ages. As it had its chief theatre in the schools, this method of reasoning was called “scholasticism.” Its importance was in the fact that it was applied to the discussion of some of the most momentous doctrines of theology. Curiously enough the turning-point of the determination was the reality of the objects denoted by abstract terms, and general concepts, sometimes called “universals” as including under them in extension many particulars. The question was whether these terms represented real existences in and of themselves, or were only names of concepts—forms fashioned in and by the mind, and having no existence outside of it. The adherents of the former view were called “realists”; and those holding to the latter view, “nominalists.” In these discussions, such writings as those of the Aristotelean logic, and Plato’s obscure *Timæus*, which formed a good part of their scanty philosophical literature, and those of St. Augustine on the controverted points of theology, were appealed to as final authorities.

But the necessity of dealing with words which cannot be otherwise than ambiguous and the imperfect apprehension of logical and real distinctions, could not fail to carry these metaphysical discussions into inextricable confusion. For Plato meant by his "idea" not the conception of the mind, but the object to which that conception conformed. And Aristotle seems not clearly to have perceived that that distinction between matter and form which he makes so important a part of his definitions, represents no actual, objective difference in things, but only sets forth the very same things apprehended under different modes of thought.

We may smile at these "quiddities" and "hacceties," but they mark analytical abilities of a very high order, and great power of sustained thought; and the controversy, while engaged upon the finest and most recondite doctrines of theology, involved almost every relation below these, from Pontifical authority and ecclesiastical orthodoxy to professional and personal relations. So that our respect cannot be withheld, and our surprise is forestalled,—though not our sorrow,—when we learn that noble men like John Huss were sent to the stake for opinions having their ground in the intellectual apprehension of the nature of the entities lying behind general concepts and abstract ideas.

It may not be easy to explain why so many able men devoted the keenest powers and utmost energies for century after century to these discussions, nor why such multitudes of young men flocked to the universities from all parts of Europe to listen to them; but it is by no means a barren passage of history. While the spirit of an age in which such things were possible has passed away, and while perhaps no more positive gains than the exhibition of the possible permutations of terms and concepts have been added to the solid sum of knowledge, yet the enthusiasm resulting in and from these controversies undoubtedly led to the wide extension of the interest in learning, and to the founding of many great and noble schools the influence of which has enriched all later means and methods of study, and in many ways beyond those manifest has a world-wide potency to-day.

ORGANIZATION

The point of time, or determination, as to the name universities is not easy to ascertain. We know that the extension of the courses of study so as to constitute the four faculties was denoted by the term "*studium generale*," or "*universale*." Hence, no doubt, the title "*university*." But whether first adopted by the heads of institutions upon their wider organization, or a current appellation descriptive of their new departure, or whether the title was first obtained by virtue of special acts of recognition of the form or effect of charters conferred as franchises by the authorities of Church or State, it may not be possible or material to determine. It is clear that the matter of internal organization was of the first necessity. The great number of students resorting to these centers of learning from all quarters of Europe rendered it necessary

to adopt regulations and declarations of rights and powers equivalent in many respects to that of a corporation, or almost a body politic. We find at Bologna in the middle of the fourteenth century more than thirteen thousand students; and shortly afterwards at Paris more than thirty thousand,—a number equal to that of the whole body of resident citizens. The regulation and governance of so many aliens must have been matter of no small concern. Under such circumstances the students and professors of a common country organized themselves into societies, or student guilds, somewhat after the fashion of the Teutonic guilds of Northern Germany,—“confederations of aliens on a foreign soil,” each following its own peculiar customs, and adopting its own laws and regulations. Thus within these great schools were three or four distinct bodies, or “nations,” as they called themselves, which enabled them in some manner to secure protection and enjoyment of rights which they could not claim as citizens, nor enforce by process of local municipal laws. It would be curious if we could trace to this practice and custom that somewhat exclusive student-spirit, and that easily provoked jealousy between “town and gown,” and that now baseless and misleading notion that students are not amenable to the municipal laws, still lurking in the older American colleges.

TENURE AND POWER

But beyond this interior, self-sufficing organization, in notable instances special privileges and immunities were granted to students of the great schools by the civil, political and religious authorities. Such an instance is that of the Emperor Frederick Barbarossa, who, importuned no doubt by the crowds of students at Bologna in the year 1155 complaining of the oppression of the landlords in whose houses they were domiciled, won high favor by conferring upon them substantial privileges, which were afterwards embodied in the “*Corpus Juris Civilis*” of the Empire. In similar manner the University of Paris, besides its interior organization of “nations,” received from the Pope not only authority for the joint faculties to “regulate and modify the entire constitution of the university,” but also the privileges of sending a representative to the Papal Court, which conferred upon it rights as a corporate body before the courts of justice. In England, Oxford, which began its practical organization in the endowment of “halls” and “houses” for the maintenance of scholars, was referred to as a university in a document of King John in the year 1201; and a royal charter was soon after granted, which established its rights as a public institution under the patronage and protection of the State. In the next century it is formally recognized by the see of Rome as an authorized place of public instruction, in the category of Paris, Bologna and Salamanca; and various regulations are laid down respecting the professors and graduates of these institutions.

Following the precedent perhaps of Paris in its representation at the Papal Court, England in 1603 granted to her universities the right of representation by membership in the House of Commons, and in that capacity, by a remarkable extension of political privilege, participation

in the legislation and government of the nation and empire. The great prestige of the universities is also attested in the fact that they ranked among the powers of Church and State. The University of Paris was an arbiter between these. Philip the Fair invoked its aid when refusing the claim of Pope Boniface that by the ordinance of God all kings, including the King of France, owed complete obedience to the Pope, not only in religious affairs but in secular and human as well. And Charles the Wise, justly estimating the glory it had shed upon his throne, declared it to be the eldest daughter of the kings of France, and gave it precedence at court immediately after princes of the blood. In the great "schism of the West" it was under its advice that the French church formally withdrew itself from the dominion and authority of the Pontiff. And in the famous Council of Constance called to determine questions of utmost moment, its chancellor, John Gerson, was ambassador of the king, and wielding the prestige of the university with masterly diplomacy and dignity became the recognized oracle of the Council. Remarkable authority seems to have been accorded to Oxford, when in the turmoil over the Divine Right of Kings in the last years of Charles II, the university published a decree asserting the duty of passive obedience, and condemning the works of John Milton and others, demonstrating to the contrary, to be publicly burned.

SOUTH AMERICA

From these examples of the rise and character of the universities of Europe, we pass to the institutions of higher learning in the New World which have been more or less directly influenced by them. In South America they followed mostly the pattern of those of Spain. Whatever reproaches may be laid against the Jesuits, it cannot be denied that in their early wide-spread missions they did good service in the cause of education. It was by their efforts, conducted with self-denial, zeal, tact and patience, exercised among the people as well as towards the political authorities, that schools of learning in South America followed so closely the Spanish conquests. Through these efforts arose the University of San Marcos in Lima, Peru, which received the royal confirmation of Charles V in 1551. Next, in 1553, appears that of San Paulo near Bahia, Brazil, which as a source of knowledge and of civilization, was a power beyond any other in the history of that country. Nearly at the same time arose the University of Santiago de Chile, under the protection of Valdivia, the successful general of Pizarro, and in Mexico a university founded by the Jesuits, largely an ecclesiastical institution after the model of Salamanca and the Sorbonne, which maintained its place and character until on the separation of Church and State in 1857 it was dissolved, and its foundations distributed among special schools of all the arts and sciences, more suited to the needs of the times. In the province of La Plate, — formerly embraced in the vice-royalty of Buenos Ayres, and now a State in the Argentine Republic, — by struggles truly heroic the Jesuits founded in 1611 the College of San Francisco Xavier at Cordova, which eleven years afterwards recognized as the University

of Cordova, began a famous career as the center of Jesuit missions and the most powerful seat of learning on the continent. The course of study here was typical of the class. At first the old mediæval curriculum was followed, based on the Latin language. The higher courses were the scholastic philosophy and theology. By degrees the faculties of medicine and of jurisprudence were added. At length, in comparatively recent times, under the popular demand for "more practical and useful knowledge than that which makes priests, nuns, and pettifogging lawyers" — so their protest and petition ran, — the faculties of mathematics and the physical sciences in all their branches and applications, took an important place in the constitution of the university. However, the early prominence given in the university to the study of the civil law has had its later fruits in the proficiency in the political sciences attained in these countries. In general public law, and especially in international law, statesmen and juriconsults of South America rank with the ablest modern masters.

CANADA

In Canada the celebrated Laval de Montmorency founded in 1663 the Catholic Seminary of Quebec, and after many vicissitudes of experience he made over all his property to this institution, where he exercised a powerful influence over the civil as well as the ecclesiastical affairs of that important province of the French Crown. This was raised into a university in 1854, perpetuating his name; and still holds vital relations to the educational system of the Province. King's College in Winsor, Nova Scotia, has the singular prestige of owing its origin to distinguished "loyalists" from the United States, who took refuge there after the Revolution. The rigor of its theological requirements led to the establishment of Dalhousie College at Halifax in 1821. Among modern institutions of the highest class are McGill University in Montreal, founded in 1825, and the University of Toronto, founded as King's College in 1827, with "university privileges," since realized in its reorganization in 1849, on the model of the University of London. Other important institutions have affiliated themselves with this. These universities hold a very high rank among the directive influences of the Dominion.

UNITED STATES

But it is the universities of the United States which chiefly engage our interest. The blessings of education were prominent objects before the eyes of the founders of these colonies. The same feeling which in all early history appears to associate closely education and religion, had remarkable manifestation in this country. And there is a special reason for this in the wonderful development of religious and civil liberty hand in hand, which characterized the first century of Colonial history. The deep experiences of Protestant Christians in England, France and the Netherlands had awakened a resolution not to be repressed. Instinct, observation, conscience, understanding, reason, faith, — nay, memory,

hope, and far-cherished ideals,—conspired to impel the colonists at the very first, to establish schools of learning adapted to the new situation, but naturally holding to some traditions of those of the old world to which they, and the cause of liberty so dear to them, owed so much. Many of them were graduates of old Cambridge in England, which in the profound revolt against absolutism had become a stronghold of Puritanism. The spirit of the Baconian philosophy had not more transformed the subjects and methods of study, than had the open Bible revealing the worth of the individual soul transfused men's minds with the spirit of freedom. All our early colleges were grounded on religious principles, and inspired by religious purpose. Harvard, founded in 1636, was dedicated to Christ and the Church, and was especially designed to prepare young men for the ministry. Yale, following in 1700, with deep religious motives in its origin, as in its development, was entrusted to the guidance of Congregationalist ministers.

Nor was it only Puritans and Independents who held fast to the religious element in higher education. The College of William and Mary in Virginia, founded in 1692, had for one of its chief objects to provide suitable instruction for such as intended to take orders in the Established Church. The College of New Jersey also, though embracing many religious sects and the traditions of several nationalities, declared its purpose to be the intellectual and religious instruction of youth, and especially the thorough training of candidates for the holy ministry. And the Academy at Philadelphia, which in 1751 grew into the University of Pennsylvania, was founded by the sons of William Penn, who though a graduate of Oxford, became a stout defender and almost martyr of the cause of spiritual liberty, and the sons no doubt were actuated by that high teaching and example. Columbia too, though not perhaps the lineal descendant of the Dutch classical school which followed close upon the first steps of colonization under the auspices of the Reformed Church of the Netherlands,—which, it is worthy of remark, holds its unbroken line from 1643 unto these times,—owes much to this influence and example. At the capitulation in 1673, the English recognized the religious allegiance of the Dutch schools, and desiring a similar one of their own in 1754 founded "King's College," patronized by all Protestant denominations and by the Government of England. Rising with new life after the Revolution as "Columbia," it bore upon its seal mingled emblems of instruction and religious faith and doctrine, and legends in Hebrew, Greek and Latin under the mystic symbol of the Holy Trinity, with the testimony—both pledge and prayer,—“In Thy Light shall we see light.”

The influence of these schools of learning who can doubt,—who can measure? Edmund Burke in his speech for the conciliation of the Colonies bears this testimony: “Another circumstance which contributes towards the growth and effect of this intractable spirit;—I mean their education. In no country in the world is the law so general a study. All who read,—and most do read,—obtain some smattering in that science.

This study makes men acute, inquisitive, dexterous, prompt in attack, ready in defence, full of resources. In other countries the people, more simple, judge of an ill principle in government only by an actual grievance; here, they judge of the pressure of the grievance by the badness of the principle." The libraries and teachings of the colleges kept the fountain full. Writes Thomas Hollis of England, one of Harvard's earliest benefactors: "More books, especially on government, are going for New England. Should these go safe, no principal books on that first subject will be wanting in Harvard College from the days of Moses to these times. Men of New England, use them, for yourselves, and for others; and God bless you!"

President Stiles of Yale—himself a noble patriot—gives testimony: "The Colleges have been of singular advantage in the present day. When Britain withdrew all her wisdom from America, this Revolution found above two thousand in New England only, who had been educated in the Colonies, intermingled with the people, and communicating knowledge among them." Well may we understand this when we see at their head such men as the Adamses, the Bowdoins, the Otises, the Quincies, Ames, Gerry, King, Parsons, for Harvard; the Livingstons, Silas Deane, Oliver Walcott, Wooster, Morris, Sedgwick, Wadsworth, Johnson, Hall, Baldwin, Ingersol and Nathan Hale for Yale,—the Dyers and Trumbulls and Wyllyses dividing their patronage between these two; Madison, John Dickinson, Ellsworth, Luther Martin, Reeve, Rush, Henry Lee for Princeton; Jay, Hamilton and Gouverneur Morris, Troup, Rutgers, Lispenard, Richard Harrison, Egbert Benson, Moore, Cruger and Stevens for Columbia; Hopkinson, Mifflin, Morgan, General Dickinson, Tilghman, and the Cadwalladers, and we might add Nixon, McKean and Robert Morris, for Pennsylvania; Jefferson, Monroe, Peyton and Edmund Randolph, Harrison, Wythe for William and Mary.

And how many others as worthy to be named, not participating directly in the formation or exposition of the new government,—preachers and ministers of the Gospel, teachers in the colleges, academies and schools, writers for the press, orators at town meetings,—did these colleges furnish for the country's need and honor!

Some of the leading minds of the Revolutionary times had been educated in the mother country. Especially was this the habit in the Southern Colonies. Of these were the Pinekneys, the Laurenses, the Rutledges, of South Carolina; the Lees and John Wilson, of Virginia, as also the Winthrops of Massachusetts.

Many too were what is styled, in distinction from college graduates, "self-made men," but perhaps still largely indebted to the influence of the college. Our patriots were not without education. They found a way or made it. Patrick Henry was privately educated by his father, a man of liberal education in the Old World, and ambitious for his son. John Marshall, though not a college graduate, received a classical education. So too, Elias

Boudinot. Henry Knox was a good scholar. Winthrop Sargent, Ethan Allen and Israel Putnam in one way, and Roger Sherman and John Mason in another, made their part in great events their means of education. George Washington had the whole country for his university. Benjamin Franklin was a university in himself.

There can be no doubt that the old classical colleges were well fitted to bring out the best powers of mind and character,—to build up a well-rounded manhood. This was not by the multitude of studies; it was by their character, and that of the noble men directing them. No student could fairly enter into fields then laid open without wakening in the mind a sense of its possibilities, and enforcing a certain discipline which gives the self-reliance and strength characteristic of manliness.

The Greek language opened the long vista of the aspiration for freedom. The Greek genius was spiritual. It saw the soul of things, and sought to embody it, in science as in art. Blending in its conception, as almost in its words, the ideas of the beautiful and the good, it set on wing those powers of the imagination which conceive and construct according to high and noble ideals. Loving the sunshine, yet with deep ethical instinct, it dealt with the profoundest mysteries of human life and destiny. We read to-day with stirring sympathy the tragedies of human will and fate wrought out in the soul of its great poets.

The Latin breathed the spirit of law. Its genius was essentially virile. It carried the impressive sense of strength, through order and obedience. It set forth in bodily form the relation of the individual and the State, which to the Greek was an endless problem or elusive image. Through restraint of will and regulation of power, it won the mastery of the world.

Mathematics touched the harmonies of the universe. It stirred the sublimest conceptions. The culture that came through it trained the power of sustained attention and connected thought, and formed the mind to habits of both vigor and rigor of reasoning.

The religious instruction, underlying all and reaching beyond all, revealed the dignity and destiny of the human soul, and its place under the moral government of the world. Its sacred teachings corrected the low moral tone of the classic literature. This gave to culture a balance where knowledge was sweetened by reverence, and at the same time quickened to power for noble achievement.

Out of such influences, earnestly administered and seriously cherished, we can well conceive what character of manhood would be wrought, and by this can understand the great examples of it which appeared in our early history.

And not only for those that shared these privileges was the college an instrument of discipline and culture. The mere existence of such an institution in the midst of a community has an educating power. It is a monument of achievement and monitor of

possibility. Even those who are not participant of its inner life are impressed by the familiar vision of an agency of power for good reserved and ready, and by that mysterious influence of presence which does not wholly reveal its source or its goal, but is one of the most effective appointed means of moving the human mind.

PRESENT ASPECT AND TENDENCY

On these lines the old colleges of the United States have built themselves up according to their means and their guiding spirit, for some two centuries. Those which sprung up in all the States after the Revolution under the fresh impulse of the people were largely shaped by these. And of later times there is no more significant characteristic than the disposition of persons who have acquired wealth to establish great and generally planned schools of higher learning, conceived and constructed after the same general ideals. Such modifications as have taken place have been in answer to the spirit of the times, or the advancement of science, or the ideas and purposes of the noble men who have established and guided them.

Regarding the present aspect and tendency of our colleges it is manifest that the religious element in them has somewhat changed, in expression if not in character, from the type of former times. The spirit and method of the study of the sciences so largely prevailing, — especially the requirement of positive verification by experimental tests conclusive alike upon all minds, — has undoubtedly affected the habit of thought and feeling towards matters depending upon spiritual evidence, and tended to diminish respect for authority, even in religion. The spirit of freedom, too, has taken a new departure. From revolt against absolutism it has extended to revolt against dogmatism. There is dogmatism everywhere, in science as in religion. Where truth is believed to be ascertained, it is to be maintained. But this reaction presses especially against religion, — or rather, against that form of it which is maintained by the church, — and not so much against the revelation and authority of spiritual truth in the individual soul.

So both these influences combine at present to work against the simple faith and habitual reverence of the times of old. The lack of reverence is undoubtedly a serious loss. For the holding of something sacred, and the recognition of relations to a moral, spiritual superior, are necessary to the best exercise of all the faculties of our nature. And surely the colleges, aiming to bring out the complete manhood, should not suffer themselves to be in default in these things. But it does not appear, even in these days of swift-moving and all-engrossing materialistic civilization, that the Christian spirit is set at naught or held in slight esteem. On the contrary it is interpreted more largely and applied more closely. Every reformer proclaims that he is seeking to apply the principles of the Christ. And the sense of individual responsibility which is enforced by all

study of human life and action will tend to counteract the vague submission to relentless "natural law," which is so repressive of the noblest aspirations of the mind. We cannot but perceive that Christianity is about entering on a new epoch of demonstration in the larger life of man. And the colleges under the guidance of noble minds conscious of their trust, will be held loyal to their ancient consecration, ministering to that true culture which is expressed in highest character, and recognizing the followers of Christ as the true church and his spirit manifested in the life of humanity as the true religion.

Closely related to this is the growing interest taken by all our institutions of learning in the political and economic sciences. It is an important part of a school of liberal education to fit young men for their duties as citizens. This function reaches very wide. Questions of government, of industry, of commerce, of finance,—questions arising from the manifold relations of our complex civilization, and pressing upon us for action, require intelligent, independent judgment on the part of citizens. And in the stress of the coming times, the great schools of the country should be fountains of knowledge and influence for right understanding and far-looking motives on these vital questions.

It is evidence of real advance in the "enfranchisement of humanity," and testimony to the practical effect of Christian principles, that the obligation is recognized of providing adequate instrumentalities for the higher education of women. There is no reason in nature, or in any revelation, why the mind of woman should not be admitted to the presence of highest truth, and why she should not be enabled to make full use of those delicate, spiritual powers,—the quick insight and almost divination of the true, the beautiful and the good,—which are a needful part of the directive forces of life, and for which it may be regarded a special provision of nature that in these attributes her endowments surpass those of men.

In connection with this, we are reminded to say that if there is a lack in the balance and completeness of the courses of higher instruction now offered, it is in the culture of the imagination. Opening the sense and the soul to the perception of beauty not only trains the mind in good taste and correct judgment of art, but also leads to the comprehension of great and perfect works. The imagination is a true constructive power. It forms conceptions of the ideals of truth, beauty, fitness and proportion without which mere knowledge of facts and niceness of analytical skill will be weight instead of wings in rising to complete mastery in any of the great arts of expression. This may not be so apparent in mere imitations of nature, or in technical and industrial drawings,—which, however, have their commercial value,—but it is a part of highest culture to draw the mind to the perception and comprehension of the beauty and power manifest in the universe, and in the works of human genius, which are also revelations of God.

The marked characteristic of present tendencies is the great amplification of studies

in the natural sciences. The wonderful advance in biology, chemistry and molecular physics, and the opening of new fields of interest and activity by reason of these discoveries and their practical applications, have created a demand for instruction in these departments, which the higher institutions of learning feel called upon to furnish. This cannot be adequately done except at the expense of a considerable inroad into the old, well-balanced "college course," especially designed to afford a general discipline and symmetrical culture of all the personal powers.

An expedient is resorted to by offering in the college course a liberal range of electives. A saving measure is adopted by so arranging these electives that a student who still desires the old course, or a moderately-modified new one, can find it by following the proper lines among the so-called "advanced courses." As a provisional measure this is, perhaps, the best that can be done. It certainly has the advantage of allowing the student to follow his natural inclinations and develop his special aptitudes; possibly also to gain a year or so in getting into his profession, or work in life, towards which there is now such hurry and rush.

But the professional schools, meantime, are increasing their requirements, and the whole college course is none too much to give the elementary knowledge and fitting discipline of mind to take up the professional course. The conditions in this country require thorough education for its professional men. No narrow or superficial preparation will suffice in this day for the successful practitioner in law, or medicine, or the ministry, or for the peculiar work of the journalist and public teacher. The colleges of the liberal arts ought to be strengthened on their own lines, instead of being required to enter upon technical or professional instruction. The provisions of electives should not look to cutting short the general disciplinary course. Electives—if a personal opinion may be here permitted—should not be taken between principal departments, but only between particulars in the same department. Language and logic should not be surrendered for biology, nor modern languages wholly displace the ancient. Nor should modern history, and political and social science and philosophy be left at all to election or option, but these should be studied by all in the light of practical ethics, in the maturer years of the course, so that young men can go out under this preparation and impulse to take their part in the direction of life for themselves and the community.

Some of the colleges, feeling the necessity of preserving the great features of the proper college course, have met the imperative demand by creating distinct and separate scientific departments, or special schools of science. Schools of Technology are established with more complete instruments of instruction. These are admirable in their intention and results; and although something of the breadth and symmetry of the college must be missed, such institu-

tions are the proper means of meeting those who for reasons sufficient to themselves prefer to waive the discipline of the college course, and move forward at once in the line of their professional work.

In what has been presented thus far, no distinction has been attempted between the college and the university. A sufficient reason for this might be in the fact that in this country, as yet, no characteristic distinction has been maintained. Some of the largest of our old colleges are now deeming it just and fitting that they should receive the higher title in recognition of their increased amplitude of studies or departments; and in rare instances, they have assumed this title in consideration of especial attention to depth, or advance, in study, rather than in the breadth of courses. Other recently established institutions, largely endowed and generously planned, providing for advanced and professional courses as their main object, have naturally, and not unjustly, taken the name of university. But still, there are no sharp or exclusive tests by which the name shall distinguish the thing. A college may multiply its course by dividing its studies into groups of electives. And any institution, by appropriate influence, may obtain the legal title of university, without evidence of any large range or profound reach of instruction. Perhaps there is no positive recognized test of titles. The universities of Bologna and of Paris had very different leading purposes and aims. Although the former was the great law school and the latter the great theological school of Europe, yet Bologna looked almost entirely to making itself a professional school, while Paris never lost sight of its original purpose and ideal, which was, by its breadth and balance of training, to afford a liberal culture, suitable for the character and station of a gentleman. This was the type of the English universities. So it was of our own early colleges.

But of late our institutions seem to have been found lacking in means for advanced instruction. For some years past no young man looking forward to securing a professorship in any department of our American colleges would deem his preparation finished until he had taken a degree at a German University. Something there may be in fashion about this; for in fact, one so minded could find adequate instruction in our own universities, to which we should naturally look as the place for the pursuit of advanced study and original research.

Such an enterprise as the "Chautauqua Assembly" for the promotion of knowledge and culture among the people, well entitled to be called a university in the breadth and sweep of its work, has the especial merit of meeting the people where they are, without requiring conditions impossible for them to fulfil. And the movements in "University Extension," though this is perhaps a misnomer as to the intrinsic character of the work, are deserving of high consideration as indicating the generous purpose of sending out as widely as possible the educational benefits which they are capable of conferring.

But it is evident also that the demand is strong for the intensive as well as the extensive. This means in such departments as language, history and philosophy, not only more intimate

knowledge of what has been said and done and thought, but a deeper insight into the nature and relations of man, and the reasons and incentives of his struggles with his environment. In the physical sciences it means a more positive knowledge of the elements and forces of the universe, and of their modes of action which we call laws. In the technical aspects of these sciences it means the study of man's practical relations to them, and the training of his faculties to skill in the use of them. This is a wide range for choice, but the work once chosen becomes a specialty, and is necessarily narrow. This field seems to belong to the university and the schools of technology; the former for original research and deep scholarship, looking to the mastery of knowledge; the latter for the applications of science, looking to mastery in the material arts.

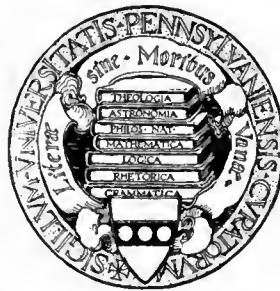
But the sphere of the college is different from these. It is for that general, liberal culture, which looks to the excellence of the man himself,—his intellectual foundations, his intrinsic character. Whether in the "classical" or "scientific" department, an undergraduate course should have this aim. For the organization of our modern higher education we have then the college, somewhat conformed to modern demands, but never losing sight of its main objective; and the university, fitted especially for advanced work or deeper study on special lines. The historic origin, however, is still recognized in the gathering around the university of schools of law, medicine and theology, as well as of politics, pedagogy, and the several branches of technology, to suit the demand of an advanced and progressive civilization. These professional schools might indeed exist separately and independently of the university and of each other, as in fact many do; but there is no doubt a gain of power to the student in the breadth of environment, and the larger atmosphere, of an institution devoted to the widest range of study and deepest grasp of thought in many departments of knowledge.

Whether or not the college can be a miniature university, it should at all events be a school of complete manhood, taking cognizance not only of what makes for good work in the world, but regarding also the culture of the moral and spiritual powers which are the noblest endowments of personality. Hence it is that in every school of discipline and culture its real worth must be measured not merely by its range of courses, or gauge of studies, but largely by the soul which animates it.



Chas. C. Harrison.

UNIVERSITY OF PENNSYLVANIA



A HISTORY

OF THE

UNIVERSITY OF PENNSYLVANIA

BY

EDWARD POTTS CHEYNEY, A.M. (CLASS OF '83)

PROFESSOR OF EUROPEAN HISTORY IN THE UNIVERSITY

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HISTORY

OF THE

UNIVERSITY OF PENNSYLVANIA

INTRODUCTION

THE history of the University is threefold; first, its outer history, that is to say its relations to its founders, to the Trustees who have administered its general affairs, to the community which has supported it; secondly, its inner history, the history of its educational methods, of the relations between Faculty and students, of its purely intellectual life; and thirdly, what may be called its social history, the history of its students and alumni in their relations to the University and to one another.

The first of these lines of development, the external history of the University, consists in its foundation and the successive steps of its chartered life, the erection of buildings, the securing of financial support, the creation of new departments, the election of Provosts, Professors and other officers; and is to be traced principally in the minute books of the Board of Trustees and in public documents. The second, its internal history, is less concrete, but possibly more important, for in the actual teaching, in the daily informal contact of teachers and students, the principal work of the University has been done, the first object of its existence has been fulfilled. The third is perhaps even more elusive. The class of students who went to the University, their age and habits, their organization as students and as graduates, the forms of punishment inflicted upon them and the rewards granted to them, the objects for which they entered the University and the influence exerted by their College course upon their later careers, their intellectual and athletic ambitions, their intercourse with the students of other Colleges and Universities, all these make up a very significant element in the history of the institution, but one which is hardly to be found fully described in definite records.

In tracing the history of the University of Pennsylvania on these lines it will be necessary to solve the problem of the date and circumstances of its foundation, to

follow it in its successive homes from the original Hall at Fourth and Arch streets, through its temporary occupation of "Anatomical Hall" and of the Hall of the Philosophical Society, to the Presidential mansion on Ninth Street, then to the two new buildings on the same site, and finally to the West Philadelphia location, where some twenty-five buildings now provide its material shell. Its various charters must be analyzed; the administration of twelve successive heads must be distinguished; the process must be traced by which income for the support of the institution and the preservation and extension of its equipment has been provided, in all the various forms and amounts of that income, whether the local subscription by Franklin and the early founders, the English contributions collected by Dr. Smith, the lotteries carried on by the Trustees, the appropriations of money and of land made by city and state, the large and small gifts made by alumni and other citizens. The growth and decline, and new growth of numbers of students must be noted till the present body of two thousand eight hundred has been attained. The process of differentiation and then of consolidation of departments, laboratories, museums and hospitals till the present number of some sixteen with their subordinate divisions has been reached, must be explained, if possible. The growth of the Library to its present one hundred and seventy-five thousand volumes, with its separate building, department libraries, new catalogue and new system of administration must be described. The adoption of successive curriculums of study and changes in methods of teaching, the use of apparatus, the system of elective studies, the changing intellectual ideals, must be traced out as far as possible. The increasing participation of the alumni in the affairs of the University is a phenomenon to be included among recent changes. Finally the life of the students as it has come to be embodied in Houston Hall, in the Dormitories, in Franklin Field, in the chapter houses, in the literary societies, in intercollegiate relationships, must be described with as much adequacy as its indefinite nature will admit of. These forms of vicissitude and growth will be the subjects of the following chapters, for in them the history of the University consists.

UNIVERSITY OF PENNSYLVANIA

BOOK I

THE EXTERNAL HISTORY OF THE UNIVERSITY

CHAPTER I

THE FOUNDING OF THE COLLEGE—1740-1755

IT is in most cases as impossible to find a single, definite, unquestioned date for the foundation of a great institution, as it is to find the single, undoubted source of a great river. Any one of four years — 1740, that of public subscription for the charitable school whose functions it eventually absorbed, and the building of Whitefield's Hall, which it eventually occupied; 1749, the year of Franklin's "Proposals," of the subscription for the Academy, and of the organization of the Board of Trustees; 1751, the actual beginning of instruction; and 1755, the acquisition of its charter as a College — might be defended as the most significant foundation date of the University.

In November 1739, George Whitefield, already noted for his evangelistic work in England, visited Philadelphia for the first time. He preached in Christ Church, from the balcony of the Court House at Second and Market streets, and on the open grounds of "Society Hill," South of Chestnut and West of Third Street, to constantly increasing audiences. In April 1740, he came again to Philadelphia and preached almost daily to crowds in the open air. A veritable religious revival spread over the city, thousands gathered to hear him, and when he took up a collection for the support of an orphan asylum and school which he had founded in Georgia the response was ready and generous, more than £200 having been subscribed in one day. After a trip to the surrounding districts he preached again in the city during May. The religious excite-

ment and interest increased. Religious books were specially advertised for sale, controversial pamphlets on religious matters were issued in large numbers, Whitefield's movements in New England, in the South and wherever he went were chronicled in detail, his pictures were sold in the shops, and his journal published in sections as it was written.

Under these circumstances a general subscription was started in Philadelphia for the purpose of erecting a building in which Whitefield and other revivalists or more permanent though unsectarian ministers should preach, and in which a free school should be supported for giving a plain English and Christian education to children too poor to pay for instruction.

A group of men several of whom were members of the Moravian congregation in the city took the initiative in this subscription, and within the early months of the year 1740 collected some money, bought a piece of land on the west side of Fourth Street just below Arch, and began on it the erection of a building far larger than any at that time existing in Philadelphia. This lot, which was one hundred and fifty feet in width and ninety-eight feet in depth, was conveyed by Jonathan Price and his wife to the pioneers of the movement, Edmund Wooley, carpenter, John Coats, brickmaker, John Howell, mariner, and William Price, carpenter, a ground rent being reserved to the former owners.

In July of the same year the purposes of the promoters of the fund were set forth more formally in an advertisement, which however

does not seem to have been ever filled in or published. After speaking of the increase in undenominational religious devotion, those who drew up the notice say: "With this view it hath been thought proper to erect a large building for a charity school for the instruction of poor children gratis in useful literature and the knowledge of the Christian religion and also for a house of publick worship, the houses in this place being insufficient to contain the great numbers who convene on such occasions and it being impracticable to meet in the open air at all times of the year because of the inclemency of the weather.

"It is agreed that the use of the aforesaid school and house of religious worship be under the direction of certain trustees, viz: . . . and other persons to be appointed by them, who in case of the decease of one of their number are to choose by a majority of their votes one other fit person to succeed in his place, and so from time to time as often as any of the before named trustees or others so to be chosen shall dye the place of such deceased trustee shall be supplied by the votes of a majority of the surviving trustees.

"Which trustees before named and hereafter to be chosen are from time to time to appoint fit and able school masters and school mistresses and introduce such Protestant ministers as they judge to be sound in principle, acquainted with experimental religion in their own hearts, and faithful in their practise, without regard to those distinctions or different sentiments in lesser matters which have unhappily divided real Christians.

"These are therefore to give notice to all charitable persons who are inclined to encourage this undertaking that the building is actually begun under the direction of . . . and the foundation laid on a lot of ground (late of Jonathan Price and Mary his wife who have generously contributed) situate near Mulberry Street in the City of Philadelphia, where materials for the building will be received, as also subscriptions of money and work taken in by the under written persons."

Later in the year the four persons named above made a written agreement with George Whitefield, Wm. Seward of London, Thomas Noble

and Samuel Hazard of New York, merchants, John Stephen Benezet, merchant, Robert Eastburn, blacksmith, Edward Evans, cordwainer, and James Read and Charles Brockden, gentlemen, all of Philadelphia, by which the latter group of men became Trustees to carry out the objects for which the property had been bought, while the four original purchasers retained the property in their names for the use of these Trustees. They agreed that they would on the request of the Trustees at any time convey the land to any person and for any uses the Trustees might require. Nevertheless the two original objects of the trust, the establishment of an undenominational place of worship and of a free school, were referred to again and again. The former of these objects quite evidently took its shape from the non-sectarian religious revival then in progress; the origin of the latter, the educational and charitable object, does not appear.

The erection of the "New Building," as it was now and for many years afterward called, proceeded rapidly, for when Whitefield returned from Boston on the ninth of the November following, that is, in 1740, it was enclosed and provided with seats and a pulpit, although not yet roofed in. He preached in it twice a day for over a week and until his departure from the city. As he went down the Delaware he wrote, December 4, to a friend in New York: "According to my promise I now snatch a few moments to send you a short account of the House lately erected in Philadelphia. I was pleasingly surprised at the sight of it. It is one hundred feet long and seventy feet wide and now just ready to be covered. . . . As I am chosen one of the Trustees and have promised to procure a master and mistress for the first scholars, I think it my duty to make what interest I can towards carrying on so good a work. The house is intended for public worship and a charity school. . . . I have preached in this house several times."

Nothing further seems to have been done toward its completion that winter, but on June 11, 1741, an appeal was issued in the name of the Trustees for money and materials for "finishing the Charity School and House of Public

Worship begun last year in Philadelphia." Additional funds were provided and the building was now roofed in and furnished. Some of the money, materials and labor were contributed, more was advanced with the expectation of repayment. A certain Hugh Cordery loaned £100, Messrs Wooley and Coats each advanced perhaps as much more, and many small debts for materials and wages were contracted. Contemporary mention of the "New Building" is frequent. In 1745 it was broken into by ruffians and the cushions and pulpit injured. In 1748 it attracted the attention of the Swedish traveler Peter Kalm. Mr. Whitefield returned to the city and preached in it during almost the whole month of September 1745, and again in May, July, August and September 1746. One of his sermons preached there August 24, 1746, on the reception of the news of the defeat of the Young Pretender, was published under the caption "Britain's Mercies and Britain's Duty." His audiences included many of the principal persons of the city, and he seems

to have risen steadily in the estimation of the more moderate men of Philadelphia. He was here again in June 1747; and in September of the same year, when in declining health he was making his next to last missionary tour, as Franklin reports, "he preached frequently at the New Building to very large and attentive audiences." In November of that year the written form of the "Association" which was intended to create a sort of temporary militia to defend the city in case it were attacked by the French or Spaniards, was placed in the New Building for signature and there signed by upwards of five hundred persons in one day.

The "New Lights," or advanced party among the Presbyterians, were now organizing themselves as a separate body and under Rev. Gilbert Tennent occupied the New Building as a regular place of worship.

In these varied uses of the building there is no mention of instruction being given to poor scholars, or of any other elements of a charity school. The Trustees seem, therefore, never to have brought into actual existence that part of the original plan, as indeed is distinctly stated

in contemporary descriptions. It is invariably referred to in any statement of the objects for which the New Building was intended, but for lack of funds or other reasons the teaching project was without doubt left in suspense.

In the year 1747 a conflict arose between the holders of the title and the Trustees of the New Building. On the 8th of June, in the interval between Whitefield's two visits of that year, the two surviving holders of the property, John Coats and Edmund Wooley, with perhaps other citizens of Philadelphia,



GEORGE WHITEFIELD

brought before the Assembly of the state a petition "setting forth that they had contributed largely, according to their respective circumstances, toward the building of a house in the said city which was intended to be a charity school for the instruction of poor children gratis in the knowledge of the Christian religion and in useful literature, and also for a place of public worship: But the Trustees not having executed their trust, the principal end for which the petitioners engaged in the subscription and paid their money is not in the least degree answered; and therefore praying that the said Trustees may be compelled to refund and pay

the money advanced by the petitioners as well as their other just demands; or otherwise that leave may be given to bring in a bill for the sale of the said building for that purpose." Later in the same session Charles Brockden and James Read, two of the Trustees, presented a request for the postponement of action on this petition, stating that they intended to lay before the House a full answer to the above complaint but wished first to communicate with and obtain the concurrence of others of their number who were then absent from the Province. The matter was then laid on the table, and two weeks afterward, June 25, 1747, by resolution, "the petitions relating to the New Building were referred to the consideration of some future Assembly."

The matter does not appear again in the journals of the Assembly, but in the succeeding January, Brockden drew up an answer to the petition for the sale of the building, and expressed his intention of sending it to the Assembly, though he felt some doubt whether they would pay any attention to it. In this defence he insists that the house should be kept for the uses for which it was originally intended,

that is, for a charity school and a public place of preaching. He declares that "the debts complained of by Mr. Wooley and Mr. Coats were only contracted since the present possessors had intruded themselves, who were also the only persons of whom it could be required to pay off such debts that had been contracted by them." The "present possessors" were presumably the Presbyterian congregation under Mr. Tennent which seems to have contributed largely to the completion and adornment of the building, though in the form of a loan to the Trustees, not a gift. The two men in whose name the property was held would gladly

have sold the building and repaid these and other advances and debts but were unable to do so because of the opposition of a majority of the Trustees, and the failure of the Legislature to authorize such action.

Nothing further was done toward the settlement of this dispute, nor is any thing further heard of the fortunes of the New Building for the next year.

In the meantime, however, a movement was taking shape which was destined to bring the building into more effective use, to give reality to the scheme of a free school, and embrace it in a much more extensive educational plan.

The lack of an educational institution of high grade can scarcely have failed to be recognized by the citizens of Philadelphia. There were several well-established private schools; and courses of teaching in the elementary branches, in the languages, in mathematics, in the more practical subjects of surveying, navigation and book-keeping, were constantly being offered by individual teachers. There seems to have been considerable intellectual activity, judging from the success of courses of



REV. RICHARD PETERS

lectures in natural philosophy which were given from time to time, and from the number and character of books imported and sold by the dealers. Nor were examples wanting. The existence of Harvard and Yale was not of course unknown, and from 1747 onward mention of the nascent institutions in New York and New Jersey begins to be made occasionally in the Philadelphia newspapers. Franklin indeed asserts that in 1743 he drew up a scheme for a College or Academy and communicated the plan to Rev. Mr. Peters in the hope that he would undertake its establishment, but that Mr. Peters preferred a lucrative

appointment under the Proprietaries, and the matter was therefore dropped for the time. Thomas Penn also speaks of having had a design for the foundation of an institution of learning, but he took no steps toward it.

The year 1749 was a period of activity and advancement in Philadelphia. The war with France and Spain was over, the military interests and disputes of the last few years ceased, regular commerce revived and proved to be more profitable if less exciting than privateering; the Governor, Mr. Hamilton, was relatively popular. Under these conditions there arose a discussion among some of the leading men as to the possibility and desirability of founding an institution of higher learning in Pennsylvania. The first clear evidence of this is a communication published in Franklin's newspaper, August 24, 1749, purporting to be addressed to the Editor, but in all probability emanating from Franklin's own pen. It reads as follows:

**"TO THE PRINTERS OF
THE GAZETTE.**

"In the settling of new countries, the first care of the planters must be to provide and secure the necessities of life; this engrosses their attention, and affords them little time to think of any thing further. We may therefore excuse our ancestors that they established no academy or college in this province, wherein their youth might receive a polite and learned education. Agriculture and mechanic arts were of the most immediate importance, the culture of mind by the fine arts and sciences, was necessarily postponed to times of more wealth and leisure.

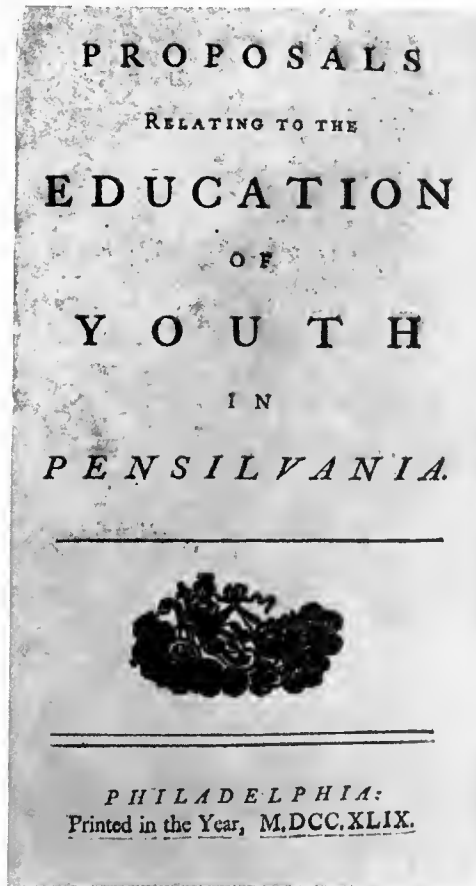
"Since those times are come, and numbers of our inhabitants are both able and willing to give their sons a good education, if it might be had

at home, free from the extraordinary expense and hazard in sending them abroad for that purpose; and since a proportion of men of learning is useful in every country, and those who of late years come to settle among us, are chiefly foreigners, unacquainted with our language, laws and customs, it is thought a proposal for establishing an Academy in this province will not now be thought unreasonable. Such a proposal the publick may therefore shortly expect."

The correspondent then goes on to quote, as being unusually apropos, the well known letter from Pliny to Cornelius Tacitus in which he describes a conversation with some neighbors of his at Como, upon whom he urges the desirability of having a school in their own town instead of sending their sons to distant Milan to be educated.

Very soon after this there was distributed in Philadelphia a pamphlet called "Proposals, relating to the Education of Youth in Pensilvania." This was in all probability composed, as well as printed and circulated by Franklin, but it represented the ideas and plans of a number of men prominent in the city; especially of Rev. Richard Peters, secretary and business agent of the Proprietaries, Tench Francis, At-

torney-General of the Province, William Allen, a well to do merchant, and others. "Frequent were their consultations and various were their sentiments; at last they agreed on the general heads," is the way one of their number, Rev. Mr. Peters, describes the process of reaching a definite plan. Certainly back of this initiatory pamphlet and of the subsequent proceedings there was a tolerably compact group of men who had become interested in the project and reached something like unanimity of views and



TITLEPAGE OF FRANKLIN'S "PROPOSALS"

Performances and Lectures of the Scholars, in such
 Modes, as their respective Masters shall think proper,
 and shall have Power, out of their Stock, to make Presents
 to the most meritorious Scholars, according to their
 several Deserts.

W. Thypen	Thos Lawrence
Wm. Strevell	Will. Allen
Philip Syng Esq. Writing	John Ingles
Phineas Bond	Jerch. Francis
Richard Peters	Wm. Masters
Abram Taylor	Moys. Laabary.
Thos Bond	Sam. M. Call Jun ^r
Wm. Coplinson	Geo. Sumner
Wm. Plumsted	Chas. Franklin
J. H. Kiddle	Geo. Leitch
Thos. Cadwalader	Geo. White
James Morris	Wm. Coleman
	D. Martin Rector
	Thos. Great math. Professor

FACSIMILE SIGNATURES OF THE FOUNDERS

From Minute-Book in Secretary's Office

definiteness of plans. Either because of their feeling of diffidence or as a shrewd means of conciliating public interest and support there was prefixed to this pamphlet an invitation to all readers to send in any advice, recommendation, or suggestion that might occur to them.

After calling attention to the desirability of higher education and the especial need for it in Pennsylvania at that time, the pamphlet proposed "that some persons of leisure and public spirit apply for a charter by which they may be incorporated, with power to erect an Academy for the education of youth, to govern the same, provide masters, make rules, receive donations, purchase lands, etc." An outline sketch of such a school as the projectors had in mind was then given. It was on the whole an enlightened scheme, though the inveterate utilitarianism of its principal author showed itself everywhere. Nevertheless, Latin and Greek and the Modern Languages (including a reiterated

statement of the necessity for a careful study of English), Mathematics, the Sciences, History, Rhetoric and Elocution were recommended, as were athletic exercises, and a location where there might be outdoor interests.

The "Proposals" attracted attention and extended the interest which no doubt already existed. The projectors arranged to canvass the city ward by ward, and subscriptions of money were readily obtained. These were asked for in the form of an annual subscription for a term of five years and within a few months amounted to a guarantee fund of about

£800 a year for that period. In the meantime twenty-four of the principal men interested were selected or volunteered to carry the plan into execution and Franklin and Francis were asked to draw up a form of organization. The next step can be best told in the opening entry on the minute book of the Board of Trustees. Immediately following an engrossed copy of the "Constitutions" reported by the two gentlemen named above it is stated that,



BENJAMIN FRANKLIN

From the painting by Martin, in American Philosophical Society's Collection

"On the 13th day of November in the year of our Lord 1749, the following persons:— James Logan, Thomas Lawrence, William Allen, John Inglis, Tench Francis, William Masters, Lloyd Zachary, Samuel McCall, Jr., Joseph Turner, Benjamin Franklin, Thomas Leech, William Shippen, Robert Strettell, Philip Syng, Charles Wil-
ling, Phineas Bond, Richard Peters, Abraham Taylor, Thomas Bond, Thomas Hopkinson, William Plumsted, Joshua Maddox, Thomas White, William Coleman,

met and having read and approved of the foregoing Constitutions, signed them with their names and thereby took upon themselves the execution of the trust in those Constitutions expressed. Whereupon Mr. Benjamin Franklin was elected President and Mr. William Coleman Treasurer for the ensuing year."

These names represented the principal men of the city. Franklin was already prominent and influential in local affairs and was becoming wealthy, though he had as yet hardly begun the attainment of his wider reputation. Mr. Peters, as has been said, was at this time the

trusted agent of the Penns and later became Rector of Christ Church and St. Peters. Wm. Plumsted was Mayor of the city for the succeeding year, and Francis became Recorder of the city at the same time, in addition to his Attorneyship for the Province; Zachary, Shippen, and Phineas and Thomas Bond were practising physicians. Others were prominent lawyers and successful merchants. The "Constitutions" or plan of organization were

sufficient to allow of the education gratis of poor children. Finally there was a provision which had already appeared in the "Proposals" as follows: "It is hoped and expected that the Trustees will make it their pleasure, and in some degree their business, to visit the Academy often, encourage and countenance the youth, countenance and assist the masters, and by all means in their power advance the usefulness and reputation of the design; that they



GROUP OF FRANKLIN PORTRAITS

In University Library

evidently based on the "Proposals." They established the number, methods of procedure and general duties of the Trustees in the carrying out of the trust, provided for the engagement of a Rector of the Academy who should have general oversight and teach Latin and Greek and also the English branches to his special group of students, of an English Master, of teachers of mathematics, the modern languages, writing and other branches, and of assistants to the masters as the number of students should require. A hope was also expressed that the fund would ultimately prove

look on the students as in some sort their children, treat them with familiarity and affection, and when they have behaved well and have gone through their studies and are to enter the world, zealously unite to make all the interest that can be made to establish them, whether in business, offices, marriages, or any other thing for their advantage, preferably to all other persons whatsoever, even of equal merit." In consideration of the standing and influence of the Trustees this provision could hardly fail to be of considerable importance and attractiveness.

The plans for immediate action were inten-

tionally modest and tentative, though the ultimate expectation was that it should develop into a College or University. In the "Constitutions" it was described as "laying a foundation for posterity to erect a seminary of learning more extensive and suitable to their future circumstances." And Mr. Peters a year later said that "though only such branches of knowledge as are perfectly adapted to the circumstances of the Province are for the present proposed to be taught in it . . . in time to come as the Academy funds increase and when a regular College may be thought to suit the circumstances of the Colony . . . it may be improved into a collegiate institution and every kind of knowledge be taught in it that the most reputed Universities lay claim to." For the present its immediate plans seem to have met universal approval in Philadelphia, though, moderate as they were, they were looked upon somewhat askance in England. Thomas Penn, the head of the Proprietary family, wrote February 12, 1750, to Governor Hamilton: —

"Your proposal for the education of youth is much more extensive than I ever designed and I think more so than the circumstances of the Province require. The best of our people must be men of business, which I do not think very great public schools or universities render youth fit for, and the additional exercises are not fit accomplishments for many. I do not think it will be any real advantage to Pennsylvania to establish such an academy, as the large allowance made to young gentlemen at all places of learning gives them the lead in every excess. I find people here think we go too fast with regard to the matter, and it gives an opportunity to those fools who are always telling their fears that the Colonies will set up for themselves."

But the founders were interested in more immediate problems than the ultimate setting up of the Colonies for themselves. One of the first questions to require decision was the location of the Academy. The "Proposals" had suggested its being placed somewhere not far outside of the town, though the possible choice of a location within the city was also contemplated. Whether it should be placed in town or outside was much debated even before the organization

meeting took place. In favor of some country village was the supposed safety to the morals of the students; against it was the greater expense to parents of sending their children away from home and the loss of time for such busy men as the Trustees in visiting it. The matter seems to have been decided by the receipt of an intimation from the Trustees of the New Building that a union of the two plans might be made. It is possible that the initiative in this, as in so many of the other movements of the time, was due to Franklin, as he himself asserts in his autobiography. But as has been seen, more than two years before this time some of the Trustees of the building had become convinced of the impracticability of their carrying out both parts of their original design. Dr. Peters says that they "had been for some years sensible that this building was not put to its original use, nor was it in their power to set forward a charity school, which was also a part of their first design; and that it was more in the power of the Trustees of the Academy than in theirs to do it." Such a union seemed altogether suitable. The Trustees of the building after nine years found themselves unable to carry out the conditions of their trust, burdened with debts acquired in their unsuccessful efforts to do so, and divided as to religion and policy. The Trustees of the new academy, on the other hand, had a considerable sum of money at their disposal and were engaged in the initiation of an enterprise which met with general approval, but they were as yet unprovided with any habitation. The main outlines of this combination were therefore already understood when at the first meeting of the new Trustees they appointed a committee to arrange with the Trustees of the "New Building" the terms on which it might be transferred to them. These terms as offered by the latter, were that the Trustees of the Academy should pay off all debts due on the building and land, and then take over with the building the duty of carrying out the two objects for which it had been originally erected, the provision of a place for free preaching and the establishment of a free school for poor children. At the same time that this proposition was reported to the Board, James Logan

offered to donate a lot on Sixth Street for the erection of a building for the Academy, but the opportunity to obtain a suitable building already in existence at a small cost was so manifestly advantageous that his offer had to be declined. Of the trusts that would become incumbent on the new Trustees one was quite in line with their own designs, the other could be easily fulfilled by the preservation of a part of the building for that purpose.

Accordingly at their third meeting, held at Roberts' Coffee House, February 1, 1750, a majority of the surviving Trustees of the "New Building" attended and joined in authorizing the two surviving holders of their property to convey the land, building and appurtenances to the new Trustees, "to the end the said building and appurtenances may at length be applied to the good and pious uses originally intended, and justice done to sundry persons who advanced sums of money for the necessary covering and completing the said building beyond their respective gifts and subscriptions." The Treasurer of the Academy thereupon paid over in cash to Messrs. Wooley and Coats the sum of £775, 18s. 11d. 3 farthings; which was in turn distributed by them to various creditors, whose liens on the building varied from £5 to more than £400. Two sums of £20 each and one of £15 were forgiven by the creditors and given as subscriptions to the charity school which it was now anticipated would become a reality. The deed by which this conveyance was made left it incumbent forever upon the new Trustees to carry out both this and the other trust of the original subscription, and they undertook solemnly to organize a charity school within two years after the transfer of the New Building to them.

The Academy therefore came to be in a certain sense a continuation of a project initiated nine years before, as well as a new foundation. This new relation was expressed by adopting almost immediately the name of "The Academy and Charitable School of Philadelphia." The ready-made home which it obtained by this arrangement was not, however, available without alterations, and to these a Committee immediately devoted itself with great interest. Money had been obtained for

the payment to the old Trustees by borrowing £800 from the Treasurers of the public lottery, the Trustees giving a joint bond for the repayment of this amount with interest, which they did some three years later. It is characteristic of the time that nineteen of the twenty-four members of the Board were among the managers of the lottery for public defence then lately established. Contributions which had been promised were collected as rapidly as possible, but more money was needed for making alterations in the building. In the early summer, Mr. Francis, who was City Recorder, made an application to the Common Council of Philadelphia for an appropriation to the Academy. The entry on the minutes of Council referring to this affair gives such a good idea of the objects in view in the organization of the Academy, and of the mixture of high ideals and thrifty self-interest on the part of the citizens, that it is well worth insertion in its entirety.

"At a Common Council held at Philadelphia for the City of Philadelphia, the 30th day of July, 1750. The Recorder acquainted the Board that there is a design on foot for the erecting of a public academy and charity school in this city, for instructing youth in the several branches of useful learning, and that divers of the inhabitants have subscribed liberally towards it; but as this undertaking is attended with a great expense in the beginning, some further assistance is necessary to carry it into execution in the best manner, and as this corporation have a considerable sum of money in the hands of their Treasurer, and have likewise an income of almost three hundred pounds per annum, besides fines and forfeitures, the Recorder proposed that it might be considered, whether this design for the advancement of learning be not worthy of some encouragement from this Board, as their circumstances may very well afford it. The Board having taken this affair into consideration, and it appearing to be a matter of consequence, and but a small number of the members were present, it was thought proper to refer the further consideration thereof to the next Common Council: 'It is therefore ordered that the members of this Board have notice to meet to-morrow at four

o'clock in the afternoon, to consider of a proposal of contributing a sum of money for the encouragement of the Academy & Charity School now erecting in this City.'"

"At a Common Council held at Philadelphia the 31st day of July, 1750.

"The Board resumed the consideration of the proposal made at the last Common Council, of contributing a sum of money for the encouragement of the academy and charity School now erecting in this city, and a paper containing an account of what is already done by the Trustees of the Academy, and what advantages are expected from that undertaking being laid before the Board, was read, and follows in these words:

"The Trustees of the Academy have already laid out near £800, in the purchase of the building, and will probably expend nearly as much more in fitting up rooms for the schools, and furnishing them with proper books and instruments for the instruction of youth. The greatest part of the money paid and to be paid is subscribed by the Trustees themselves, and advanced by them; many of whom have no children of their own to educate, but act from a view to the publick good, without regard to sect or party. And they have engaged to open a Charity School within two years for the instruction of poor children gratis, in reading, writing and arithmetick, and the first principles of virtue and piety. The benefits expected from this institution are:

"1. That the youth of Pensilvania may have an opportunity of receiving a good education at home, and be under no necessity of going abroad for it, whereby not only considerable expense may be saved to the country, but a stricter eye may be had over their morals by their friends and relations.

"2. That a number of our natives will be hereby qualified to bear magistracies, and execute other public offices of trust, with reputation to themselves & country; there being at present great want of persons so qualified in the several counties of this province. And this is the more necessary now to be provided for by the English here, as vast numbers of foreigners are yearly imported among us, totally ignorant of our laws, customs and language.

"3. That a number of the poorer sort will be hereby qualified to act as schoolmasters in the country, to teach the children reading writing, arithmetic and the grammar of their mother tongue, and being of good morals and known character, may be recommended from the Academy to country schools for that purpose; the country suffering at present very much for want of good schoolmasters, and obliged frequently to employ in their schools, vicious imported servants, or concealed papists, who by their bad examples and instructions often deprave the morals or corrupt the principles of the children under their care.

"4. It is thought that a good Academy erected in Philadelphia, a healthy place where provisions are plenty, situated in the center of the colonies, may draw a number of students from the neighboring Provinces, who must spend considerable sums yearly among us, in payment for their lodging, diet, apparel, &c., which will be an advantage to our traders, artisans, and owners of houses and lands. This advantage is so considerable, that it has been frequently observed in Europe, that the fixing a good school or college in a little inland village, has been the means of making it a great town in a few years; and therefore the magistrates of many places have offer'd and given great yearly salaries to draw learned instructors from other countries to their respective towns, meerly with a view to the interests of the inhabitants. Numbers of people have already generously contributed sums to carry on this undertaking; but others, well disposed, are somewhat discouraged from contributing, by an apprehension, lest when the first subscriptions are expended, the design should drop. The great expense of such a work is in the beginning. If the Academy be once well-opened, good masters provided, and good orders established, there is reason to believe (from many former examples in other countries) that it will be able after a few years to support itself.

"Some assistance from the Corporation is immediately wanted and hoped for; and it is thought that if this Board, which is a perpetual body, take the Academy under their patronage, and afford it some encouragement, it will

greatly strengthen the hands of all concerned, and be a means of establishing this good work & continuing the good effects of it down to our late posterity. The Board having weigh'd the great usefulness of this design, after several propositions heard & debated, agreed that a sum of money be given by this Board & paid down, towards compleating the building which the Trustees have purchased, and are now fitting up for the purpose, and likewise that a sum or sums be given yearly by this board, for five years to come, toward the support & maintenance of the schools under the direction of the said Trustees. Whereupon the following questions were put and carried in the affirmative.

"1. Whether this Board will give the sum of two hundred pounds, to be paid immediately to the Trustees of the Academy, towards compleating the building purchased by the said Trustees for an Academy & Charity School in this City? Which was carried in the affirmative by a great majority.

"2. Whether this Board will give fifty pounds p. annum for five years next ensuing, to the Trustees of the Academy, towards supporting a Charity School for the teaching of poor children reading, writing and arithmetic? Which was unanimously agreed to.

"3. Whether this Board will give fifty Pounds p. annum for the five years next ensuing, to the Trustees of the Academy, for the benefit thereof, with condition that this Board shall have a right of nominating and sending one scholar yearly from the Charity School, to be instructed gratis in the Academy, in any or all of the branches of learning there taught? Which was carried in the affirmative by a great majority."

Thus £200 was immediately available. Two other gifts of £100 each were received within the first year, one of them from London, and others of smaller amount, in addition to the five years subscriptions amounting to about £800 a year. With these funds the preparation of the New Building for its still newer uses went rapidly on. Its single large hall was divided by a floor into two stories, one of which was reserved for the promised hall for preaching, the other divided into class-

rooms. May 17, 1750, it was announced that "The brick partitions in the great New Building to make rooms for the Academy are already carried up to a considerable height and the work will be finished with all expedition." A belfry was erected, and the ground lying between its old lot and Arch Street and back to the Church burying-ground bought. Equipment was begun by the expenditure of £100 in the purchase of Latin and Greek books, maps and instruments.

In the meantime however they had been engaged in the creation of the still more essential part of an educational institution, a group of teachers. Three months after their organization they elected David Martin as Rector and teacher of Latin and Greek, as well as of History, Geography, Chronology and Rhetoric. His appointment was to date from May 13th, 1750 and his salary to be £200. In looking for an English Master, Franklin and Francis made a fruitless journey to New England, to offer the position to Rev. Samuel Johnson of Stratford, Connecticut, a graduate of Yale College. Difficulty was found in securing a suitable man, and the Trustees raised the salary previously offered from £100 to £150. Finally in December 1750, a David James Dove, who had long kept a school in England, arrived in Philadelphia, and delivered a course of lectures in Experimental Philosophy. These were much admired and the Trustees engaged him out of hand as English Master in the Academy from January 7, 1751, to teach English "grammatically and as a language," and to those students who did not study Greek and Latin the same subjects as the Rector taught. For teacher of Mathematics they engaged Theophilus Grew, who had kept a school in Chestertown, Maryland, then opened one in 1742 in Philadelphia which prospered and in which he had achieved a reputation as a mathematician, publishing frequently in the newspapers notices of astronomical or other current phenomena. His subjects were to be Writing, Arithmetic, Merchants' Accounts, Algebra, Astronomy, Navigation and all other branches of Mathematics. It must have been in reference to him that another teacher of Mathematics and Navigation published in his advertisement just

at this time, "Sailors! take a friend's advice, be not cheated by landsmen that pretend to navigation." The first group of teachers was completed by the selection of Charles Thompson, long afterwards Secretary of Congress, as Tutor to assist the Rector at £60 a year. During these arrangements, the Trustees had endeavored to test the probable wishes of the community by such advertisements as the following:

"The Trustees of the Academy of Philadelphia, hereby give notice that the rooms for the several schools are in great forwardness and will be finished with all possible expedition, and that the Academy will be opened as soon as they are ready, and the several branches of learning taught that are mentioned in the constitution already published, upon the most reasonable terms that the Trustees shall be enabled to fix when they are fully informed of the amount of the subscriptions and the expenses likely to accrue. In the mean time those who have any youth under their care whom they intend to have educated in the same Academy are desired to enter their names with the Rector, Mr. David Martin, at the Post Office in Philadelphia, who will for that purpose attend there from ten to twelve every day, till the end of this instant August (Sundays excepted), that the Trustees may be enabled to judge from the numbers of proposed scholars, the advances they have already made, and the parts of learning they are to be taught, what assisting tutors in the several branches will be necessary to be provided."

The last preliminary to be settled was the tuition fees. It was finally determined that the sum of 20s. quarterly and 20s. entrance money, "with a rateable share of the expense of firing in the winter season" be paid by each pupil, for which they should be instructed in any branches of learning to be taught in the school. The proportionate share of the expense of heating proved to be 4s. per student, making the annual charge for the first year of any student £5, 4s., equalling about \$17.50 of our present money. The material and intellectual equipment having been thus provided for, on the 10th of November, 1750 it was resolved "that the Academy be opened on the 7th day of January next, and the rates of learning, and the

opening, be published in the Gazette a fortnight hence." Accordingly in December the following notice was published in Franklin's paper, the Pennsylvania Gazette:

"PHILADELPHIA, Dec 11th, 1750.

"Notice is hereby given that the Trustees of the Academy of Philadelphia intend (God willing) to open the same on the first Monday in January next, wherein youth will be taught the Latin, Greek, English, French and German languages, together with history, geography, logic and rhetoric, also writing, arithmetic, merchants' accounts, geometry, algebra, surveying, navigation, astronomy, drawing in perspective, and other mathematical sciences, with natural and mechanical philosophy, etc., agreeably to the Constitutions heretofore published, at the rate of £4 per annum and 20 shillings entrance."

On the 7th of January, 1751, therefore, the ceremony of opening took place. It was described at the time as follows: — "Yesterday being the day appointed for the opening of the Academy in this city, the Trustees met and waited on his Honor, our Governor, to the public hall of the building, where the Rev. Mr. Peters made an excellent sermon on the occasion to a crowded audience. The rooms of the Academy not being yet completely fitted for the reception of the scholars, the several schools will be opened to-morrow, in a large house of Mr. Allen's, on 2nd St. Those intending to enter their children or youth may apply to the Rector or any one of the Trustees."

The sermon of Mr. Peters described the plan of the Academy, preparations up to that date, and its great possibilities, and made such an impression on his fellow Trustees that they passed a vote of thanks to him and secured his consent for its publication.

The Academy became immediately popular. The number of students rose steadily till it was over a hundred within the first nine months and over one hundred and fifty early in its second year. The Trustees were, as has been said, the most wealthy and prominent men in the Province, and there is little doubt but the promise of the "Proposals" and "Constitutions," that they would interest themselves in the students of the Academy and use their influence for their

advancement in life, was an important element in this popularity. It was found necessary to add tutor after tutor, till within eighteen months of the opening there were five such assistants in addition to the three masters.

The Academy having been successfully organized the Trustees turned their attention to the Charity School which they were bound by the terms of their trust to establish within two years and for which they had already received subscriptions. April 1751, they took steps to engage a master and announced publicly their intention of opening the school as soon as they had secured one. They had difficulty in finding a suitable person, but finally in August 1751, engaged a man named George Price at a salary of £30 a year and his house rent and firewood, and announced their willingness to take twenty boys free of charge for receiving a plain English education. In April of the next year they announced their readiness to take more poor children into the Charity School and engaged an assistant to the master. Within the next year they added to this a school for thirty girls under a Mrs. Holwell as mistress, to teach them reading, sewing and knitting.

October 26, 1752, the Trustees report that the Charity School "now teaches reading, writing and arithmetic to one hundred poor children, most of whom are from eight to thirteen years of age, and had never been sent to any school before, nor did it seem likely many of them would have been sent to any school, if it had not been for this institution." It was then declared that the existing fund was hard pressed and many applications had to be postponed. Subscriptions were therefore urged for the extension of this pious foundation. In these times of free schools and universal education it is somewhat difficult to realize the feeling about free education to the very poor; but in the middle of the eighteenth century this charitable side of the work of the institution awakened much interest and sympathy. A company of comedians passing through the city acted a play for its benefit, by which more than £100 was raised. Whitefield on a later visit to the city appointed the Charity School as the object for which a collection

should be taken up at one of his Sunday evening sermons, and more than £100 was again realized from this source. Some years later Wm. Parsons of Easton, ex-Surveyor General of the Province, bequeathed £200 for the benefit of the "poor scholars of the Academy of Philadelphia." The Trustees early in their history passed a resolution providing that each member of the Board absent from a meeting without satisfactory excuse should contribute one shilling for the purchase of paper, quills, books, etc., for the use of the Charity Schools; though the frequent re-enactment of this provision and the still more numerous absences from meetings raise some doubt as to the enforcement of the rule.

After less than a year of service as Rector of the Academy and Latin and Greek Master, Mr. Martin died. Franklin was at this time engaged in printing for the use of the pupils of the Academy a compendium of Logic and Ethics prepared by Rev. Samuel Johnson who had been before asked to take the position of English Master; and he was now again urged to come to Philadelphia as Rector of the Academy. He again declined, and subsequently in 1754 became the first President of King's College, afterwards Columbia, in New York. Then negotiations were begun with Rev. Francis Alison, a Presbyterian clergyman, well-known for his learning, who had offered publicly two years before to give instruction in Latin, Greek and polite literature to any young men who would come to his home in Chester County, Pennsylvania. Finally in March 1752, he was elected to the position of Rector, which he held until the Revolution.

A committee consisting of Franklin, Thomas Hopkinson and the Rev. Mr. Peters, had been early appointed to prepare a set of rules for the daily regulation of the various parts of the institution. They had found the task a difficult one, and though urged repeatedly to make a report, asked for extensions of time, and in September 1751, proposed that a translation be made of a German pamphlet recommended by Mr. Whitefield, containing the rules and orders observed in the school at Halle in Saxony, which they supposed would, as being the result of long experience, furnish the pre-

cedents of which they felt the lack. This was agreed to, and a form of organization and of rules, dated July 11, 1755, seems to represent the final result of their labors.

A form of prayer for daily use in the schools was compiled by Rev. Mr. Peters, and a year later a revised edition was prepared and printed.

Thus within a period of three years from the proposals of 1749, of twelve years from the inception of the earlier trusts, the Academy and Charitable School had been organized and were in working order, with a building and other equipment, with some nine or ten teachers, and more than two hundred scholars.

The Board of Trustees was, however, so far only a voluntary group of men with self-appointed rules. The original plan had been that they should be incorporated. Under

the circumstances of evident prosperity and growth in 1752 there seemed to be no reason why this plan should not be carried out, and Attorney-General Francis was appointed in June of that year to make a draft of a charter for the institution. It was then sent to England and submitted to the Proprietors, Thomas and Richard Penn, for their acceptance. In April 1753, the document was returned with their approval accompanied by a gift of £500. On the 13th of July, 1753, in the words of the minister, "Mr. Peters informed the Trustees that the Governor was now at his house, ready to pass the Charter, which had been fairly engrossed for that purpose; whereupon the Trustees in a Body waited on the Governor,

who accordingly signed the same with a warrant for affixing the Provincial Seal thereto and delivered it to the Trustees, expressing his good wishes to their undertaking." Thus the "Trustees of the Academy and Charitable School, in the Province of Pennsylvania" became a corporate body. The property was now reconveyed into the corporate name, a seal ordered to be engraved, and a committee appointed to reduce the former constitutions and the rules since adopted into the form of a series of laws and ordinances.

In the general prosperity some difficulties

were met with. Some of the most valued Trustees died, James Logan and Thomas Hopkinson within the first year. Isaac Norris, who was speaker of the Assembly, and Thomas Cadwalader, a physician and a member of the Provincial Council, were



THE ACADEMY AND COLLEGE

elected in November 1751 to fill the vacancies. In September 1754, Governor Hamilton was chosen in the place of Thomas Lawrence deceased, and in the early part of 1755 Alex. Stedman was elected in place of Charles Willing deceased, and John Mifflin in the place of Isaac Norris resigned. There was always difficulty in securing the attendance of such busy men and the quorum for routine business had to be reduced from thirteen to seven. There were frequent resignations of the tutors or ushers, and consequent necessity for searching for new ones. These changes in the interior life of the Academy were due largely to the fact that the institution was not yet of sufficient strength to offer high inducements to those in its employ.

Mr. Dove, the English Master, was a popular and successful teacher; so much so indeed that he was not satisfied to give all his time to his duties in the Academy and made a practice of leaving an hour early both in the morning and the afternoon to attend to a girls' school which he had opened in his own house. The Trustees were not willing to allow of this absenteeism, and he was not willing to sacrifice his other occupation, so a separation was agreed upon, February, 1753. In the following July Ebenezer Kinnersley was through Franklin's influence elected to the same position. One result of this change was the reduction of the number of students taking the English course so far that one of the ushers was discharged. Indeed the "English School" never regained the popularity it had had under the first English Master. On the other hand, teachers of French and Italian were appointed in the summer of 1754 and there was no diminution of the total numbers. The teacher of the Charity School proved to be intemperate and cruel to the children, and was discharged, and another man engaged.

The general condition of the new institution was one of undoubted success, but it was still

only an "Academy" not a "College." That it should develop into such had been, as already pointed out, the original expectation. It was so explained to Peter Kalm, Professor at the University of Abo in Sweden, when he came here on his second visit in 1751. "The

building of the Academy is in the western part of the town. It was destined to be the seat of a University, or to express myself in more exact terms to be a College; it was therefore fitted up for this purpose. The youth are here only taught those things which they learn in our common schools; but in time such lectures are intended to be read here, as are usual in real Universities." Another reason why it should now adopt an actual collegiate organization and name was to be found in the rivalry of the two neighboring institutions in New Jersey and New York which had recently come into existence. The latter of these,

with a complacency which was not to disappear with infancy, spoke of the Philadelphia Academy as a preparatory school from which its students were to be drawn. Thomas Penn, who had become more reconciled to the Academy's ambitions since 1750, wrote in 1754 to Richard Peters, "I find the people of New York have

(1)

CONSTITUTIONS

OF THE

PUBLICK ACADEMY,

IN THE

CITY of PHILADELPHIA.

AS nothing can more effectually contribute to the Cultivation and Improvement of a Country, the Wisdom, Riches and Strength, Virtue and Piety, the Welfare and Happiness of a People, than a proper Education of Youth, by forming their Manners, inuring their tender Minds with Principles of Rectitude and Morality, instructing them in the dead and living Languages, particularly their Mother-Tongue, and all useful Branches of liberal Arts and Science. For attaining these great and important Advantages, so far as the present State of our Infant-Country will admit, and laying a Foundation for Posterity to erect a Seminary of Learning more extensive and suitable to their future Circumstances; AN ACADEMY for teaching the Latin and Greek Languages, the English-Tongue grammatically, and as a Language, the most useful living foreign Languages, French, German, and Spanish: As Matters of Erudition naturally flowing from the Languages, History, Geography, Chronology, Logick and Metaphysics; Writing, Arithmetick; the several Branches of the Mathematicks; Natural and Mechanic Philosophy; Drawing in Perspective; and every other Part of useful Learning and Knowledge, shall be set up, maintained and have Continuance within the City of Philadelphia, in manner following. Twenty-four Persons, To wit, James Logan, Thomas Lawrence, William Allen, John Inglis, Tench Francis, William Masters, Lloyd Zachary, Samuel McCall, junior, Joseph Turner, Benjamin Franklin, Thomas Leech, William Shippen, Robert Stretell, Philip Syng, Charles Willing, Phineas Bond, Richard Peters, Abraham Taylor, Thomas Bond, Thomas Hopkinson, William Plumstead, Josias Maddox, Thomas White, and William Coleman, of the City of Philadelphia, shall be TRUSTEES to begin and carry into Execution this good and pious Undertaking, who shall not for any Services by them as Trustees performed, claim or receive any Reward or Compensation; which Number shall always be continued, but never exceeded, upon any Motive whatever.

WHEN any Trustee shall remove his Habitation far from the City of Philadelphia, reside beyond Sea, or die, the remaining Trustees shall with all convenient Speed, proceed to elect another, residing in or near the City, to fill the Place of the absenting or deceased Person.

THE Trustees shall have general Conventions once in every Month, and may, on special Occasions, meet at other Times on Notice, at some convenient Place within the City of Philadelphia, to transact the Business incumbent on them; and shall, in the Gazette, advertise the Time and Place of their general Conventions.

NOTHING shall be transacted by the Trustees, or under their Authority, alone, unless the same be voted by a Majority of their whole Number, if at a general Convention; and if at a special Meeting, by a like Majority, upon personal Notice given to each Trustee, at least one Day before, to attend.

THE

FACSIMILE PAGE OF FIRST CHARTER, 1753

Original at Pennsylvania Historical Society

resolved to establish their College, and have persuaded Dr. Johnson to accept of the Presidency of it and expect to make it greatly serviceable to all the provinces, as they look on your Academy only as a school to fit them for that College. But I hope, when Mr. Smith arrives it will not be necessary to send any pupils from Philadelphia."

William Smith, the man referred to in this letter, with whose career that of the University was so closely involved for the next thirty years, was born near Aberdeen in Scotland. He came of a family of some position, and was educated in the University of Aberdeen, from which he graduated in 1747. He was much interested in questions of public education and spent some time in London in connection with a Scotch educational movement. In 1751 he became Tutor to the two sons of Colonel Martin of New York and accompanied them to their home, taking with him letters of recommendation from the

Archbishop of Canterbury. Here he remained for the next two years. He was a man of active mind and original thought and was not likely to remain without participation in current events. There was at the time considerable interest in New York in the proposed foundation of the College, later King's and Columbia, and in April 1753, he published a pamphlet entitled, "A General Idea of the College of Mirania," expressing his ideas of principles on which such a College should be founded. He sent copies of this pamphlet to Dr. Peters and to Franklin, the two

most prominent Trustees of the Philadelphia Academy. Franklin acknowledged this a week later, sending him a copy of his own "Proposals," and expressing the hope of seeing him in Philadelphia or entering into correspondence with him on his return to England. In subsequent correspondence a visit of Dr. Smith to Philadelphia was arranged for and took place. He was received at the Academy with a complimentary recitation by one of the students of

some of his own verses. He was much impressed with the Academy and wrote a poem on the subject of his visit there, which was subsequently published. Franklin soon expressed to him privately his hope that the Trustees of the Academy would call him to a position in their institution. Subsequently he visited England, where the correspondence between him and Franklin was continued, and when he returned to America he landed at Philadelphia. Three days after his arrival, May 25, 1754, a



WILLIAM SMITH

From the painting by Benjamin West

resolution was passed by the Board of Trustees that a person be provided in the Academy to teach Logic, Rhetoric, Ethics and Natural Philosophy, and it was ordered that "Mr. William Smith, a gentleman lately arrived from London, should be entertained for some time upon trial to teach the above mentioned branches of learning, in case he will undertake it." He seems to have begun teaching the next day. There is but little doubt that the introduction of Mr. Smith into the Academy was part of a deliberate plan on the part of Franklin and perhaps Dr. Peters to in-

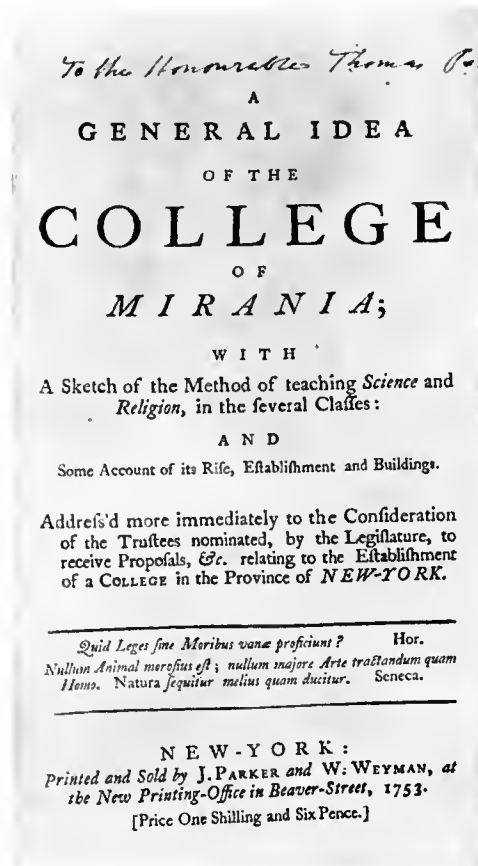
roduce the changes in the organization of the Academy which had long been contemplated, but which the Trustees had shrunk from on the ground of expense. Accordingly, on the minutes of the 10th of December, 1754, six months after Mr. Smith's appointment, appears the following notice: "It being represented by Mr. Alison and Mr. Smith that it would probably be a means of advancing the reputation of the Academy if the Professors had a power of conferring degrees upon such students as had made a suitable proficiency in learning to merit that distinction, and that several ingenious young men, not finding that testimony of their acquirements to be had here, had left the Academy on that account; the Trustees, considering that such honorary distinctions might be an incitement to learning and having reason to believe that the Governor if applied to would readily grant the power of conferring them, desired Mr. Alison and Mr. Smith to draw up a clause to be added to the charter for that purpose and lay it before the Trustees at their next meeting." It was not thought necessary to communicate again with the Proprietors in England, as the change was looked upon rather as a simple step in advance and natural development or improvement of the institution, than as a transformation of it; and a mere extension of the charter was of course quite within the competency of the Governor. However, the work grew under their hands till finally an entirely new charter was drawn up, providing for a re-incorporation under a fuller title including the name "College," for the power to grant degrees, and for the ap-

pointment of a "Provost" and "Vice-Provost," the latter to be also Rector of the Academy. In its final shape it was a much longer and more formal document than the first charter and required the Trustees, Officers and Professors to take the various oaths or affirmation required of all public officials, that is to say, the first three oaths of the Act of 1714 and of the Test Act of 1674, except the usual exemption

which Quakers in Pennsylvania enjoyed. The privilege to hold property was restricted to such an amount as would produce not more than £5000 a year, a limit, which, it will easily be believed, the Trustees found no immediate temptation to transcend. The names of Rev. William Smith as "first and present Provost" and Rev. Francis Alison as "Vice-Provost" were inserted in the charter, though a provision was added explaining that there was no intention to give them the same lifetime as that of the Trustees, notwithstanding their being named in the document. Finally, on the 10th of June, 1755, all the Trustees present at the regular monthly meeting, with the Provost and the Vice-Provost elect, waited on the Governor

and subscribed the qualifications named in the charter, and thereafter assumed the name of the "Trustees of the College, Academy and Charitable School of Philadelphia in the Province of Pennsylvania."

The most important change introduced by this document was of course the power to grant degrees. It is stated "that one class of hopeful students has now attained to that station in learning and science by which in all well constituted seminaries youth are entitled



TITLEPAGE "COLLEGE OF MIRANIA"

to their first degree, and which the said students are earnestly desirous to be admitted to." It is then provided among the powers of the Trustees, "that for animating and encouraging the students thereof to a laudable diligence, industry and progress in useful literature and science, they and their successors, met together on such day or days as they shall appoint for that purpose, shall have full power and authority, by the Provost, and in his absence by the Vice-Provost, and in the absence of both the Provost and Vice-Provost, by the senior professor, or any other fit person by them authorized and appointed, to admit any of the students within the said College and Academy, or any other person or persons meriting the same, to any degree or degrees, in any of the faculties, arts and sciences, to which persons are usually admitted, in any or either of the Universities or Colleges in the Kingdom of Great Britain. And we do ordain, that the Provost, Vice-Provost, or other person appointed as aforesaid, shall make, and with his name sign diplomas or certificates of the admission to such degree or degrees, which shall be sealed with the public seal of the said corporation, and delivered to the graduates as honorable and perpetual testimonials thereof."

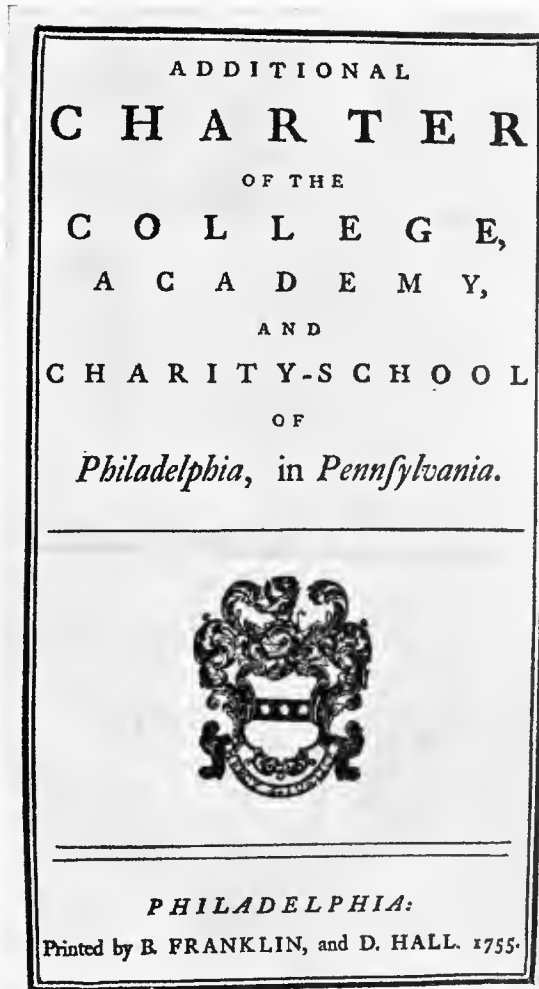
New titles and dignities were also conferred on the Masters by which they were to be known

officially, not merely popularly, as "Professors." At the head of the teaching body, as has been said, were to be the Provost and Vice-Provost. The reason for the adoption of this term, which is not used in any other American College, does not appear. At Mr. Smith's own University, Aberdeen, the usual

Scotch terms, "Chancellor," "Rector" and "Principal" were used. The head of Trinity College, Dublin, was called the Provost, as were those of Oriel, Queen's, and Worcester at Oxford, and of Eton. The most conspicuous use of the term in Scotland was, however, for the chief civil official of Scotch towns. It is probable therefore that it was simply taken over, at Mr. Smith's suggestion, either from political to academic, or from English and Irish to American usage. The salary of the Provost was fixed at £200, the same as that of the Rector of the Academy, except that it was understood that the Provost's salary was really £250, an addition of £50 yearly being made as a personal gift from the Proprietor,

Thomas Penn. The Provost, Vice-Provost and Professors were to be constituted and known as a "Faculty," with the specific name of the institution attached to them, and with such powers as the Trustees should delegate to them.

The new charter and the new name seem to have brought a sense of exaltation. Almost



TITLEPAGE SECOND CHARTER, 1755

Original at Historical Society of Pennsylvania

£500 was expended in rebuilding, and in preparing a platform and gallery for audiences of distinction on public occasions; £150 was appropriated for the purchase of apparatus for exhibiting experiments in natural philosophy. The two masters not named in the charter, Ebenezer Kinnersley and Theophilus Grew, were named respectively Professor of the English Tongue and Oratory, and Mathematical Professor. A committee was appointed to dis-

cuss the possible revision of rates to be paid by scholars under the new conditions and the question of vacations and holidays; and a paid clerk was provided to keep the minutes and other records. Provost Smith entered upon his new office with vigor. The combined College, Academy and Charitable School had now passed through its embryonic stages and was entering on a period of a quarter century of good work, of prosperity and of prominence.

CHAPTER II

THE ADMINISTRATION OF DR. SMITH—FROM THE SECOND CHARTER TO THE REVOLUTION—1755-1779

BUT no degree of public fame or even confluence of pupils can relieve an institution for higher education without endowment and without public subsidy from money difficulty. The original subscriptions were now exhausted, the casual donations were few, and the income from tuition fees of course insufficient to pay the expenses of the institution. In February 1755, therefore, recourse was had to the means most familiar at that time of raising money for semi-public objects, a lottery. The Trustees announced to the public that they had started a lottery for the purpose of raising 3000 "pieces of eight" or Spanish silver dollars, the value of which was 6 shillings sterling, or almost a dollar and a half of our money. The plan succeeded, every ticket was disposed of before the date of the beginning of the drawing, March 3, 1755. This was so encouraging that a second lottery for 9375 pieces of eight was immediately announced. The objects for which the money would be used, that is, repairs, scientific books and apparatus, endowment for salaries, and the support of the boys and girls Charity Schools were announced, and those who should draw blanks were comforted by the reminder that they were contributing to a charitable cause. In the next three years there was a lottery in each year, the total sum collected in this way during five years amounting to more than \$32,000, modern value.

A reaction against lotteries seems to have set in at that time in the community, for in 1759 a bill was passed by the Assembly and submitted to the Governor and Council "For the more effectual suppressing of lotteries and plays." This bill was attributed at the time to the hostility of certain persons to the College. Some members of the Council say that they are informed that it was intended to destroy what they describe as "a most noble and useful institution." They report that certain members of the House are known to have thrown all possible discouragement on it and now were trying to prohibit lotteries, from which of late the Academy had drawn its principal support. It is stated that some eighty poor boys and forty poor girls are being taught gratis to read, write, and cast accounts and the girls to sew; that one hundred and thirty boys are taught Greek, Latin and English, Writing and Mathematics in the schools, and that about twenty students in the College are being instructed by able Professors in all higher branches of learning. It is pointed out that the expenses of the institution are equal to some £1300 a year and that all they receive from scholars is about £500. The remaining £800 was formerly raised by subscription, but as it had proved too heavy for a few individuals it had of late been supported by lotteries which it would be injurious if not destructive now to prohibit.

However, the authorities of the College, perhaps influenced by this action, or themselves turning against it as a somewhat questionable way of raising an income, and having another source of support suggested to them, gave up the policy of establishing lotteries and determined in 1761 to appeal for funds to a wider constituency, the people of the mother country.

Provost Smith had already in 1759 made a visit to England mainly for personal objects. He had taken part in 1757 and 1758 in the active disputes then in progress between the majority of the Colonial Assembly, who were

opposed to military defence against the Indians on the one hand and a large minority among the people who wished the Legislature to organize a defence on the other. One incident of this dispute was that the Provost was sent to jail in Philadelphia by the Assembly for

aiding in the publication of what they declared to be a libel, and for a breach of the privileges of the Assembly by his refusal to apologize for doing so. One of the picturesque events in the history of the College is the attendance of the students on the Provost in the jail, by order of the Trustees, to receive their usual instruction. On his temporary discharge at the dissolution of the Assembly, Mr. Smith went to England to seek redress by an appeal to the King's Council. This he obtained, with an official though somewhat perfunctory rebuke to the Pennsylvania Legislature, sent through the Governor. He was moreover received with much distinction in England. His posi-

tion as head of the College, his activity in certain other philanthropic and educational work, his literary productions, and doubtless his aristocratic political sentiments obtained for him attention from many prominent men. He was given the degree of Doctor of Divinity by his Alma Mater, the University of Aberdeen, by the University of Oxford, and later by the University of Dublin. He obtained at the same time a considerable gift for the College, consisting of a grant from Thomas Penn of his fourth part of the Manor of Perkasié in Bucks county, containing about two thousand five hundred acres.

The rents from this land amounted at that time to about £60 a year only, but later they were considerably greater. He returned from this trip in October 1759. Two years afterward, in the year 1761, probably at the suggestion of Dr. Smith him-



OLD JAIL, THIRD AND MARKET STREETS

Where the Provost taught his classes, February-April 1758.

self, the Trustees determined to make use of the Provost's acquaintanceship in England by sending him thither to ask for contributions for the continued support of the College. He was equipped with money in hand, and an order for more in London, with official instructions, with a long appeal to the British public, and a special appeal to the Penn family. His public appeal recited, "That about twelve years ago sundry gentlemen of the City of Philadelphia, observing the rapid growth of the said City and Province, through the vast accession of People from different parts of the world, became seriously impressed with a view of the Inconvenience that must necessarily arrive in

such a place if left destitute of the necessary means of Instruction. They saw with concern that after the Death of the first settlers (many of whom were well educated before they came into America), the generality of their Descendants were in danger of degenerating into the greatest ignorance." He started for England on the 13th day of February, 1762, on what proved to be a mission of over two years. According to instructions he presented himself first to the Proprietary, Thomas Penn, whom he had known on his previous visit, and for whose personal interests in Pennsylvania he was known to be a warm advocate. Penn received him, encouraged the plan with the greatest readiness, and immediately added to his former gifts the sum of £500 as a subscription from the Proprietary family. He received similar encouragement from Dr. Secker, Archbishop of Canterbury, with whom he

had had much correspondence pertaining to church and educational affairs in Pennsylvania, from the Archbishop of York and several other bishops and prominent dissenting clergymen. The plan, however, was hardly well introduced when, in July 1752, James Jay of New York, an active young physician, called upon him in London to say that he had just come entrusted with a similar errand and credentials for collecting funds in Great Britain for King's College, New York City. After considerable hesitation and long negotiations an arrangement

was made by which Dr. Smith and Dr. Jay were to act in everything in common and divide the proceeds of their soliciting equally between the two colleges. They then proceeded to follow two plans of collecting: the first to obtain a royal brief from the King's Council, by which through a complicated process, eleven thousand five hundred copies of a royal missive were distributed to as many

clergymen of the Church of England enjoining upon them an appeal to the charity of their parishioners and the collection of the resulting donations by local collectors and their payment to the representatives of the beneficiaries. The other plan was to go directly to wealthy persons and corporations and ask for subscriptions.

Both plans were followed assiduously through more than a year of constant visiting, corresponding and soliciting. The two collectors traveled up and down and to and fro through England, Scotland



THOMAS PENN

From original canvas in Historical Society of Pennsylvania

and Ireland, the bulk of the work naturally falling upon Dr. Smith, from his being a clergyman and constantly preaching to encourage contributions in the parishes according to the brief as well as for the special subscriptions. Still other methods were followed, for Dr. Smith writes home: "On Wednesday next we are to have a benefit oratorio at Drury Lane and Mr. Beard leaves his own house to perform for us at the other and will give a benefit himself next winter, but could not do it now on account of a week lost to him at his house, viz. Covent

Garden. Mr. Garrick has been exceedingly kind in the matter and gave his house at first asking, and was sorry that the season was so far advanced and that he had no night disengaged sooner. The principal performers, vocal and instrumental, serve gratis, and we are favored with the boys from the Chapel Royal, and every other mark of distinction. Mr. Tyers even put off the opening of Vaux Hall, which was fixed on Wednesday next, in order to favour us."

When the matter came before the King, he expressed much interest and himself subscribed £400 to King's College and £200 to the College at Philadelphia, giving the smaller sum to the latter institution because, as he said, it already had generous patrons in his room in the Penn family.

The net results of the collecting tour in England were as given in the following table:

One-half of the brief money . . .	£4800		
One-half of the private collections . . .	1136	10	6
The King's gift	200		
The Proprietor's gift	500		
Collections before the union with King's College	284	17	
	£6921	7	6

These sums came from a vast number of small givers. Dr. Smith estimated the number of subscriptions under the first item alone as over eleven thousand and under the second as about eight hundred. Among the latter were the Princess of Wales, the Duchess of Argyle, the Dukes of Devonshire and Newcastle, the Earls of Shelburne, Dartmouth, Temple, Chesterfield, and Shaftesbury, Lords Bute, Clive, Grosvenor, Spencer, and Gage, and Mr. Pitt. The various colleges of the two Universities of Oxford and Cambridge gave respectively £163 and £166.

His work in England had been made harder by the non-support, if not the actual opposition of Franklin, who was in England at Provost Smith's arrival and is said to have taken "uncommon pains to misrepresent our Academy before he went away to sundry of these people (the Dissenters), saying that it was a narrow bigoted institution, put into the hands of the Proprietary party as an engine of government."

Franklin's interest in the College had flagged as he came to be occupied with various other matters; the development of its classical rather than English and utilitarian elements had been against his judgment, and moreover early after Dr. Smith, largely through his efforts, had become Provost, their ways began to diverge politically. In the party conflicts between those who favored the Proprietaries and the more popular party who were opposed to their claims, Dr. Smith took the former side, Franklin the latter. Franklin resented Dr. Smith taking part in politics at all, while the latter with his vigorous mind, ready pen and speech, and broad interests, felt that the College was only one, though of course by far the most absorptive one, of his many interests. When, therefore, the Provost came to England, especially when he put himself under the patronage of the Proprietaries, Franklin seems to have felt that the College was allying itself closely with all that to which he was opposed, and therefore not only withheld his support but even, if he was correctly reported, alleged of it a narrowness and party position which certainly was not true. However, the success of the plan for subscriptions was complete, and after all direct expenses had been paid, the product of the Provost's mission, amounting to several thousand pounds, was ordered by the Trustees to be invested as a perpetual fund, the interest only to be used for expenses; an investment which was unfortunately almost all subsequently lost in the confusion of Revolutionary times.

The same general plan was followed somewhat later in raising further funds. Dr. Smith made a visit in the winter of 1771 to Charleston, South Carolina, and although he met with much difficulty from those who thought contributions for educational purposes should be used in their own midst, collected nearly £1000. Again one of the Professors who was about to go to the Island of Jamaica was commissioned to solicit subscriptions, and collected about £3000. Still again, in 1771, when it was necessary to collect a sum of £300 with which to pay for the orrery which had just been constructed by David Rittenhouse, and which was long to remain one of the chief glories of the College,

Dr. Smith gave a course of lectures from which some £200 was obtained. A general subscription in Philadelphia in 1772 brought in about £1200. Within Dr. Smith's official career, 1755 to 1779, therefore, money had been collected, in addition to the lotteries, for the support of the institution, to the extent of more than \$40,000 of modern money. The product of the last one of the lotteries, in 1761, amounting to almost £2000 was utilized in 1762 for the erection of a second building on the College grounds. The lower story of this building was used for the Charity Schools, the two upper stories as dormitories for the lodging of students who came from outside of the city. Twelve years afterward, in 1774, the Trustees built a dwelling-house for the Provost on the corner of their property, at Fourth and Arch streets, and houses were subsequently provided for two of the other three Professors. With this material basis of support and of habitation, under the administration of a man as vigorous and as prominent as Dr. Smith, and with at least some members of the teaching force men of considerable ability, the College held during this period a well defined and conspicuous place in the pre-Revolutionary community of Philadelphia.

In January 1757, Lord Loudon and the Governors of several of the Colonies were in Philadelphia consulting upon plans for common resistance to the Indians who were then ravaging the western frontiers. The occasion was seized by the Provost to hold a public examination of the students in the College and Academy and to give a performance in the presence of the distinguished visitors of a certain "Masque of Alfred," adapted for the occasion and considered especially suitable because of the analogy between the condition of England overrun by the Danes and the

Colonies invaded by the Indians. There were from the beginning frequent visitations of its various classes by the Trustees and by other visitors, and annual exhibitions. With the year 1757, however, began its regular series of Commencements. The first of these ceremonies was held in the College Hall on the 17th of May of that year. The charge delivered to the graduates by Dr. Smith was afterwards published, and is rather a striking address. Besides the usual appeals and warnings to young men he invokes as witnesses to their fulfilment of high ideals the long series of classes, the "generations yet unborn" of the College world, the ever increasing body of

graduates of which they are the first. He appeals to them for patriotic self-sacrifice if their country should call them, as if anticipating those national vicissitudes with which they were all to be more or less prominently connected. The six graduates of this first class were Jacob Duché, Francis Hopkinson, James Latta, Samuel Magaw, John Morgan, and

Hugh Williamson. Each commencement after this was an occasion more or less notable in proportion as pains were taken to bring it into prominence or as public circumstances brought it into contact with the larger life of the community. That of 1759 is thus described in a contemporary newspaper, "On Tuesday, the 1st inst., the Honourable James Hamilton Esq., our Governor, was pleased to visit the College and Academy of this city, whereof his Honor is a Trustee, and being received at the gate, was conducted up to the experiment room, to take his place among the other Trustees, who attended him from thence to the public hall, followed by the masters, tutors, graduates and students, in orderly procession; where being seated, the following address and congratulations were delivered in the presence of



THE RITTENHOUSE ORRERV

In University Museum

a large number of the citizens." Then followed laudatory addresses and verses in English and Latin, addressed to the Governor, and a formal reply from him. The Commencement of 1761 was attended in a body by the members of the convention of clergymen of the Episcopal church, then in session in Philadelphia. At the Commencement of May 17, 1763, a dialogue and ode on the Peace of Paris which had just been signed, was performed by the students, and published in Liverpool, and in 1766, 1767 and 1770 similarly a "Dialogue and Two Odes" were given, and all subsequently published in Philadelphia.

Perhaps the most distinguished body of guests which the College ever had was, however, the Continental Congress, which met on the 10th of May, 1775. General Washington, who was passing through the city on his way to take charge of the troops before Boston, was

also present. The newspaper description of the commencement is as follows: "This day the public commencement for graduates in the arts was held here in the presence of the most illustrious assembly this seminary ever beheld. About half an hour after nine o'clock agreeable to an invitation previously given to them, the honourable members of the Continental Congress were pleased to proceed in a body from the State House to the College, where they were received at the gates by the Provost, Vice-Provost, Professors, Graduates, and other students, in their proper habits. They entered the hall, and took their places; the galleries and other parts of the house being filled with

as many of the respectable inhabitants of the city as could find room." Then came prayers and anthems and a Latin Salutatory and a Latin "syllogistic dispute" and orations and "a Dialogue and two Odes set to Music," as usual; then the conferring of degrees, and more orations, and finally the Provost's charge, several patriotic passages of which were quoted from that of 1757, given eighteen years before. Several of the orations, especially one on "The Fall of Empires" by the son of Dr. Smith, had reference to the existing political troubles and echoed the prevailing tone of patriotism and the love of liberty. The audience "broke

forth into one loud and general plaudit," when he cried out; "Liberty is our idol!—she is the parent of virtue, the guardian of innocence, and the terror of vice. Equal laws, security of property, true religion, wisdom, magnanimity, arts and sciences



The College Building

Dormitories and Charity School

THE COLLEGE, ACADEMY AND CHARITY SCHOOL

From a contemporary sketch

are her lovely offspring! She has turned deserts into fruitful fields, and villages into populous cities. Without enjoying the blessings which she bestows, the solitary state of nature is preferable to society; and the skins of wild beasts a more honorable covering than all the silken vestments slavery can bestow." The authorities of the College subsequently published the orations in pamphlet form "in order that the principles constantly propagated in this Seminary may be known to the whole world."

In the meantime, while the lower schools and the College proper were prospering, a new line of activity had been taken up by the Trustees in the form of regular courses of medical teaching,

virtually a fourth foundation added to the three already being carried out,—the College, the Academy and the Charitable Schools. It was an outgrowth partly of the educational spirit of the institution, but principally of the conditions existent in Philadelphia at the time.

Soon after the middle of the century that city had become distinctly the medical centre of the Colonies. Several of the most active members of the American Philosophical Society, founded in 1744, were physicians, and the proceedings were to an appreciable extent devoted to medical discoveries. A few pamphlets of native production were published. A lecture on inoculation for smallpox was given in the "New Building" shortly after it was acquired by the Trustees of the Academy and before any teaching had begun. The Philadelphia Hospital was founded in 1751 and with it served a number of physicians whose names are familiar as pioneers of higher medical views and more careful practice in our early history, such as Lloyd Zachary, Thomas and Phineas Bond, Thomas Graeme, Thomas Cadwalader, Samuel Preston Moore and John Redman. These men

were in most cases of the second generation of settlers and had received their medical education from the older men who were immigrants and had been educated abroad. Under them served as apprentices, however, a generation of still younger men, the most ambitious of whom went subsequently to Europe to study, and brought back the knowledge and training received from wider opportunities and more famous teachers. The possibilities of a more formal kind of teaching in Philadelphia than was given by this personal intercourse seem to have been recognized, and at least one physi-

cian, Dr. Cadwalader, offered public instruction in anatomy when he returned from Europe, about 1750; the lectures being given in a building on Second Street above Walnut. Two still younger men, who were both studying medicine in London about 1761, Drs. Shippen and Morgan, planned a more ambitious scheme, that of the foundation of a regular medical school, none such being in existence at that time in America. The former of these, the son of Dr. Wm. Shippen of the Board of Trustees of the College, after graduating from the College of Rhode Island, serving a medical apprenticeship under his father in Philadelphia, and then spending five years of further study in London, Edinburgh and Paris, returned to Philadelphia in 1762. He brought with him as a gift to the Philadelphia Hospital from Dr. John Fothergill, a prominent physician of London, a number of anatomical drawings, two thirds of life size, and some casts in plaster of Paris. A letter from Dr. Fothergill read to the Trustees of the Hospital at the presentation of these on the 8th of November, 1762, speaks as follows of the gift and of the future plans. "In the



JAMES HAMILTON

From canvas in Independence Hall

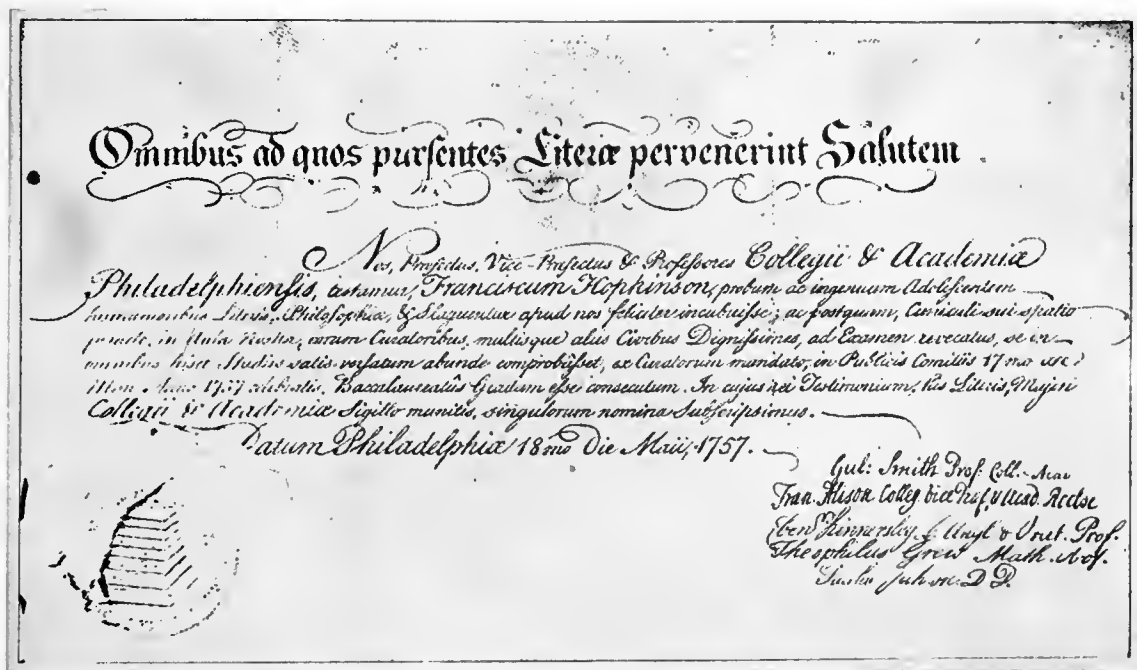
want of real subjects these will have their use, and I have recommended it to Dr. Shippen to give a course of anatomical lectures to such as may attend. He is very well qualified for the subject, and will soon be followed by an able assistant, Dr. Morgan, both of whom I apprehend will not only be useful to the Province in their employments, but if suitably countenanced by the Legislature will be able to erect a School of Physic amongst you, that may draw students from various parts of America and the West Indies, and at least furnish them with a better idea of the rudiments of their

profession than they have at present the means of acquiring on your side of the water."

In accordance with the first suggestion, at least, of this letter, Dr. Shippen announced in the newspaper of November 25, 1762, that "Dr. Shippen's anatomical lectures will begin tomorrow evening at six o'clock, at his father's house in Fourth Street. Tickets to be had of the Doctor at five pistoles each, and any gentlemen who incline to see the subject prepared for the lectures and learn the art of dissecting, injections, etc., are to pay five pistoles more."

lectures was given during the next two winters also.

In April of 1765 Dr. Morgan came back to Philadelphia, a thoroughly well educated physician and an enthusiastic advocate of public medical teaching. He was born in Philadelphia and was one of the six members of the first graduating class of the College. He studied medicine as an apprentice to Dr. Redman, served a year in putting up prescriptions at the hospital, and four years with the army as a surgeon in the French and Indian War.



FACSIMILE DIPLOMA OF FRANCIS HOPKINSON — THE FIRST DIPLOMA

An introductory lecture to the course was delivered in one of the rooms of the State House before a large audience of gentlemen, and Dr. Shippen at that time suggested the ultimate organization of a Medical School. The course was attended by twelve students, and he was allowed to use for the illustration of his lecture the anatomical drawings and casts lately given to the hospital. During the summer of 1763 Dr. Shippen attended the hospital every other Saturday afternoon to explain the pictures to any who wished to attend and who would pay a fee of one dollar for the benefit of the hospital. His course of

From 1760 to 1765 he was in London, Edinburgh, Paris and Padua, in each place obtaining instruction under the best teachers, and taking the degree of Doctor of Medicine at Edinburgh in 1763. He developed some new medical theories and perfected certain processes of preparation of organs for demonstration. He seems to have looked forward to a more specialized form of practice of his profession than was then customary, when he should return to America, and also to the delivering of medical lectures, as was indicated by the discussions between Shippen and himself in London. Moreover he had either himself

conceived or had had suggested to him the idea of attaching the proposed Medical School to the College. Consequently, immediately on his arrival in Philadelphia, he laid before the Board of Trustees a definite proposal for the establishment of medical courses under the patronage of the Trustees of the College, submitted a letter from Thomas Penn, who was already acting as the special patron of the College, speaking with the highest approval of the scheme and of Dr. Morgan, and applied for appointment as Professor in the new school.

Letters were also presented from Dr. Peters and Mr. Hamilton, former members of the Board, recommending the plan. This meeting was held on the 3rd of May, 1765. Five prominent physicians were members of the Board at that time, and with this professional support, with the urgent letters of recommendation, the fact that public lectures on medical subjects were already initiated, and the manifest desirability of the object, the Trustees immediately gave their approval to the proposition and elected Dr. Morgan "Professor of the Theory and Practice of Physic." May 3,

1765, became therefore the date of the creation of the first Medical Professorship in an institution of learning in America, although at King's College, New York, vigorous preparatory steps to the formation of a Medical School were being taken at approximately the same time. At the College commencement, three weeks later, Dr. Morgan was invited to deliver his inaugural address. It was entitled "A Discourse upon the Institution of Medical Schools in America," and had been prepared while he was in Paris. It was a full and thorough discussion of the various fields of medicine, of the kind of study required for its most successful prosecution, of

ideal teaching methods, and of the suitability of Philadelphia for the location of such a studying and teaching body. The "Discourse" was published the same year, with an appeal for the separation of the practice of medicine from surgery and pharmacy.

Dr. Shippen seems to have somewhat resented Dr. Morgan's sole initiation in the proposal to the Trustees of the College, when he himself had publicly suggested the creation of a Medical School three years before, and even before that had, as he claimed, made the original suggestion to Dr.

Morgan in London and agreed with him to leave it for subsequent joint action. A few months afterward, however, September 23, 1765, he sent a letter to the Board expressing his pleasure in their action, stating his own plans, and applying for a Professorship. This request was immediately complied with, and Dr. Shippen became Professor of Anatomy and Surgery. Immediately afterwards advertisements were inserted in the newspapers announcing the two courses, one on Anatomy, the other on Materia Medica, but including under these heads



WILLIAM SHIPPEN, JR.

an outline at least of Pharmacy, Chemistry, Surgery, and the Theory and Practice of Medicine. The description given was as follows:

"Dr. Shippen's course of Anatomical Lectures will begin on Thursday, the 14th of November, 1765. It will consist of sixty lectures, in which the situation, figure, and structure of all the Parts of the Human Body will be demonstrated on the flesh subject; their respective uses explained, and their Diseases, with the Indications and Methods of Cure, briefly treated of; all the necessary Operations in Surgery will be performed, a Course of Bandages given, and the whole will conclude

with a few plain and general directions in the Practice of Midwifery. Each Person to pay six Pistoles.

"Those who incline to attend the Pennsylvania Hospital, and have the Benefit of the curious anatomical Plates and Casts there, to pay six Pistoles to that useful Charity.

"A Course of Lectures on the Materia Medica, by John Morgan, M. D., F. R. S., and Professor of Medicine in the College of Philadelphia. Price, Four Pistoles.

"This Course will commence on Monday, the 18th day of November, and be given three times a week, at the College, viz., Mondays, Wednesdays, and Fridays, at three o'clock in the afternoon, till finished, which will last between three and four months.

"To render these lectures as instructive as possible to students of Physic, the Doctor proposes, in the course of them, to give some useful Observations on Medicine in general, and the proper manner of conducting the study of Physic. The authors to be read in the Materia Medica will be pointed out. The various Substances made use of in Medicine will be reduced under Classes suited to the principal Indications in the cure of Disease. Similar virtues in different Plants, and their comparative powers, will be treated of, and an Enquiry made into the different Methods which have been used in discovering the Qualities of Medicines; the virtues of the efficacious will be particularly insisted upon; the Manner of preparing and combining them will be shown by some instructive Lessons upon Pharmaceutic Chemistry: This will open to students a general Idea both of Chemistry and Pharmacy. To prepare them more effectually for understanding the art of prescribing with Elegance and

Propriety, if time allows, it is proposed to include in this course some critical Lectures upon the chief Preparations contained in the Dispensatories of the Royal College of Physicians at London and Edinburgh. The whole will be illustrated with many useful Practical Observations on Disease, Diet, and Medicines.

"No person will be admitted without a Ticket for the whole course. Those who propose to attend this course are desired to apply to the Doctor for Tickets, at least a week

before the Lectures begin. A Dollar will be required of each student, to matriculate, which will be applied in purchasing books for a Medical Library in the College for the Benefit of the Medical Students."

Dr. Morgan's lectures were evidently given in some room of the College Hall. Dr. Shippen continued to give his in the rooms in his father's house arranged for the purpose, on Fourth Street above Market, in the same square as the College. These courses were given for two successive winters, and Dr. Thomas Bond, one of the Trustees, and an attending physician at the Hospital also prepared and gave a

voluntary course of clinical medicine there for the benefit of the medical students. In 1767 the five medical Trustees, the two Professors, and the Provost, drew up and published a code of rules and requirements according to which the degree of Bachelor of Physic would be given by the College to any students showing a satisfactory knowledge of Latin and of elementary science, having attended and been examined in each of the medical courses given, and having served an apprenticeship to some reputable practitioner. The degree of Doctor of Medicine would be given to graduates of three years standing, full twenty-four years old, and who



JOHN MORGAN

From painting at Pennsylvania Historical Society

should write, defend and publish a satisfactory Thesis. Every effort was made to hold the degrees high, and to furnish instruction at the College and in the Hospital in collateral subjects to medicine. The city physicians already established seem to have given earnest encouragement to what might now, considering that it had its regular teachers, its established rules, and its separate body of students, very fairly be spoken of as a Medical School, even although there was no separately organized Faculty. But after all, two regular Professors, dividing the whole field of medicine between them, a clinical course at the hospital, and one course on natural philosophy at the College especially intended for medical students, made but a narrow foundation for medical education, and the Trustees seem to have held themselves ready to add to the number of teachers as soon as the proper persons should present themselves. Therefore, when Dr. Adam Kuhn of Germantown, who had like Dr. Shippen studied under his own father, then gone abroad, studied botany with Linnaeus in Sweden, and taken his degree at Edinburgh in 1767, returned to Philadelphia in January 1768, and applied for an appointment in the College, he was immediately elected Professor of Botany and Materia Medica. Similarly when Dr. Benjamin Rush, who was likewise an Edinburgh man, having taken his degree of Doctor of Medicine there in 1768, returned to Philadelphia in July of 1769, with a letter of recommendation from Thomas Penn, like Dr. Morgan, and a present from the same patron of a "chemical apparatus" for the College, he was unanimously elected Professor of Chemistry.

June 21, 1768, occurred the first Medical Commencement, eleven years after the first

Commencement in Arts. With all the formalities of gowns, Latin orations, disputations, and charges by the Provost and by the senior Medical Professors, John Archer, Benjamin Cowell, Samuel Duffield, Jonathan Potts, Jonathan Elmer, Humphrey Fullerton, David Jackson, John Lawrence, James Tilton and Nicholas Way, had bestowed upon them the degree of Bachelor of Medicine. The wider field from which this school was to draw its students was shown at this very first Commencement, where only two of the ten gradu-



BENJAMIN RUSH

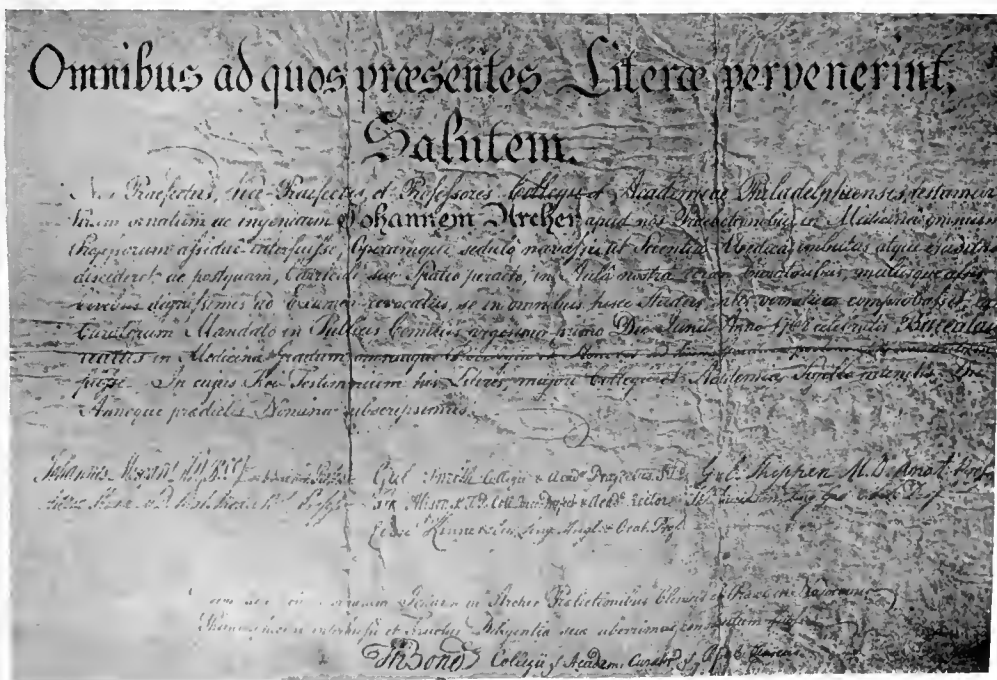
ates were from the city, five being from other counties of Pennsylvania and three from other states. Similar degrees were conferred at the close of each of the next two years, and then in 1771, in addition to the seven who received the Bachelor's degree, four of the graduates of three years before obtained the degree of Doctor of Medicine.

Thus a distinct group of five Medical Professorships existed with an established curriculum, a group of students, and annual Commencements with the conferring of degrees. The number of those graduating was, so

far as statistics exist, not again during the pre-Revolutionary period quite so large as the ten of the first class, but the number attending the courses of lectures was considerable, rising sometimes to forty students. The Professors were, with the exception of Dr. Bond, all young men, graduates of the University of Edinburgh, and reproduced here the methods and theories of that school, which had been in turn brought into the prominence that it then possessed by the efforts of a group of men who had been imbued with their medical enthusiasm at Leyden. The connection of the medical courses with the work of the College was only slight.

It is true that the Professors were always spoken of as Professors in the College and they did not apparently form a separate Faculty or keep minutes until 1800; medical diplomas were signed by the Arts Professors, and one Commencement, at least, that of 1769, was held jointly for students in Arts and in Medicine. But the students were ordinarily entirely separate; distinct Commencements were usually held and each Medical Professor seems to have acted largely independently, except for general regulations, and in the matter of

cultured element that was to be sorely needed in the more materialistic period that was to follow. The names of the members of the first graduating class have already been mentioned. Every one of them became prominent and exerted an influence far above the ordinary on the affairs of their time. Jacob Duché became an Episcopal clergyman, Rector of Christ Church and St. Peter's, Philadelphia, and was Chaplain to Congress till the Declaration of Independence, when he chose the Loyalist horn of the dilemma, and was in England dur-



FACSIMILE DIPLOMA OF JOHN ARCHER — FIRST MEDICAL DIPLOMA

granting degrees. This last function was kept entirely under the control of the Trustees. The degrees were conferred and the diplomas presented by the Provost in person, though that was almost his only intercourse with the medical students.

During this period of academic prosperity and achievement lying between 1755 and 1777, each graduating class both in Medicine and in Arts had included men who subsequently played a prominent part in the later days of colonial and the early days of our national life, besides the still larger number who were simply absorbed into the community as a

ing the remainder of the war. In the College he was successively Tutor, Professor and Trustee. Francis Hopkinson took the patriot side in the Revolution, was a signer of the Declaration, and held legislative, judicial, and administrative offices under New Jersey, Pennsylvania and the United States. He wrote some popular pamphlets and verse which were of value to the cause of freedom, and edited a volume of Admiralty Reports. He also became a Trustee. James Latta was a somewhat prominent Presbyterian clergyman and served in the Revolution as Chaplain. Samuel Magaw will be mentioned later in the History

of the University as Vice-Provost and Professor of Moral Philosophy. He was an Episcopalian clergyman, and was one of the founders of the Episcopal Academy in Philadelphia. John Morgan has already been spoken of as joint founder with Dr. Shippen of medical courses in the College, and an active and influential physician in connection with the Pennsylvania Hospital. He was also at the head of the medical service of the American Army during the early years of the Revolution. Finally, Hugh Williamson passed a most varied, long and influential life. He was successively a clergyman, Professor of Mathematics in the College, physician, business man and politician. He testified concerning the destruction of tea in Boston harbor before the British Privy Council, represented North Carolina in the Continental Congress, in the Constitutional Convention and in Congress. He served in the field as a medical officer, reported on the transit of Venus of 1769, and wrote a number of books, essays, and papers on the most varied subjects. He died finally in New York City, at the ripe age of eighty-four.

Among those who were in the College or Academy at the same time, but who did not take degrees, were Benjamin West the artist, and Lindley Murray the grammarian. In the Class of 1759 were William Paca, a signer of the Declaration of Independence from Maryland, and a holder successively of almost every variety of legislative, judicial and executive position under that Colony and State and under the United States Government within Maryland; Philemon Dickinson, whose position was somewhat similar in New Jersey, but who added to it an active military career on

the patriot side during the Revolution; Samuel Powel, a Mayor of Philadelphia and a Trustee of the University; Andrew Allen, who held many provincial and civic positions in Philadelphia, and was a member of the Continental Congress, but opposed the Declaration of Independence; and his brother, John Allen, who had much the same career and was even more outspoken against independence.

In the Class of 1760 were, Thomas Mifflin, afterward General, Governor, and President of Congress; John Cadwalader, member of Congress, Judge successively of each of the Philadelphia courts, and General in the service of the State of Pennsylvania during the Revolution; his brother, Lambert Cadwalader, with a somewhat less conspicuous military but more prominent civil record, and Whitmel Hill, who was active in the Revolutionary and subsequent history of North Carolina. In the Class of 1761 were Richard Peters, who was engaged in the service of the Admiralty on the breaking out of the Revolution, and continued in a mixed legal and military career under the American Government till the close of the Revolution, and was



JACOB DUCHÉ

From original canvas at Pennsylvania Historical Society

subsequently a member of Congress and a Pennsylvania Judge. In the same class were Tench Tilghman of Maryland, Military Secretary to Washington during the whole war, who carried to Congress Washington's despatch announcing the surrender of Cornwallis; and John Neilson of New Jersey, who had an active Revolutionary career in that State and in Congress, and was afterwards instrumental in the foundation of Rutgers College. In the next year's class, 1762, Samuel Jones participated in the foundation of another College, that of Rhode Island, now Brown University, which gave him

his degree of Doctor of Divinity in 1786, and offered him its Presidency on the death of its first President, Dr. Manning. In the Class of 1763 were Isaac Hunt, who was afterwards an aggressive Tory, escaped to England, and was the father of Leigh Hunt; Jonathan Dickinson Sergeant and John Peter Gabriel Muhlenberg two prominent members of those prominent families. In the Class of 1765 were John Andrews, subsequently Provost, and William White, afterward Bishop of Pennsylvania for forty-nine years. The third Provost, John McDowell, graduated in the Class of 1771. And so from the various classes down to the Revolution names which later became well known might be culled. In the last class, that of 1776, was John Clopton of Virginia, who joined the army immediately after his graduation as Captain of a company of militia made up of relatives, friends and dependents of his family from his own parish of St. Peters, Virginia. Clothing and supplies were furnished for the Company throughout the whole war by his father, William Clopton, and for their sake he refused repeated offers of promotion which would have separated him from them.

During this period, thirty-four matriculates are known to have subsequently become clergymen, sixteen physicians, and forty lawyers, several of each of these groups having taken later courses connected with their professional studies in England and Scotland. The greater number of students were of course from Philadelphia and its immediate vicinity, but a large number in proportion to the total in attendance were from the adjoining Provinces, and a considerable number from further away, especially from the Southern colonies and the West Indies, with occasionally a few from New York or New England. The usual number in the whole institution was between two hundred and fifty and four hundred; more than one-half of these, however, being in the Charity Schools, one-half of the remainder again being students of the Academy only, and a still smaller number, some thirty or forty, taking those higher courses which constituted the College, and perhaps as many more the medical course. So far as the statistics are complete, fourteen is the largest number that graduated in Arts in any

one year, and the average number of graduates for the twenty years is about seven yearly. In Medicine the largest number was ten, with an average of about six. Quite a number, however, in the various courses pursued their studies nearly to graduation, but for one reason or another did not take their degrees.

With the Revolution came troublous days for the College. As early as the 23rd of May, 1776, it was ordered that the Commencement should be a private one, on account of the existing unsettled state of public affairs. On June 10, therefore, some of the Trustees and Professors attended in the hall, and the degrees were conferred, but there was no public ceremony. The first actual interference was from the volunteer troops which were gathering in the city in the summer months of 1776. The large yard and hall and class-rooms of the College, situated just in the outskirts of the built-up portion of the city, seem to have been so convenient that the recruiting and militia officers could not refrain from their use. Christopher Marshall mentions in his diary under the date July 15, 1776: "More of the militia with the artillery went from Trenton this day, and Colonel Montgomery's men from Chester came to town and used part of the College as barracks." From that time onward, against the protests of the Professors, its buildings were used for temporary barracks, its yards were filled with horses and wagons, its classes thereby broken up. Scarcely had one party gone, the premises been cleaned up, and an effort been made to gather the scholars, when a new batch of troops was quartered in the buildings and grounds. On the Trustees' Minute Book under the date December 1776, is the entry, "No meeting, the schools being broke up on account of the public alarms." In January 1777, a formal protest was sent to the Council of Safety by the members of the Faculty stating that "the doors of school, lecture and even bedrooms were forced open by some violent young men calling themselves deputies of the barrack-master and some hundreds of soldiers quartered in the College at one time." But apparently this protest had no effect. Not only material difficulties but the general excitement and confusion was telling on the regular

work of the institution. The medical course fell into disuse after 1773 or 1774. On the 21st of January, 1777, it is announced that there are only about twenty-five scholars in the Latin School and as many in the English School. During the early months of 1777 the attendance of the Trustees at the meetings ran down to five or six, and from the 25th of June, 1777, to the 25th of September, 1778, there were no regular meetings at all nor were any minutes taken, nor indeed was there any attempt by the Professors to give instruction. On the 30th of June, 1777, the continuation of

the work of the College was acknowledged to be hopeless, and it was closed.

The Revolution terminated an epoch in the history of the University of Pennsylvania. At no subsequent time until within the last two decades, if then, has the institution played relatively such an important part; at no time has it exerted such an influence on the community in which it has been placed as it did during the greater part of the administration of Dr. Smith, the period from the acquisition of its second charter in 1755 to its closing on account of the confusions of the Revolution in 1777.

CHAPTER III

THE INFLUENCE OF THE REVOLUTION ON THE COLLEGE — THE DIVIDED INSTITUTION — 1777-1791

WITH the outbreak of the Revolution all the six higher institutions of learning in America alike passed under a cloud, and the group of depressing influences was practically the same for all of them. Invasion of their buildings, depreciation of value of their property, diversion of the interests of students and parents of students to other matters, differences of political principles among their administrative officials, the passing away of an old group of patrons, and delay in the appearance of a new, — all these difficulties served to make the decade following 1776 a period of either suspended animation or of but slowly renewed life and readjustment to new conditions.

The closing of the College and Medical School at Philadelphia and of the two lower institutions connected with the former, in June 1777, was due directly to the interference of the newly recruited troops with the free use of the buildings and the attendance of the students, but the interest of all concerned had already begun to flag, and the near approach of the usual summer vacation would soon have scattered students and Faculty even if they had not been dispersed a month earlier. Before the time when an attempt might have been made to gather the classes again for the open-

ing of the fall term the British were threatening the city, and on the 26th of September, 1777, it was occupied by them and remained in their possession till June 18, 1778. During this period no attempt was made to carry on the courses. The Provost retired to his country home on the Schuylkill not far above Philadelphia, and most of the other Professors and Trustees left the city. Professor Kinnersley had recently resigned, and Vice-Provost Alison died in 1779, so that the numbers of the Faculty were unusually depleted, apart from their dispersion. No meetings of the Board of Trustees were held, as has been said, between June 28, 1777, and September 25, 1778; though Thomas Willing, one of their number who succeeded in keeping on tolerable terms with both sides in the struggle, and who remained in Philadelphia, gave some attention to the affairs of the corporation. When the British troops evacuated the city and Congress returned there, the deserted College Hall proved to be the only place fit to meet in and for several days in July that body made it its home while the State House was being cleansed and made habitable again. At the close of the year 1778, after a year and a half's absence, the Provost returned to the city, and the work of re-organizing the institution was immediately

taken up, the opening being announced for January 1779. Some success was obtained in putting the property and investments of the College in order, in securing tutors, and in collecting pupils, new and old. By the early months of 1779 there were twenty-two students in the philosophical classes, making up the College, eighty-one in the language and mathematical schools, making up the Academy, sixty in the Medical courses, forty-one boys and sixteen girls in the Charity Schools, making a total of two hundred and twenty in the whole institution. Seven students were examined for the degree of Bachelor of Arts and one for Bachelor of Medicine, and in June six former graduates were recommended for the degree of Master of Arts.

But now another danger which had long been threatening became real and brought this work of reorganization, at least as carried on by the old Board of Trustees, to an abrupt close. This was the antagonism of the radical party, now in control of the state government, to the existing management of the institution. The College had always been especially supported by the aristocratic element of the province. The Board of Trustees was made up originally, and by the process of filling their own vacancies as they occurred had continued to be made up of the men highest in position and birth in Philadelphia. Then when Thomas Penn had taken the College under his special patronage, granted it his charters of incorporation, making to it liberal gifts of money, equipment and land, the connection with the Proprietary party in Philadelphia and in England necessarily separated it still more from popular interest. The oaths of allegiance to the King required to be taken according to the charter of 1755 were no more than every public official in Pennsylvania had to take, but to private men they seemed to make it to a certain extent an institution under royal control. The Provost's financial mission to England was a success from the point of view of securing money contributions, but it cost its price in the alienation of local support. Franklin had declared that there was no propriety nor necessity in the College asking assistance from abroad had it not come to be looked

upon as being in the hands of the Proprietary party, and the patronage from England probably increased such of this feeling as already existed. As Dr. Smith's influence in the institution and participation in the discussion of public questions both became more active, the College came to share in popular estimation the political position which he held. As a result of all these influences the College was looked upon as holding a distinct position on the anti-popular side in the agitations that were now beginning. The heat and virulence of party contest in colonial Pennsylvania were far greater than anything now in existence in this country, and it was nearly impossible for an active public man to avoid entering into party conflict.

Long before this time the identification of a Provost of such decided and outspoken views with the College, which every one agreed should as an institution occupy a non-partisan position, had been recognized as a serious matter. As early as 1756 insinuations began to appear in one of the Philadelphia newspapers that Provost Smith was using his position in the College to influence the minds of his students in favor of his own political and religious views, which to many of the inhabitants of Pennsylvania seemed opposed to the liberties of the Province and to free government anywhere. In July of that year the Trustees took the matter up on the ground that such reports and charges might affect the reputation of the College injuriously, and appointed an investigating committee, who inquired seriously into the question. The students of the Senior class, voluntarily or by request, interested themselves, and the four of them who were in town at the time sent a memorial to the Trustees stating that Dr. Smith had never introduced into his lectures anything relating to existing politics, nor tried to persuade them to adopt one side more than another, nor in his course in Ethics and Government had introduced any principles other than those usually accepted by the standard authorities. As proof of this latter statement they submitted their books of notes on the lectures he had given them. The committee reported that in the first place it was im-

possible by the organization of the College and Academy for any one Professor in the institution "to carry on any separate or party scheme, or teach any principles injurious to piety, virtue and good government," without the collusion of the whole body of teachers and Trustees, which was not charged or suspected. Secondly, that Dr. Smith had thoroughly commended himself by his abilities and efforts to all those who had been brought directly into contact with the institution; and thirdly, that a number of the students most worthy of credit had declared the falsity of the charge. They state therefore that they "are of the opinion that he has discharged his trust as a capable Professor and an honest man, and that he has given sufficient evidence of the goodness of his principles." This report was accepted by the Trustees and published in the newspaper in which the charges had originally appeared.

Nevertheless the outbreak of the Revolution twenty years later, found a fixed popular belief that the College as it was then administered was one of those Colonial institutions which were entirely antagonistic to the new liberty and independence.

The danger of interference with the independence of the corporation by the party which then came into power was recognized. Dr. Smith accordingly in the summer of 1776 gathered at his house a few gentlemen connected with corporate bodies in Philadelphia, especially clergymen, and proposed that they should endeavor to have inserted in the new state constitution which was then being framed an article securing the inviolability of chartered rights. An article to that effect was drawn up, approved, and by the influence of Franklin, included in the constitution. It read as follows: "All religious societies or bodies of men heretofore united or incorporated for the advancement of religion and learning and other pious and charitable purposes, shall be encouraged and protected in the enjoyment of the privileges, immunities and estates which they were accustomed to enjoy or could of right have enjoyed under the laws and former constitution of this State." As the division of parties became more pronounced the individuals most prominent in their connection with

the College did not act in such a way as to dispel the belief in its ultra-conservatism. Dr. Smith was no Tory, it is true, and, in his funeral sermon for General Montgomery, preached before Congress in Philadelphia, in February 1776, he gave his thorough approval to armed resistance. Yet all his feelings, associations and training made the idea of actual separation from the mother country repugnant to him. In March 1776, he printed a small pamphlet containing essays signed "Cato," pointing out the impolicy of a separation. Some of his relatives by marriage also were distinct Loyalists. But apparently after the Declaration of Independence had once been made, he refrained from all opposition, took the oath of allegiance, and then withdrew from political matters. Still, such lukewarmness was in itself suspicious, and on the 31st of August, 1777, his name was included among those of forty-one persons who were, on the approach of the British, ordered by the Supreme Executive Council of Pennsylvania to be either imprisoned or placed under parole. He seems to have chosen the latter alternative, and while not actively opposing the Revolution, certainly did nothing to conciliate its supporters in Pennsylvania. Neither of the two other Professors in the College took any position toward current events which connected them prominently with one side or the other, though they did leave Philadelphia when the British army entered it. Four Medical Professors, on the other hand, served in the highest positions as medical officers on the American side. Of the Trustees, several were out and out Tories, and when the British withdrew from the city in 1778, left with them. Moreover the six Trustees who had been elected to fill vacancies occurring between 1776 and 1779, although adherents of the American cause, belonged to the conservative element, no representation at all having been given to the radical and Presbyterian party who were now in control of the state government. The feeling, therefore, that the authorities who set themselves to the re-organization of the College at the close of the year 1778 were not in hearty accord with the new order of things, was certainly a natural one, and partially at least justified.

Again, there existed among the more popular party an ideal of an institution for higher learning under the direct control of the State government. In the State Constitution of 1776, it has been provided in the forty-fourth section of Chapter II., that "All useful learning shall be duly encouraged and promoted in one or more Universities." There were therefore two factors in the situation, first, a distrust and dislike on the part of the dominant party of the existing management of the College, and second, a desire on the part of the same majority to have a College or University closely connected with and representative of the new system of popular government.

The Legislature had already during the year 1778 shown its antagonism to the College as it was then administered. A law was introduced into the Assembly at Lancaster, December 29, 1777, and passed on January 2, 1778, while the British Army was occupying Philadelphia, suspending temporarily the functions of the Trustees. It

was evidently inspired by the fear that the Tory element, possibly including the Provost, might obtain a majority and take some action unfavorable to the patriot cause. The preamble was as follows: "Whereas some of the Trustees of the College and Academy of Philadelphia are now with the British army under General Howe, and in open hostility against the United States of America, and some others of them have voluntarily put themselves in the power and under the dominion of the said General Howe and the enemies of the said States by remaining in the

City of Philadelphia at the time they entered the same, and still continue there, whilst some other of the said Trustees together with the Vice-Provost and Professors and other officers of the said College and Academy, preferring the government and protection of this Commonwealth and in order that they might contribute as far as in their power to the defence of their just rights and liberties and the maintenance of the freedom and independence of these States, removed themselves out of the said city and still so continue. And whereas it would be unpolitic and unjust to suffer any act of the said Trustees in such a situation to have any force or effect"; it was therefore ordered that no resolve, vote, order, or act of the Trustees, or of any quorum of them passed since the preceding Sept. 1st, and until three months after the British should have been expelled from or should have evacuated the City, should be valid. It was also ordered that the salaries of the Vice-Provost, the Professors and the Tutors



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who had left the city should be ultimately paid by the Trustees as if they had fulfilled the duties of their positions during the whole period of suspension.

Again, three months later, in the law of April 1778, directed to the enforcement of the requirement that all male white inhabitants should take the oath of allegiance to the State of Pennsylvania; "all Trustees, Provosts, Rectors, Professors, Masters, and Tutors of any College or Academy" were, with a quite unnecessary universality, placed in the fore-front of a list of persons of various professions who

were disabled for the future from occupying any professional position unless they should take the oath of allegiance before June 1, 1778.

The first real intention, however, to reconstruct the College expressed itself in the following resolution passed by the State Assembly on the 23rd of February, 1779.

"Ordered that Mr. Clymer, Mr. Mark Bird, Mr. Hoge, Mr. Gardner and Mr. Knox, be a committee to inquire into the present state of the College and Academy of Philadelphia, its rise, funds, etc., and report thereon to the House, and that they be empowered to call upon persons and for papers for that purpose." On learning of this action the Board of Trustees appointed a Committee to prepare in conjunction with the Provost a memorial answering the inquiries which the committee would presumably make. This paper, which was carefully and skilfully drawn up, gives an account of the foundation of the College, describes its organization, mentions some of the more salient points of its history, and enumerates the students in its various schools at the time. As to its financial condition the report is less clear and less complacent. The funds had suffered recently by the paying off of mortgages in the depreciated currency, and in other ways, but there had just been made some liberal subscriptions for a term of years. Some of the current criticisms of the administration of the College were anticipated and answered. On the 6th of March, 1779, there was a joint meeting of the representatives of the Trustees and of the Assembly and on the 16th a second at which this statement was presented and discussed. Three weeks later on the fifth of April the Committee made a report in writing which was read and laid on the table. Nothing further was done, however, as the Legislature soon adjourned. In the meantime the matter seems to have been brought up in the Supreme Executive Council of the State, and as the 5th of July, the time appointed for Commencement, approached the President of the Council informed some of the Trustees that doubts existed as to the legal qualifications of the Board, and advised that no Commencement should be held at that time. In deference to

this request the Trustees of the College postponed Commencement, but protested against a continuance of opposition without a judicial investigation of the question of their chartered rights.

Nothing was done in the summer, but on the 9th of September President Reed of the Supreme Council of the state in his message to the new Assembly, spoke as follows in reference to the College: "The principal institution of learning in this State, founded on the most free and catholic principles, raised and cherished by the hand of public bounty, appears by its charter to have allied itself so closely to the Government of Great Britain by making the allegiance of its governors to that state pre-requisite to any official act, that it might well have been presumed that they would have sought the aid of government for an establishment consistent with the Revolution and conformable to the great changes of policy and government. But whatever may have been the motives, we cannot think the good people of this State can or ought to rest satisfied, or the protection of government be extended to an institution framed with such manifest attachment to the British Government and conducted with a general inattention to the authority of the State. How far there has been any deviation from the liberal ground of its first establishment, and a preeminence given to some societies in prejudice to others equally meritorious, the former inquiries of your Honourable House will enable you to determine." The matter was immediately referred by the Assembly to a new committee of five members, who visited the College on a tour of enquiry September 18, and presented September 24, two weeks after their appointment, a divided report. The minority, consisting of two men, reported that no evidence had been presented to show that the College should be interfered with, but that on the contrary a great deal had been brought out to its credit. The other three members of the Committee, however, forming the majority, brought in a strongly adverse report, stating that the charter required that the Trustees should take an oath of allegiance to the King of Great Britain, that some of them had joined the British Army and stood

attainted as traitors, that the corporation of the College had shown in its general management an evident hostility to the existing government and constitution of Pennsylvania, and in certain particulars even to the common cause; that the funds were entirely inadequate, and it would require therefore further support to give it the utility and respect a seminary of learning ought to have; that by the disqualifying law of June 1778, some of the officials had become disfranchised, and finally that the original plan of equal privileges to all religious denominations had not been fully adhered to. The Committee therefore recommended that a bill should be brought in "effectually to provide suitable funds for the said College, to secure to every denomination of Christians equal privileges, and establish the said College on a liberal foundation in which the interests of American liberty and independence will be advanced and promoted and obedience and respect to the Constitution of the State preserved."

Such a bill as the one proposed, notwithstanding the euphemistic form in which its objects were stated, was understood to amount to an entire remodelling of the College and was therefore antagonized by all its old friends. When the report was read for a second time, on the 25th of September, George Clymer, who was both a member of the Legislature and a recently elected Trustee of the College, asked for and received a copy of the report for the purpose of laying it before the latter body. Provost Smith sent in a petition to the same effect, asking that all persons interested in the charter rights of the institution be given an opportunity of being heard respecting the matters alleged in the report, before any further proceedings were taken on it. In compliance with this request and in consideration of the general interest in the matter, the succeeding Wednesday was appointed by the Assembly as a time when all persons interested might appear before the Legislature and be heard by themselves or by two counsel. The Attorney-General was ordered to attend at the same time to manage the argument of the state in the matter, obtaining legal assistance if he wished; and the Judges of the Supreme

Court were also asked to be present to give decisions on legal points that might arise. On the appointed day arguments were begun, and continued during that and the succeeding two days. Certainly there was no lack of interest or attention given to the subject. Nevertheless on the second of October a resolution was carried "that a committee be appointed to bring in a bill to confirm the estates and interests of the College and Academy of Philadelphia, and to alter and amend the charters of the said institution, so as to make them conformable to the Revolution and the Government of this State." The friends of the existing administration of the College tried their best to stem the tide, but their amendment, that the opinion of the judges be taken before the motion was put, was defeated by a majority of thirty-one to eighteen; and that the evidence on which the committee had made its adverse report should be laid before the house, by thirty-three to sixteen. A committee of five was then appointed to bring in a bill to reorganize the College as proposed. The minority entered a protest on the grounds that proceedings had been hurried through without regard to accustomed form, because the opinion of the judges had not been asked on the legal questions involved, because the House itself had not heard the evidence which had been submitted to its committee, because the corporation had been deprived of a jury trial, and finally because the animus of the whole action was a dislike by the majority of the political opinions of certain other men who, although they differed with them on minor points, had nevertheless given zealous service to the general American cause. After all the excitement, however, the Legislature adjourned without passing any Act on the subject, though they commended it to the early attention of their successors.

As a matter of fact no time was lost by the next Assembly, and on November 3, the second day of its session, a committee was appointed to bring in a bill on the same lines as that previously ordered. A week later this draft was read, and discussed at several successive meetings. All papers in the hands of the Trustees were called for, and brought by Dr. Smith to the door of the Assembly, where he was

allowed to deliver them and then to retire. On the 22nd of November, again, Dr. Smith, acting as Secretary for the Board of Trustees, appeared with a memorial from the Board asking to be heard before the bill was passed, and on the next day presented a similar paper begging to be allowed to present his personal interests in the matter. Both of these requests were refused by the Assembly. Finally on Saturday, November 27, 1779, the bill remodeling the College, superseding its old Trustees, dissolving its existing Faculty, and changing its name to the "University of the State of Pennsylvania," was enacted into a law.

The Trustees of the College had met on November 22 to draw up the memorial already referred to. The law passed on the 27th removed them from office, and they did not meet again till ten years afterward, when the Legislature again restored them to their functions. The investigating committee's report had included three principal grounds of complaint against the College in its old form, first, that the close connection with the British Government during colonial times had been followed by only a partial adherence to the new object of loyalty which the Revolution had introduced, the State Government of Pennsylvania; secondly, that its funds without state support were entirely inadequate; and thirdly that its original plan of equal privileges to all religious denominations had been deviated from. The first charge was that which had been brought into greatest prominence in the Governor's message. For some reason, however, the last point was the one on which the greatest stress was laid in the preamble to the Act as it was passed. Yet, curiously enough, it would seem to have been the point in which the College was least vulnerable.

The undenominational character of the institution had not been referred to in words in the "Proposals" and "Constitutions" of 1749. It is probable, however, that it had been taken for granted, since no particular religious body was interested in its inception or especially represented among the first group of Trustees. Moreover when it was reported at one of the earliest meetings of the Board, February 6, 1750, that there was some popular objection

to a clause in the regulations which required all students before being admitted to have the written consent of the majority of the Trustees, it was explained that this provision was only intended to prevent more scholars being admitted than the teaching force and equipment would admit of, and that all applicants would be admitted according to priority of application, "without any view to sect or party." The same expression, "without regard to sect or party," is used in the appeal to City Council in 1750. But when the Charity School Trust was combined with that of the Academy the nonsectarian character of the institution was thrown into greater prominence and became a fundamental characteristic, required by the very terms of its existence; for that project had been bound up with the undenominational movement to build the hall for Whitefield's preaching. A form of prayers was prepared by Rev. Mr. Peters for the use of students of the Academy and College at their homes and before and after the day's studies, but it contains no extracts from the prayer-book and no mark of church influence. When Dr. Smith became Provost his prominence as well as that of Dr. Peters, who succeeded Franklin as President of the Board of Trustees, and the churchmanship of some other members of the Board made a certain Episcopalian connection, but none of the members of the Faculty except the Provost were churchmen, and no changes were introduced or other action taken in favor of that body. Indeed as against any Episcopalian predominance is to be set the charge of Presbyterianism contained in a pamphlet called "A Looking-glass for Presbyterians," published in 1764. It declares that "the College in this city planned upon the principles of moderation and liberty and intended for the use and benefit of every denomination, is now got into the hands of a Presbyterian faction and the Professors and Tutors being generally chosen of that persuasion, lord it with such a high hand over other professors," etc. As a matter of fact, there is no discoverable denominationalism in the history of the College before the Revolution.

In 1764, the breadth of the religious foundation of the College was put down in categorical

form and given the greatest possible solemnity of statement. The occasion was as follows: When Dr. Smith was about to start for America after his collecting tour in Great Britain some of the most prominent benefactors of the College saw fit to send by him a letter urging the Trustees to adopt a fundamental rule of religious toleration. Just why they should have laid such stress on the adoption of a policy which the Trustees had always adhered to, and had not the least intention to depart from, does not appear. It may have been the direct result of Franklin's hostile statements. It is not impossible that it was a device planned by Dr. Smith to offset the influence of Franklin's criticisms of the College as being in the hands of the Proprietary party. However, the English patrons, after congratulating the Trustees upon the success of the collection, proceeded to advise them as follows:

"At the time of granting this collection, which was solicited by the Provost, who is a clergyman of the Church of England, it was known that there was united with him a Vice-Provost who is a Presbyterian, and a principal Professor of the Baptist persuasion, with sundry inferior Professors and Tutors, all carrying on the education of youth with great harmony; and people of various denominations have hereupon contributed liberally and freely.

"But jealousies now arising lest this foundation should afterward be narrowed and some party endeavor to exclude the rest, or put them on a worse footing than they have been from the beginning, or were at the time of this collection, which might not only be deemed unjust in itself, but might likewise be productive of contentions unfriendly to Learning and hurtful to Religion; we would therefore recommend it to you to make some fundamental rule or declaration to prevent inconveniences of this kind; in doing of which, the more closely you keep in view the plan on which the seminary was at the time of obtaining the Royal Brief, and on which it has been carried on from the beginning, so much the less cause we think you will give for any party to be dissatisfied."

This letter was signed, with expression of good will, by the Archbishop of Canter-

bury, Thomas and Richard Penn, and Samuel Chandler, a prominent dissenting clergyman. In response to this suggestion the Trustees readily adopted on the 14th of June, 1764, the following declaration, which was placed upon their minute-book and signed by all the Trustees living at that time, and by each one elected subsequently, down to 1790.

"The Trustees being ever desirous to promote the peace and prosperity of this Seminary, and to give satisfaction to all its worthy benefactors, have taken the above letter into their serious consideration and perfectly approving the sentiments therein contained, do order the same to be inserted in their books, that it may remain perpetually *declaratory* of the present *wide* and excellent plan of this Institution, which hath not only met with the approbation of the great and worthy personages above mentioned, but even the Royal Sanction of his Majesty himself. They further *declare* that they will keep this plan closely in their view and use their *utmost endeavors* that the same *be not narrowed*, nor the members of the Church of England or those dissenting from them in any future election to the principal offices mentioned in the aforesaid letter be put *on any worse footing* in this Seminary than they were at the time of obtaining the Royal Brief. They subscribe this with their names and ordain that the same be read and subscribed by every new Trustee that shall hereafter be elected before he takes his seat at the Board."

This was a well known statement of principles and is frequently alluded to in contemporary descriptions of the College and in its own announcements.

After the adoption of the clause of 1764, Dr. Chandler wrote to the Trustees: "The fundamental declaration you have entered in your books will be a monument of honor to your principles and conduct, I trust in God, till time shall be no more."

Yet the Act of 1779 contains the following article:

"*And whereas* the college, academy, and charitable school of the city of Philadelphia, were at first founded on a plan of free and unlimited catholicism; but it appears that the

trustees thereof, by a vote or by-law of their board, bearing date the fourteenth day of June in the year of our Lord one thousand seven hundred and sixty-four, have departed from the plan of the original founders, and narrowed the foundation of said institution." Long afterward the party opposed to the College explained this by saying that the declaration of 1764 narrowed the original foundation by requiring that the Provost should always be an Episcopalian, and the Vice-Provost a dissenter from that church, as they were at that time.

Whether the committee which drew up the bill had misunderstood the entry on the minute book to which they referred, or had chosen to make this captious and absurd interpretation of it, or had deliberately misrepresented it, their statement is certainly directly opposed to the fact. It is possible, however, that in later colonial times the Episcopalian influence, so nearly identical with the conservative influence, grew somewhat, and certainly the Western Scotch-Irish, Presbyterian element, was but poorly represented among the Trustees.

However, the forcible re-organization of the College in 1779, was in the main an episode of the party struggle between the radicals and conservatives of our early state period. The real reason for the removal of the old Trustees was without any manner of doubt the political dislike and distrust felt by the radical party for the conservatives, and their desire to obtain the control of the institution for their own party. The exact grounds on which the change was made are therefore relatively unimportant.

The law, passed November 27, 1779, was described as "An Act to confirm the estates and interests of the College, Academy and Charitable school of the City of Philadelphia, and to amend and alter the Charters thereof, conformably to the Revolution and to the Constitution and Government of this Commonwealth, and to erect the same into a University."

It confirmed to the institution the earlier charters, with the rights, powers and property which they conveyed, excepting such additions as flowed from the alleged narrowing of the foundation by the resolutions of June 14, 1764. It provided that in addition to its old property it

should be endowed with a grant of estates confiscated from royalists, up to a maximum value of £1500 a year. Thus having provided for the perpetuation and support of the institution as a corporation, the law proceeded to dissolve the existing Board of Trustees and Faculty, and to put in place of the former a new Board made up of twenty-five persons enumerated in the law, who should have the superintendence and trust of all the powers, property and authority of the former Board. These new Trustees were of three classes: first, the highest state officials, viz., the President and Vice-President of the Supreme Executive Council of the State, the Speaker of the Assembly, the Chief-Justice of the Supreme Court, the Judge of Admiralty, and the Attorney-General, — all these *ex-officio*; secondly, the oldest ministers respectively of the Episcopal, the Presbyterian, the Baptist, the Lutheran, the German Calvinist and the Roman Catholic churches in the City of Philadelphia, — these also *ex-officio*; and lastly certain persons named in the statute, viz., Benjamin Franklin, William Shippen, Frederick A. Muhlenberg and James Searles, the last three being at the time delegates from Pennsylvania to Congress, William Atlee, John Evans, Timothy Matlack, David Rittenhouse, Jonathan Bayard Smith, Samuel Morris, George Bryan, Thomas Bond and James Hutchinson, several of these being prominent members of the radical party, and at that time holding various offices, but not being appointed *ex-officio*. The choice of the new Trustees was evidently with two objects, first to connect the institution closely with the state government, and secondly, to obtain the catholicity of control which it was declared the former Board had failed to preserve. The first object was still further sought for by giving the Legislature the right of disapproval of any newly elected Trustee, within a period of six months, by requiring all officials and teachers of the institution to take the same oaths as state officers, and by requiring the Trustees to submit their accounts from time to time to the inspection of representatives of the State Legislature. Finally the corporate title was changed to "The Trustees of the University of the State of Pennsylvania," and the Faculty was to be known as

the Provost, Vice-Provost and Professors of the University of the State of Pennsylvania.

This law has often been described as an Act abrogating the old charters, destroying the old institution, or bringing to a close the history of the College of Philadelphia. This is quite a mistake: the charters of 1753 and 1755 were, except in a few points, expressly re-enacted and confirmed, the life of the institution as a corporation was intended to be preserved, not destroyed.

Those who carried the law of 1779 would have described themselves in the words afterwards applied to their action, as "taking the institution under the care and protection of the State," or as "giving to the institution new guardians," "re-establishing it on its original broad bottom," "providing it with new funds," "bestowing on it a new name and new honors." The old Trustees themselves describe the law only as "disfranchising your memorialists, and depriving them of their trusts, immunities, and estates in the said corporation, changing the whole mode of its government and succession, and appointing other persons in their stead." It was in reality a change of personnel, of name, and to a considerable extent of ideals, but there was no breach of continuity in the institution as a legal and educational body. At most there was a divided institution, one part, the University, possessing the property, administering the trusts, and continuing the instruction in the various schools in the old buildings; the other, Provost Smith and the group of old Trustees of the College claiming to be illegally and temporarily prevented from carrying on their work. The line of descent was not, however, broken for ten years, to be restored in 1789, when Dr. Smith and the surviving Trustees were again put in charge of the administration of their old property and trusts, but came continuously down through the University of the State of Pennsylvania which drew its powers from the same charters, and administered the same trusts as the College had done, except that it had been quite profoundly modified, or was intended to be, by legislation.

Still, as far as personal administration was concerned, one group of men passed out of control, and another group entered upon it. The

old "College, Academy and Charitable School" of Philadelphia was superseded as to its Trustees and nominally as to its Faculties, at the same time that it was legally continued in its property, powers, rights and duties, by the new "University of the State of Pennsylvania." In accordance with the directions of the statute eighteen of the twenty-five persons named in it met in the old College Hall on the 1st of December, 1779, three days after the passage of the Act, and proceeded to organize themselves by taking the various oaths prescribed for the state officials, and a special oath for the faithful discharge of their duties as Trustees, and by electing General Reed, President of the State Executive Council, President of the Board. They were an unusually able group of men. Thos. McLean, Thos. Hopkinson, Jonathan Dickinson Sergeant, Jonathan Bayard Smith, Frederick Augustus Muhlenberg and David Rittenhouse were only the most prominent of the group. They took up their work with considerable vigor and interest. Frequent meetings were held and well attended. Committees were appointed to take over the property from the former officials of the College, and to ask certain of the teachers to proceed in their work of instruction until further arrangements should be made. The two old charters were read at their second meeting, held in the State House, and Committees were appointed to go over the minutes and by-laws of the former Board of Trustees for the purpose of making a revised body of statutes and regulations, to seek teachers, to settle questions of salaries and tuition fees, to re-organize the Medical School, etc. There seems to have been no general opposition on the part of the old officials to handing over the property in their hands, but some difficulty was found in getting from Dr. Smith possession of the seals, and of the dwelling-house he had occupied as a sort of official residence on Fourth Street, and also of some philosophical apparatus which remained in his hands. In fact he refused to deliver up the keys of his house for almost a year, and until a representative of the new Board had summoned him before a magistrate and threatened him with imprisonment if he refused longer. Dr. Smith seems to have

taken some comfort in comparing his position with that of Dr. Hough of Magdalen College, Oxford, in 1688.

Within a short space of time, however, practically all the old buildings, property and records were in the possession of the new Trustees. Then they took up the question of completing the organization of the Faculty. The Provostship, whether for the possible ultimate re-election of Dr. Smith, or for some other reason, was left temporarily vacant, but they proceeded to elect from among a number of nominees Dr. John Ewing to be Professor of Natural and Experimental Philosophy and Vice-Provost, David Rittenhouse to be Professor of Astronomy, James Davidson, Rector of the Academy, Rev. Robert Davidson, Professor of the Greek and Latin classics, James Cannon Master of the English and Mathematical Schools with the rank of Professor, and some five or six tutors in the various schools. In fact all the old teachers, with the exception of Dr. Alison, who had just died, and of Provost Smith, were re-elected under the new management, although with some changes

of position. Dr. Ewing declined the Vice-Provostship, and after some delay he was by a small majority elected Provost, and Professor Rittenhouse unanimously chosen Vice-Provost. Dr. Ewing had long before fulfilled the duties of the same position while Dr. Smith had been absent in England, so that he seemed the logical candidate. An innovation was made by appointing a German Professor of Philology, whose duty it should be to instruct boys in Greek and Latin through the medium of German. This was an evident attempt to conciliate the German element in the state, most of whom lived outside of Philadelphia. Rev. John

Christopher Kunze, Minister of the German Lutheran Congregation in Philadelphia, was elected to this position. Thus by the fall of 1780 a group of fourteen teachers had been gathered together, exclusive of the Medical Professors. In December 1779, they had found some fifteen boys in the College classes, one hundred and forty-one in the Academic schools and fifty-four in the charity schools. Three years afterward there were three hundred and twenty-seven students in the schools, some thirty-eight being in the classes which constituted the College proper, about fifty each in the Latin, English, German and Mathematical schools, and almost ninety in the charity schools. The numbers remained about the same for some years.

The committee appointed in December 1779, to re-organize the Medical School seems to have found its task very difficult, and the Board itself when it took up the work made slow progress. Dr. Shippen accepted at once the invitation to retain his old position, but partly from personal jealousies, partly from other causes, the other Medical Professors declined re-election. Even Dr. Ship-



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pen was slow to begin. In November 1780, a petition was presented to the Board by a number of the medical students complaining of the lack of anatomical lectures and asking that the course in that subject should be resumed. The President of the Board thereupon wrote to Dr. Shippen trying to obtain from him a definite agreement as to when he would begin his work. Several others to whom the various chairs were offered declined, and instruction was only given by temporary and irregular expedients until 1783, when the old Professors finally accepted their re-election and more regular courses were given. In the news-

papers of September 1784, there is an advertisement that "The Lectures upon Anatomy, Chemistry, Materia Medica and Practice of Physics will begin in this city on Monday, November 1." There were from four to ten graduates either as Bachelors or Doctors of Medicine, each year, and a much larger number attending such courses as were given.

It was during this period, in 1784, that a graceful evidence of good feeling was given by the French Government in the form of a present of books to the University. This occurrence was described at the time by Francis Hopkinson as follows: "His most Christian Majesty, willing to promote a literary as well as a political connection with the United States, hath been pleased to present to the University of Pennsylvania, a valuable and elegant collection of books in philosophy, history, arts, etc., by the most eminent French authors and of the most approved editions, amounting to more than one hundred volumes. These have been respectfully received by the Board of Trustees and are now lodged in the Library of the University where it is hoped they will answer his Majesty's good intention by increasing the avenues to knowledge, and encouraging the study of the French language in America."

The new relation of the University as a state institution was kept prominent for a while by action from both directions. The Trustees submitted the names of new members of the Board to the Legislature for their approval and reported other action from time to time. February 1784, the Assembly appointed a large committee of visitors "for the purpose of examining the books, accounts, and economy of the said University and to report their proceedings."

The Trustees and Faculty appeared as a body in all formal state functions, such as inauguration of the Chief Executive and processions at the opening of the Assembly. Above all, however, the Trustees kept the Legislature aware of its responsibilities by frequent appeals for pecuniary help.

The greatest difficulty the new administration had to meet was as usual this financial one. The provision made by the Legislature seemed liberal, but the lands granted to the University were not promptly conveyed and could not always be made available. By the close of the year 1781, two years after the new foundation, the authorities of the University complained that only £600 worth of land had been reserved to them, out of the £1500 worth promised. Two years after that we still find the Executive Council submitting to the Legislature in February 1784 a list of forty additional estates for approval as part of the endowment to be given to the University, and even this did not complete the full allowance. The form of the grants was extremely cumbrous and unsatisfactory. Lands were from time to time confiscated

by the state as Tory landowners were attainted of treason. These lands were sold by the government for cash, but in addition to the price paid, a ground rent was required to be paid forever by the purchasers, and it was this rent which was usually granted to the University. The ground rent was almost invariably payable in wheat or in its value and was no doubt in most cases the quit rent which had been previously paid to the Proprietaries. These quit rents had been commuted in a lump sum by the state to the Penn family, and there seemed a certain suitability in handing them



DAVID RITTENHOUSE

From original painting at American Philosophical Society

over now to a corporation as their successors. An example of the form which these grants took may be found in the sale by the state government of one hundred acres of land in Blockley township, which had been confiscated from Joseph Galloway, for £25,000, subject to a yearly rent of twelve and a half bushels of merchantable wheat payable to the University of the State of Pennsylvania; or another tract of fifty-eight acres in Northern Liberties confiscated from the same Loyalist, with a reservation of thirty bushels of wheat to the University. So the University received "a ground rent of twenty-four and one-half bushels of wheat out of a house in the City of Philadelphia late the property of Joseph Henderson and purchased by Joseph Dean." Other payments were from lands in various counties of the state. Some of them were of absurdly small amounts; "ten and one-fifth bushels"; "three bushels"; "two bushels and nine-twentieth parts of a bushel;" "a rent charge of three bushels of wheat to be paid annually to the said Trustees out of about three acres of banked meadow on Hollanders creek in the township of Moyamensing."

In some cases the grants were of actual pieces of real estate, houses and lots, and even wharf property, including that at the north side of Arch Street, and one between Arch and Market, which if retained would eventually have become very valuable. September 22, 1785, all the scattered grants to the University were enumerated and vested absolutely in the Trustees by Act of the Legislature. They were in number as follows: fifty-seven rent-charges in wheat, sixteen ground rents in money, and twenty lots of real estate. But it was stated in the Act that these estates "do not when considered together amount to more than the yearly value of £1381, 5s, 7½d. computing wheat at ten shillings per bushel."

The property of the College had diminished sadly in value even before the removal of the old Trustees. The money collected in England and from other sources in its more prosperous period had been largely invested in mortgages on land. When the currency depreciated during the Revolution the owners of the property upon which these mortgages lay

took advantage of the opportunity to pay them off in money of the same amount nominally as that which had been loaned to them by the College, but really of only a fraction of its value. The total income of the College property became therefore extremely small. The annual subscriptions promised by individuals to the old management to fill up this void were probably not paid to the new, as repeated appeals for their continuance are recorded on the minutes.

The continued disorders of the currency were in themselves almost destructive to any institution having an income nominally fixed, but expenses necessarily variable. The salaries of the Professors had to be established at a high rate and afterwards doubled and then tripled, in order that they might live. In March 1780, the bill for a bell rope is £22 10s.; in March 1781, a lock and key costs £90, and in arranging for the payment of arrearages of some old rents, payable in wheat, they are settled at an estimate of the value of wheat of £10 per bushel. In 1781 the Trustees recur to the old device of a lottery to raise £750 specie, then they borrow £15,000 currency from the Legislature for a period of six months but are not able to pay it back; so that only eighteen months after the re-organization a committee has to be sent to confer with the General Assembly of the state on the embarrassed state of the funds of the University, and the difficulty the Trustees meet with in properly supporting the institution.

So much for some of the vicissitudes in the performance of the task which the Trustees of 1779 had taken up. The old Trustees, or at least the Provost, kept up with unwearied vigor the protest which they had made against being superseded, and having the property and franchises of the College taken out of their hands.

One of the most regular entries in the records of the Assembly for some years succeeding 1779 is a note of the presentation of a petition by Dr. Wm. Smith, asking consideration of his protest against his removal and that of the old authorities of the College. It appears in the session of 1780, is again presented on November 29, 1781, read a second time March 18, 1782, and referred to the committee on griev-

ances. Nothing was done at that session and in the autumn session the petition was again presented. It was again laid on the table, but December 5, 1783, Dr. Smith presented a new memorial praying that the House would take under their consideration the grievances complained of in his petitions to former Houses of Assembly. This again was referred, after a second reading, to a committee of grievances and on March 4, 1784, they reported against its further consideration until the same matter had been acted on by the Council of Censors. This revising body which had been provided for in the State Constitution of 1776 had met in November 1783, and within the first month of its session Dr. Smith had laid a memorial before them praying them to recommend a repeal of the law of 1779. Dr. Smith's appeal was accompanied by a memorial signed by ten of the old Trustees reciting the fact of their expulsion from the control of the College and asking the Council of Censors "to take the premises under their wise consideration and to do therein as justice and equity shall direct."

The Council of Censors as originally elected was a conservative body and if it had considered the matter of the College at that time would probably have taken action favorable to the old Trustees. But during its adjournment in the early summer of 1784 vacancies occurred which were filled by men of the radical party, and when the matter came up in August the same party as that which had carried the original law of divestment was in a majority. The form which the question took was a clause in the report of a committee charged with an inquiry into the constitutionality of recent legislation. The fourth paragraph of their report declared that the Act passed November 27, 1779, was "a deviation from the Constitution." During a prolonged discussion of the paragraph the memorials of Dr. Smith and of the Trustees were brought up and read. Finally, August 27, 1784, this paragraph in the report of the Committee was stricken out by a majority of thirteen to nine, thus giving a decision unfavorable to the old authorities of the College. A protest by the minority and a statement of the reasons for the action of the majority were both spread upon the minutes and as a

summing up of the controversy are worth a short analysis.

The majority contended that the corporation in 1779 had practically lost its vitality and was incapable of acting legally without being re-animating by legislative action. This they showed by pointing out that of the twenty-four Trustees named in the Charter of 1755 all were dead except seven; that as the charter provided that the presence of a quorum of thirteen was necessary for the election of a Provost or Professor, at least the same quorum must be necessary for the election of a Trustee, and yet that only one of the Trustees named since 1755 had been elected in a meeting of as many as thirteen, and therefore these later supposed Trustees had not been legally elected and could not act. There were only seven or at most eight competent Trustees, and the vital powers of the body corporate were therefore to a great extent extinct.

Even if this reasoning was not correct, they argued, the Board was equally depleted by the disloyalty of so large a proportion of its members. For of the twenty-one members at the close of 1778, three, Alexander Stedman, Andrew Allen and Jacob Duché Jr., were under attainder for treason, eleven others had neglected to take the oath of allegiance by June 1, 1778, as required by law, and were therefore disabled, and three others, Thomas Willing, Samuel Powell and Edward Shippen, had remained in the city during the British occupation and only taken their oath on the last day, May 30, 1778. There were therefore only seven members capable of executing their trust, and three of these were open to suspicion as to their loyalty. Moreover, in filling the vacancies in the Board created by the attainder of Messrs. Stedman, Allen and Duché, the Trustees do not mention that reason for their expulsion, but in the first case attribute the vacancy to the long absence from Pennsylvania of Mr. Stedman, and in the other two cases merely state the fact of the vacancy, thereby ignoring the action of the state government in their attainder, implying that that action was of no effect and that they had remained Trustees till the Board itself had vacated their places.

Then the majority reiterate the statement

that the Trustees were bound by their charter to take oaths of allegiance to the King of England, and that they had violated the religious liberty of the institution by their by-law of 1764 requiring that the Provost should always be a member of the Church of England, and the Vice-Provost a person dissenting from that church. Then, on general principles, the education of youth was of such vast importance that it was the duty of the Legislature to them, especially as being the class from whom future magistrates and all in authority and influence would be drawn, to see that they were early inspired with a love of their country and a respect and liking for its republican spirit and character. They say: "from these principles we conceive that it was the duty of the Legislature of the Commonwealth, as guardians of the rights of the people, — (and we have no doubt of their power), after so recent and great a revolution from monarchy, to take especial care of the education of the youth in the first seminary in the state, to place it under the direction of gentlemen, not only of education, but of known republican principles and of tried virtue, and by all means in their power to prevent the Commonwealth from receiving any detriment either from the influence of men hostile to equal liberty or inimical to the Revolution and independence of this state, or from any other cause. We doubt not that it appeared to the General Assembly in 1779, which passed the Act under consideration, as it doth to us, that the great majority of the late Trustees of the College of Philadelphia were not only hostile to our independency but abettors of the cause of the King of Great Britain, and totally disqualified for such a trust under our present government.

"To remedy all these defects, incapacities, forfeitures, and evils, legislative interposition became absolutely necessary. They accordingly reanimated the orphan seminary, gave it new guardians, secured its estates and interests, which were very near being lost, reestablished the institution on its original broad bottom, provided it with new funds, and bestowed on it a new name and additional honors."

As to the statement that the Legislature should not intermeddle with private estates

or interests or actions, that applied to individuals, but ought not to apply to corporations, which might then nullify the wishes of the whole community. Finally, although the Act of 1779 had been finally carried somewhat abruptly, yet in the previous stages of the investigation abundant opportunity had been given for all persons concerned to bring to the attention of the Legislature all facts of import to the case.

The reasons for dissent were as follows; first, that paragraph 45 of the Constitution had been inserted especially to guard the Charter of the College, which such action infringed; secondly, the statement as to the resolutions of 1764 narrowing the religious foundation was against the facts, and was "only a specious coloring to a scene of pre-determined injustice"; thirdly, the suggestion of a forfeiture on account of the deficiency of qualified Trustees was merely frivolous; and lastly that the new arrangements for higher education were in themselves bad, that the care of education was best left to private hands, and to place it in the control of officers of government and the ministers of religion made a dangerous alliance between the institution and the state and made possible the use of the University as an instrument for purposes of tyranny and oppression.

The adverse judgment of the Council of Censors was given August 27. On the 3rd of September, Dr. Smith renewed his appeal to the Assembly and on the 7th the memorial of the old Trustees was presented. The prospects there were distinctly better than in previous years, or in the Council of the same year. The membership had become more and more conservative until the old radical majority had disappeared; the Council of Censors had become extremely unpopular, and the fact that it had rejected a certain claim tended to make the Legislature more favorable to that claim. The "affair of the College" as it was called had come moreover into newspaper discussion and was being utilized as a basis of attack by the conservatives upon the radicals.

The matter was therefore brought immediately into consideration and the greater part of the time of the Legislature for the next three weeks given to successive reports of a committee on the petitions, discussions in

committee of the whole, listening for one day each to counsel for Dr. Smith, for the old Trustees of the College, and the new Trustees of the University, and to the final report of the committee of the whole on the 18th of September. This report was for the first time since the passage of the law of 1779 a favorable one. The committee reported that the corporation in question was one of those intended to be protected by the Constitution, that it had never forfeited its rights or franchises, and even if so it was amenable to the courts, not to the Legislature, and recommended that a bill be brought in to repeal so much of the Act as took away the property and rights of the Trustees of the College and to reinstate them in all their former rights and franchises. At the same time the committee proposed that the existing Trustees of the University should continue that institution on the basis of the property and charter rights which had been

recently granted to it, at least until the Assembly should order otherwise. A bill was thereupon brought in on these lines September 22, 1784, and passed its first reading by a vote of twenty-seven to twenty-four. The old College party were jubilant, but their hopes never came to fruition.

The radical minority had been becoming more and more desperate as one measure after another which they hated — concerning the test laws, the Proprietary estates, and now the College — seemed likely to pass, so when the

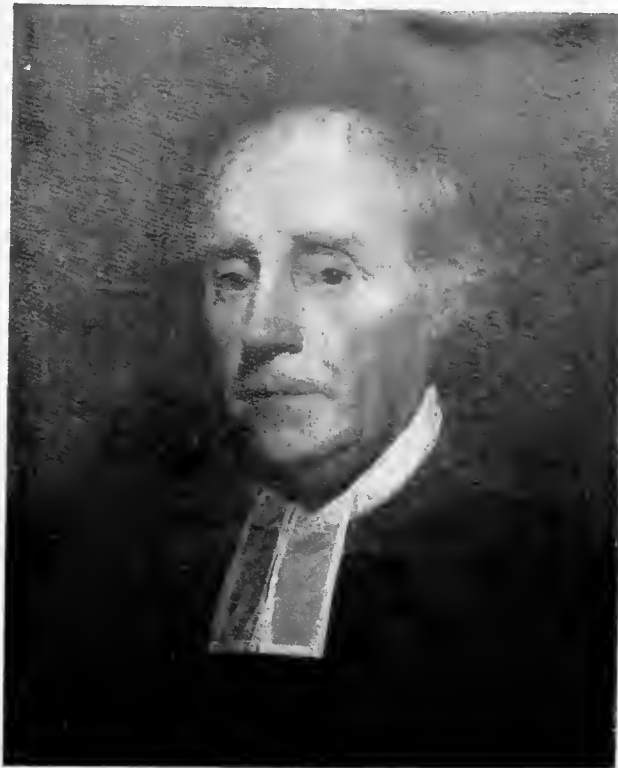
first of these subjects was called up for further consideration on September 28, by a preconcerted arrangement nineteen members rose and rushed tumultuously from the Hall. Nor did they return; no quorum could be obtained, and the period of the session expired without the doing of any further business.

The usual petitions do not seem to have been renewed for the next three or four years. Dr. Smith was living in Chestertown, Maryland,

where he was Rector of the parish and had been, since 1782, Principal of Washington College, an institution which grew out of a private school he had established there in 1780, and was created largely by his personal exertions. He was also much occupied with the movements which were then taking place toward the organization of the American Protestant Episcopal Church.

However, March 12, 1788, Dr. Smith's memorial was again presented to the Pennsylvania Legislature, but, although reported on

by a committee, nothing more was accomplished than a recommendation to the next General Assembly. At this meeting it was destined to reach its long delayed success. November 4, 1788, a committee of seven was appointed to report on the memorial, and a few weeks afterwards the old petition of the Trustees was also reintroduced. February 17, 1789, the Committee reported: "That they have duly considered the said memorial and the subject matter thereof, and are of opinion that the act which took away the charter of the College,



WILLIAM SMITH

From the painting by Gilbert Stuart

Academy and Free School of the City of Philadelphia was not founded upon any just cause of forfeiture of the said charter, but in direct violation of the Constitution of this State, and contrary to those principles of justice which ought ever to govern legislative acts." They recommended, therefore, as their predecessors had in 1784, that a bill be brought in to restore their charter to the old Trustees. The report was accepted and the recommendation ordered to be carried out by a vote of forty-six to eighteen, a majority so large as to indicate an entire revulsion of feeling in the matter and to give a good standard with which to measure the diminution of revolutionary animosities within the decade since 1779. Two days afterward the bill was brought in and finally passed on the 6th of March, 1789.

This Act left unmentioned most of the points of controversy, the single ground taken being the unconstitutionality of the former legislative action. Its form was that of a repeal of all parts of the law of 1779 which applied in any way to the College. Its result, therefore, was to restore to the living representatives of the old Board and of the old Faculty all the property which they had then been divested of, all their rights, trusts, duties, and privileges under the original charters, and in a word to reinstate them, nominally, in exactly the position they had held ten years before. At the same time nothing was done to deprive the Trustees of the University of the State of Pennsylvania of the estates which had been granted to them by the Legislature, of their corporate existence, or of the trusts and privileges which they also exercised under the charters of 1753 and 1755, and under the

act of 1779. The result was that legally there were now two institutions, or two branches of the same institution, each with its Board of Trustees and Faculty, both drawing their origin from the same original charters. One, the University, was continuous with the colonial institution in its corporate life and educational work, but had been much modified by legislative and personal changes; the other, the College, was continuous in personnel, in name, in estates, and in traditions, but had been probably even more deeply affected by ten years' intermission of its functions. The old pre-revolutionary College was now represented by two institutions. There remained two years and a half of this divided existence before the two parts were reunited.

Dr. Smith was naturally jubilant. He severed his connection as clergyman and College President with Maryland, and came back to Philadelphia to live. He had published in the newspapers and in a separate volume, in the early months of 1789, a long statement of the case of the College, and in anticipation of the early restoration of the old buildings to the former Trustees, compared re-

cent events with the experience of the Oxford and Cambridge Colleges during the Commonwealth, and proposed the same inscription here as that placed on Queen's College at the Restoration; *Divina Ope Misericordia et Providentia Collegium hoc a Captivitate quadam Babylonica ereptum Integris et Legitimis suis Membris Constituitur.*

On the ninth of March, 1789, three days after the passage of the Act of Reinstatement, a meeting of the Trustees of the old College was held at the home of Franklin, who was now spending the last few years of his long life in



BENJAMIN FRANKLIN

From the painting by Benjamin West. Original in possession of Hon. Samuel W. Pennypacker

great honor and such rest as his busy nature would allow to him. He was the oldest member of the Board in years, and the only survivor of the original twenty-four. All of the fourteen living Trustees were present. At a subsequent meeting held April 28, 1789, the ten vacancies in the Board were filled and steps were taken to rehabilitate their restored estates. The old buildings were immediately restored to them, the University removing its classes to "the Lodge in Lodge Alley," which had been temporarily rented for the purpose. The reinstatement of all living members of the Faculty dissolved in 1779 applied only to two Professors of the College proper, Dr. Smith and James Davidson, Professor of the Greek and Latin languages. The Faculty was completed by the election of Rev. John Andrews, a clergyman from Maryland, as Professor of the Sciences, and Rev. William Rogers as Professor of English and Oratory.

On the fifteenth of April, the following notice was published in the newspapers.

"COLLEGE, ACADEMY, AND CHARITABLE SCHOOLS OF PHILADELPHIA.

"Notice is hereby given that the several schools in this seminary are now opened upon their ancient foundation as follows, viz:

"1. The Charitable School, viz: the Boys under Mr. Oliphant, and the Girls under Mrs. Davis, as usual.

"2. The Academy, viz: the English Grammar School and the School of the practical branches of Mathematics, under the Rev. William Rogers, A. M. as Professor of English and Oratory.

"3. The Latin Grammar School, under James Davidson, A. M., Professor of Humanity or of the Latin and Greek Languages.

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"The College, or Philosophy Schools, under the subscriber, as Provost, and the Rev. John Andrews, D.D., lately appointed a Professor in the Sciences; and for further assistance in these schools, a Vice Provost will in due time be appointed."

"WILLIAM SMITH, D.D.,
*Provost of the College and
Academy of Philadelphia.*"

The Medical School was treated separately. Of its Professors, Drs. Shippen, Kuhn and Rush were living and accepted their old positions, though Dr. Kuhn soon resigned from the College to take a higher position in the University. Dr. Rush, on the other hand, gave up his position at the University to become Professor of the Theory and Practice of Medicine in the College. Dr. Shippen retained his position as Professor of Anatomy in both institutions. Dr. Morgan was still living, though not in Pennsylvania at the time, and he died later in the same year. Several new men were then added. Dr. Caspar Wistar began his great professorial career by being elected to the Chair of Chemistry and



CASPAR WISTAR

From painting at American Philosophical Society

the Institutes of Physics. Dr. Samuel Griffith was elected Professor of Materia Medica and Pharmacy, and Dr. Benjamin Smith Barton of Natural History and Botany. Perhaps the most important action on this reorganization of the Medical School was the abandonment of the degree of Bachelor of Medicine. It was declared that to confer that degree gave encouragement to those who had taken it to enter immediately into practice, to call themselves Doctors of Medicine, and thus to impose upon the public, and never return for the further study and maturity necessary to obtain the degree of Doctor of Medicine. It was therefore determined to confer the Doctor's

degree only, and to insist that in order to obtain it all candidates should be at least twenty-one years old, should spend at least two years at the College, attend all principal courses of lectures, pass examinations and prepare and print a thesis.

The old schools having been formally reorganized within the year 1789, the next year brought an innovation that seemed as if it might be the beginning of a second professional school analogous to the Medical Department. This was a Professorship of Law. The plan was adopted in the flow of enthusiasm due to the successful reinstatement of the Trustees, but it sprang also from the conditions of the time.

The circumstances were somewhat analogous to those at the formation of the Medical School twenty-five years before. Philadelphia was already famous for the talent of its lawyers, and students preparing themselves for the Bar were numerous and ambitious. The only instruction available to them was that obtained in the offices of the practising lawyers with whom they were entered. Additional opportunities of learning were an evident desideratum.

At one of the early meetings of the Board, therefore, March 16, 1789, a request came from a group of young law students for the use of one of the rooms of the College for the meetings of a society which they had formed. The request was granted. A year or more later, July 10, 1790, a communication was sent to the Board by a prominent lawyer, Charles Smith, Esq., suggesting the institution of a law lectureship and offering to read a course of lectures each winter, if he should be appointed to it, under such regulations as the authorities of the College might deem proper. The suggestion of giving in-

struction and degrees in Law attracted attention and was discussed at several successive meetings, though no formal notice was taken of Mr. Smith's personal proposal. Finally in August a plan of such a Professorship was reported to the Board by a committee of which the Chairman was James Wilson, formerly a Tutor in the College, but now one of the Trustees and an eminent statesman and lawyer. He had moreover been recently appointed by President Washington one of the Justices of the Supreme Court. This plan, which provided for a course

of twenty-four lectures each year, was immediately adopted and Judge Wilson himself was appointed Professor of Law. To accept this position he resigned from the Board of Trustees. The plan of the course, which was somewhat vague and diffuse, to say the least, was as follows:

"The object of a system of law lectures in this country should be to explain the Constitution of the United States, its parts, its powers, and the distribution and operation of those powers; to ascertain the merits of that Constitution by comparing it with the constitutions of other States,

with the general principles of government, and with the rights of men; to point out the spirit, the design and the probable effects of the laws and treaties of the United States; to mark particularly and distinctly the rules and decisions of the federal courts in matters both of law and practice.

"To examine legally, critically and historically the constitutions and laws of the several States in the Union; to compare those constitutions and laws with one another, and with the general rules of law and government; to investigate the nature, the properties, and the extent of that connection which subsists between the



JAMES WILSON

Federal Government and the several States, and, of consequence, between each of the States and all the others.

"To illustrate the genius, the elements, the originals, and the rules of the common law, in its theory and in its practice; to trace as far as possible that law to its fountains, to the laws and customs of the Normans, the Saxons, the Britons, the ancient Germans, the Romans, and perhaps in some instances the Grecians.

"Under this head it is to be observed, that the common law, in its true extent, includes the law of nations, the civil law, the maritime law, the law-merchant, and the law too of each particular country, in all cases in which those laws are peculiarly applicable. All the foregoing subjects of discussion should be contrasted with the practice and institutions of other countries. They should be fortified by reasons, by examples, and by authorities; and they should be weighed and appreciated by the precepts of natural and revealed law.

"The obvious design of such a plan is to furnish a rational and an useful entertainment to gentlemen of all professions, and in particular, to assist in forming the legislator, the magistrate and the lawyer.

"The lectures and exercises may be so prepared and arranged as to suit the different views of those who shall attend them."

An announcement was made of a course of lectures to be delivered on three afternoons of the week at six o'clock, with law exercises on Saturday. The introductory lecture, given on the 15th of December, 1790, in the College Hall, was a notable affair. Since Philadelphia was at that time the Capital of the United States, there was no lack of public officials to compliment Judge Wilson by their presence. President Washington and the members of his Cabinet, the members of the Senate and House of Representatives, of the Supreme Executive Council and of the Assembly of the state, the Mayor and members of City Councils, Judges of the courts and a great array of prominent citizens and well known ladies made a very striking gathering. The course of lectures then inaugurated was given during the winter of 1790-1791. But a second series, although begun during the next winter and carried part

way through the year, was interrupted and never completed. Nor were the law lectures continued thereafter. The plan fell into desuetude, to be temporarily revived twenty-five years later, but not to attain any real importance or to become an actual Law School until the middle of this century. The Lectureship was only an experiment, interesting in itself, from the personality of the lecturer, and from being the first Law Lectureship established in America, but it had no permanent significance. It was only the old College courses and the Medical courses that were fully established at this time.

On the eighth of June, 1790, the first Medical Commencement of the re-established institution took place in the old College Hall at the same hour as the Commencement of the University took place in the new quarters which they had rented in the Philosophical Society's hall on Fifth Street below Chestnut. On the 17th of July the regular College Commencement was held. A Commencement was held June 22, 1791, to confer the degree of Doctor of Medicine on five students, but none was held for the College classes. It had no doubt already come to be realized before the usual time for Commencement that the continuance of the two institutions, the College and the University, in perpetual duplication and rivalry, was impracticable. The Provost and Trustees of the College had obtained their vindication, and now both institutions alike were straitened in finances and poorly attended by students; the old rivalries were diminished, the old pride somewhat humbled. There was but little popular interest in either institution, although the University was subjected in the summer of 1790 to a searching investigation by a committee of the State Legislature. Franklin was a member of the Board of Trustees of each institution, though he had never taken the oaths qualifying him for service in the University and had not attended any of the meetings. One of the Medical Professors was serving on both Faculties and at least one other, Dr. Wistar was deeply interested in both.

Under these circumstances the question of a union of the College and the University could

hardly fail to come up. As early as December 24, 1790, the Board of Trustees of the College passed a resolution stating that they understood there was a disposition on the part of the Board of Trustees of the University to enter into a conference on the subject of a possible union of the two institutions, and appointing a committee. On the fourth of January, 1791, they wrote to this effect to the other Board. This letter was read at the meeting of the Trustees of the University held February 9 and an answer sent in which they are particular to say that they had not had the matter under consideration, but are willing to confer with them and receive proposals on the subject. They likewise appointed a committee for further consideration of the matter. Two weeks afterward the two committees held a joint meeting in a room in the State House. Matters hung fire during the summer while both institutions were making strenuous efforts to strengthen themselves and to keep up appearances. In August, however, the two Committees made reports to their respective Boards and the arrangements for a union went rapidly forward. The University authorities were interested in laying stress on the fact that the overtures for union had come from the College. The College authorities insisted that the name for the proposed united institution should be "The University of Philadelphia," not "of Pennsylvania," as proposed by the other party. The form of a common petition to the State Legislature was eventually drawn up, and, after continued negotiations, approved, no mention being made of the question of initiative, and the College waiving its preference for the name Philadelphia.

The main features of the plan of union were the adoption of the name of "University of Pennsylvania;" the creation of a new Board of Trustees by the choice from each Board then existing of twelve of its members, and the

addition of the Governor of the State; the creation of a new Faculty by choosing from each of the existing Faculties equally as many Professors as it should be determined to have in the new institution, and the election of a Provost and Vice-Provost from among these Professors; that the Board should be perpetuated by filling its own vacancies, and the Faculty by election of the Board; that all the property of the two institutions should be united, and that an annual statement of the conditions of their funds be laid before a representative of the State Government. The petition was submitted to the Assembly by the two institutions jointly, and an Act was thereupon passed on the 30th of September, 1791, embodying these proposals, and incorporating a new institution, the "University of Pennsylvania." There had been, as before pointed out, no real breach in the continuity of the work of the original College and Academy. The Act of 1779 had put a new group of Trustees in charge of its property and trusts, and had connected it much more closely with the State Government than it had been before. At the same time the expelled Trustees were in a position to claim a sort of moral if not legal continuance in office. The Act of 1789, in performing an act of justice in returning their old property and franchises to this group of men, had really brought about the temporary division of the institution into two institutions. Now these were again united into one. The close connection with the State Government was partially preserved by the provision that the Governor of the state should always be *ex-officio* President of the Board of Trustees and that annual financial reports should be made to the Legislature. The property of both institutions came into the possession of the new one, and all the old duties, including the keeping up of a Charity School, were still incumbent upon it.

CHAPTER IV

THE UNIVERSITY OF PENNSYLVANIA—THE REUNITED INSTITUTION
TO THE CLOSE OF THE CENTURY

THE decade which followed the union includes two matters of special interest, the reorganization of the Board of Trustees and the Faculty, and the exchange of the old home for a new.

In accordance with the Act of 1791, each of the two Boards of Trustees proceeded to select one half of their number as members of the new Board. Those selected by the College were: Rev. Robert Blackwell, Rev. William White, Edward Shippen, William Lewis, Robert Hare, Samuel Powell, David H. Conyng-ham, William Bingham, Thomas Fitzsimmons, George Clymer, Edward Burd and Samuel Miles; those chosen by the University were: Thomas McKean, Charles Pettit, James Sproat, Frederick Kuhl, John Bleakly, John Carson, Jonathan B. Smith, David Rittenhouse, Jonathan D. Sergeant, David Jackson, Janies Irvin and Jared Ingersoll. These lists represented tolerably well the old social and political and even religious divisions of Pennsylvania. The former is mainly made up of representatives of prominent old colonial families, who were generally Episcopalians; the latter principally of men of the Revolution, new men, and several of them Presbyterians. Those cleavages of society, however, were rapidly disappearing and giving place to new. On the 8th of November, 1791, twenty-three of the men thus selected, together with Thomas Mifflin, Governor of the State, met at the office of the Secretary of the Commonwealth, in the State House, organized themselves, and proceeded to give to the institution its last formal reconstruction up to the present time. The changes introduced in the courses of studies will be described in another connection, but the creation of a Faculty is properly included here. They elected the following men to the respective chairs: Dr. Ewing, Professor of Natural Philosophy, Dr. Andrews of Moral Philosophy, James Davidson of Greek and Latin, Robert Patterson of Mathemat-

ics, Rev. Dr. Wm. Rogers of English and Belles-Lettres, and Rev. Dr. J. H. C. Helmuth of German and the Oriental Languages. As Medical Professors, Dr. Shippen was elected Professor of Anatomy, Surgery and Midwifery, Dr. Caspar Wistar, Adjunct Professor of the same branches, Dr. Adam Kuhn, Professor of the Practice of Physics, Dr. Rush of the Institutes of Medicine and of Clinical Medicine, Dr. James Hutchinson of Chemistry, Dr. S. P. Griffith of Materia Medica and Botany, Dr. Benjamin S. Barton, of Natural History and Botany. Justice Wilson was continued in his nominal position of Professor of Law.

By these elections all the Professors in both the earlier institutions were included in the Faculty except Dr. Smith, the late Provost of the College, and Dr. Magaw, Vice-Provost of the University. The latter declined a nomination, as it was felt to be impossible that both he and Dr. Andrews, to whom he was much attached, could be included in the new Faculty, and he deferred to his friend. After some delay a contest was made for the re-election of Dr. Smith, but he was defeated by a vote of thirteen to eleven in favor of James Davidson. In other respects the old Provost was treated with great consideration. His official residence was left to him for a year, rent free; his financial claims on the College were paid, and the annuity of £100 formerly granted him by the College in recognition of his services in obtaining the endowment fund in Europe was secured to him for life. Early in 1792, Dr. Ewing was elected Provost and Dr. Andrews Vice-Provost. Thus the teaching was provided for by a body of fifteen men, seven each in Arts and Medicine, and the Law Professor. The positions of one Professor of each of the first groups and of the Professor of Law were scarcely more than nominal so the actual teaching body consisted of twelve men, a number which was not exceeded for many years. The Academic Department, consisting of the

old Latin, English and Mathematical schools was by resolution more completely separated from the College than it had been before. The medical courses were sufficiently distinguished by the circumstances of the case. This division was somewhat closely connected with the question of location.

The subject of location of the institution had become complicated for several causes. The College had been in possession of three buildings for teaching purposes, the two on its old grounds at Fourth and Arch streets and another, usually known as Anatomical Hall, or Surgeon's Hall, used for the medical lectures, on the east side of Fifth Street above Walnut.

To these the new University of course fell heir in 1779. On the division of the institution in 1789, and the restoration of its property to the old College, the University obtained rooms in the building of the American Philosophical Society on the west side

of Fifth Street, just below Chestnut, agreeing to pay £85 a year for five years and to complete the building, deducting their expenses in doing so from the rent. This location under the shadow of the State House seemed to accentuate the position of the University as the special protégé of the state. Being unprovided with any bell of their own, the Trustees of the University asked and obtained permission from the state authorities to ring the State House bell twice a day for the assembling of the scholars, basing their request on the fact that the institution was created by the state government and that such a permission would enable them better to fulfil what was expected of them. After the re-union in 1791, and the expiration of this lease, the available buildings were again, as before, only the Charity School building and the old Hall at Fourth and Arch streets,

and the Anatomical Hall on Fifth Street. These were inadequate and inconveniently located. There had been a time when the Fourth Street location was so far at the edge of population that the Trustees in obtaining estimates for a tower clock had only provided for dials on the southern and eastern sides, but this was no longer so. The centre of population had moved far westward. Moreover, within the next few years an unusually good opportunity for a new location presented itself. This was the sale by the state government of the building which had been intended as a residence for the President of the United States. In 1791, when the seat of the Federal Government

had been removed from New York to Philadelphia, the Legislature of Pennsylvania ordered the purchase of a space of ground on the west side of Ninth Street, running from Market to Chestnut, and the erection upon it of a large and

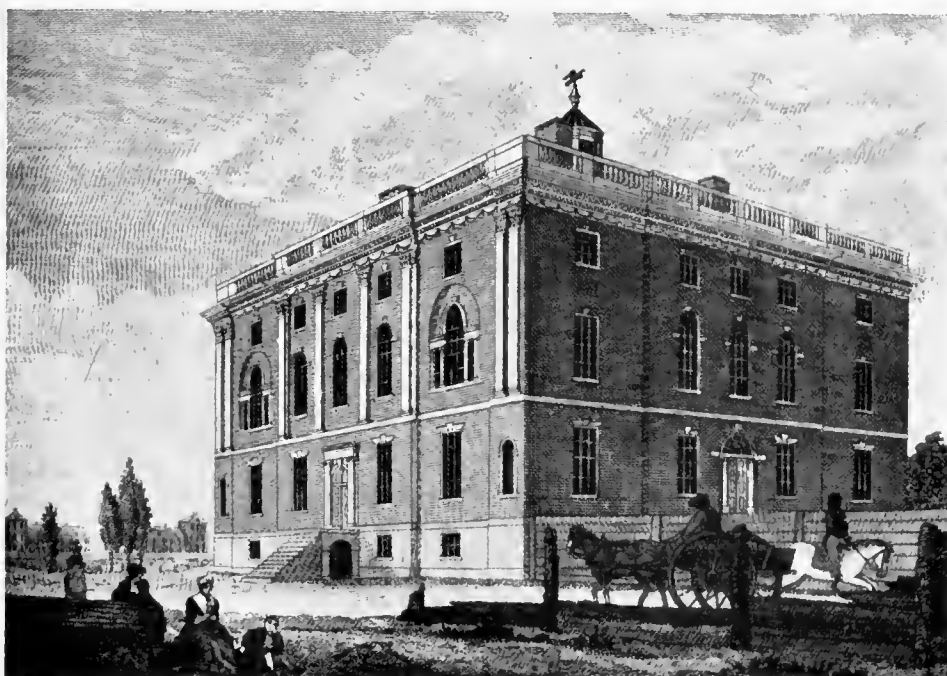


HALL OF THE AMERICAN PHILOSOPHICAL SOCIETY

handsome building, in which it was expected that President Washington would dwell. The corner stone was laid on the 10th of May, 1792, but the work of construction proceeded slowly, successive appropriations were as usual required, and it was not until the spring of 1797, and after the expenditure of almost \$100,000, that it was finally completed. By this time Adams had been elected, and what had no doubt originally been intended as a free gift to the Chief Executive was now only offered to the President as a dwelling-place at a rate of rent to be named by himself. President Adams, not attracted by this restricted courtesy, or considering the house too large and pretensions, or possibly feeling some doubt as to the legality of his acceptance of the gift of a reduced rent, returned a polite note to Governor Mifflin, on the third of March, 1797,

declining to receive it. It then lay vacant for three years, till in March 1800, it was ordered by law to be sold at auction. In July of the same year the house and land were purchased by the Trustees of the University for \$41,650, payable in installments. They then sold part of their old estate, including the houses in which four of the Professors had lived, and rented out building lots on part of the new. Even then, however, means had to be provided to make the necessary alterations in the build-

been healed, permanent shape given to the outward organization of the University, and the location adopted which was to be retained for seventy years, had nevertheless shown but little promise as the years went on of giving to the University any great prominence or influence in the community, or bringing to it any great number of students. It is true that large classes of students graduated in 1792 and 1793, but after that the number fell off in the Arts courses till in 1796, and



THE PRESIDENTIAL MANSION AS OCCUPIED BY THE UNIVERSITY 1802-1806

From an Etching made in 1800

ing, and it was the spring of 1802 before the classes were all transferred. The subjects of Anatomy and Chemistry continued for lack of accommodations to be taught in the small hall on Fifth Street. Part of the old College Hall was now leased for other purposes, though the Charity School was still kept up in its old building. To anticipate somewhat, in 1806 an addition was made to the building on Ninth Street, for the use of the classes in Anatomy and Chemistry. All advanced courses under direction of the Trustees were thus for the first time given under one roof.

This period, in which the old divisions had

again in 1798, no commencements were held. The average number of graduates for several years was either five or six. The times were not favorable for higher education. The attractions and rewards of commercial and mercantile life were especially great, and comparatively few of the young men of Philadelphia and its vicinity went to College at all. Many of those who did go were attracted for denominational or other reasons to other Colleges, and the University failed in its turn to attract any longer, to its culture courses at least, students from a distance. New educational facilities had been provided that did not

exist in colonial times. Franklin College, for instance, was established at Lancaster in 1787, in the midst of the German section of Pennsylvania, and this led to the abolition of the

remains that the University as reorganized in 1779 and 1791 was not successful in obtaining such relative prominence and influence in Philadelphia and Pennsylvania as it had before the



UNIVERSITY BUILDINGS, 1806-1829

German Classical School at the University in the next year. Dickinson College similarly in the Scotch Irish section was founded in 1783, and others in Pennsylvania and the adjacent states at about the same time. Whatever the reasons may have been, the fact

Revolution. Even the Medical courses showed but small inclination to grow, though they averaged nine or ten graduates yearly, and the second and succeeding decades of the century were destined to see a great development in that department.

CHAPTER V

THE MIDDLE AGES—THE FIRST HALF OF THE CENTURY

THE half-century which followed was a period in the history of the University the main features of which were indicated by the condition of things at its beginning. There was a succession of Provosts who were all good scholars and men of intellectual ability; but with perhaps one exception they acted as teachers and disciplinarians only, not at all as initiators or administrators as was Dr. Smith and as have been the last three Provosts. The teaching given was good, the influence exercised by the Professors over the individual students a valuable one, but the benefit of this teaching and influence was given, in the Collegiate Department at least, to but a handful of students, who were almost all residents of Philadelphia or its vicinity. The Trustees were prominent and able men, but from one cause or another they did not

prevent the University from falling into ruts, they did not secure for it adequate funds, or give to it any great influence in the community. A series of attempts, it is true, were made to develop new lines of activity, but all of these proved to be failures. Suggestions and plans which were in many cases in advance of anything being done elsewhere in America were made, but from lack of interest or lack of means or lack of wise adaptation, were allowed to struggle through a shorter or longer period of discouragement and then to drop out of existence. The Medical Department alone grew and prospered and drew students and

obtained fame and exercised influence. The old nucleus of the University was during this period a good enough small College, existing in the midst of a large and growing community, but not participating in the life of that community nor exercising any appreciable influence over its development.

On the death of Dr. Ewing in 1802 no Provost was chosen for five years, when in 1807 Dr. John McDowell, of the Class of 1771, and Tutor from 1769 to 1782, who had been called the year before from his principalship of St. John's College in Maryland to become Professor of Natural Philosophy in the University, was elected Provost. Three years later he resigned on account of ill-health. Dr. John Andrews, who had been Vice-Provost ever since the revival of the College in 1789, was now promoted to the Provostship, but he also lost his health and resigned in



JOHN MCDOWELL

1813. In July of the same year Rev. Frederick Beasley was chosen Provost. His administration continued until 1828 when he resigned at the request of the Board of Trustees. This period was a crisis in the affairs of the College. The diminution in the number of students was alarming. October 1827, there were but eleven Seniors, ten Juniors, six Sophomores, and six Freshmen in the College. There was much dissatisfaction within the institution and criticism from without. A Committee of the Board was therefore appointed to inquire into "the present state of the University as respects the Department of Arts." This Committee

made various investigations and reports, as did another Committee appointed to consider a change in the location of the College. As a result of the general agitation a resolution was carried June 3, 1826, that "in the judgment of the Board it is expedient that all the Professorships in the Faculty of Arts in the University except the Professorship of Mathematics shall be vacated at the end of the present session." As Mr. Patterson, Professor of Natural Philosophy and Vice-Provost, had just resigned to take a position at the University of Virginia, these removals applied only to Provost Beasley and Mr. Thompson, Professor of Languages. These were each given a retiring pension of about two-thirds of their salary for the next three years, and the Faculty was thoroughly reorganized. Rev. Dr. William H. de Lancey, one of the Trustees, was elected Provost and Professor of Moral Philosophy. It was ordered that his time should be given to superintendence rather than teaching, his formal instruction being given to the Senior class alone, and he was invited to attend the meetings of the Board at which matters concerning the



JOHN ANDREWS

Department of Arts should come up. Rev. Edward Rutledge was elected Assistant Professor of Moral Philosophy to give the instruction to the lower classes formerly given by the Provost. Robert Adrain had been called from Rutgers College a few months before as Professor of Mathematics, and now began his work. Rev. Samuel Brown Wylie was elected Professor of Languages, and shortly afterward Alexander Dallas Bache, Lieutenant in the United States Engineer Corps, was elected Professor of Natural Philosophy and Chemistry. The salaries of the Professors were equalized and increased, a new arrangement

of studies introduced, a rearrangement of vacations made, and the 22nd of February appointed as "University Day." A "Book of Promise" was also established in which students on their entrance bound themselves to proper obedience to rules and studiousness.

A response to this awakening was immediately seen in increased numbers of students. In the Freshman class which entered in 1828 there were eighteen as compared with the six of the previous year, and in the Sophomore class there were twenty-one. Before the winter

was over the total numbers had risen to seventy-seven as compared with thirty-three in the previous year. The next year there were upward of a hundred at the opening of the year, and before its close one hundred and twenty-six. But for some reason this improvement did not continue. After holding his office for five years Dr. DeLancey resigned in 1833, and in 1834 Dr. John Ludlow was elected and remained Provost till 1853 when he resigned. In all cases except that of Dr. McDowell the Provosts were teachers of Moral Philosophy. He taught Natural Philosophy, or what in

modern times would be called Physics. The most prominent teachers in addition to the series of Provosts and the others who have been mentioned above were: Professor Robert Patterson and his son and successor in the professorship, Robert M. Patterson; Dr. William Rogers, Professor of Oratory and English Literature; James G. Thompson, Professor of Greek and Latin, and his successor, Rev. Samuel Brown Wylie; Alexander Dallas Bache, Henry Reed and Henry Vethake. Just before the middle of the century John F. Frazer was elected Professor of Natural Philosophy and Chemistry. At about the same time George Allen was

called as Professor of the Greek and Latin Languages, the teaching of which, and especially of the former, he raised into a new prominence and influence. The work of these men will be discussed in the second division of the history. In that connection also must be recounted the steps in the distinct separation of the College from the Academy during this period, the extension of the college course to four years, and other changes in the curriculum; while the institution of the oldest College societies and other matters more particularly connected with the life of the students will fall into the third division.

The building on Ninth Street was added to from time to time, principally to satisfy the needs of the growing Medical School, but in 1829 it was decided to remove the old pile and to put up an entirely new structure. This was done and two twin buildings were erected, one for the Medical School, the other for the College and allied work. These buildings then remained practically unchanged till the site was given up in 1871. The Academy had by this time become practically a private preparatory or grammar school, under the general supervision only of the College Faculty, but still occupying a portion of the old Hall on Fourth Street. Another school, known as the "Western School" was also kept up under the similar patronage of the University. The number of boys at each of these schools averaged between fifty and a hundred. The Charity Schools occupied the whole of their old building on the original site, the partial use of that building for dormitory purposes never having been resumed after its closing at the time of the Revolution.

Just at the opening of the century there seemed a probability of a much greater exten-

sion of this charitable educational work of the University. This was from a bequest by an interesting old local character, Christopher Ludwick. He had been a German baker in a small way in colonial Philadelphia, but had gradually risen to some means, and when the Revolution broke out took a most active, self-denying, and valuable part in arousing local patriotism and in supplying the army with bread. He was extremely charitable, though eccentric, and on his death in 1801 bequeathed £500 in equal shares to four institutions, one of which was

the University, to be employed in educating poor children. He proceeded, however, in his will to express a hope that an institution would be established in Philadelphia distinctly for the purpose of educating poor children of all denominations gratis, and directed his executors to expend the income of his residuary estate, which he estimated at upwards of £3000, for the uses of free education until such an institute should be founded, and then to pay over the capital as his "mite or contribution toward such an institute." The Trustees of the University believed that in their Charity School they were carrying



FREDERICK BEASLEY

From canvas in University Chapel

on just the work contemplated, and therefore, in order to conform to the requirements of the bequest, applied, September 7, 1801, for incorporation as "The Trustees of the Free School attached to the University of Pennsylvania," expecting to apply the bequest to their Charity School already in existence, and of course to extend its work. But there were rivals in the field. In the winter of 1799 a few young men who were in the habit of meeting in the evenings for social intercourse had formed themselves into the "Philadelphia Society for the Free Instruction of Indigent Boys" and opened a night

school in which nine of their members took weekly terms in giving instruction to some twenty or thirty boys in the ordinary English branches. In 1801 they had just determined to open a day school for the same purpose when the terms of the Ludwick bequest became known. They immediately remodelled their constitution and applied for incorporation as the "Philadelphia Society for the Establishment and Support of Charity Schools," with the expectation of applying to the executors for the conveyance to them of the residuary estate of Mr. Ludwick. Application for incorporation was made to the state authorities by both parties at approximately the same time. But as the charter in order to become effective must after receiving the signatures of the state officials at Philadelphia be transmitted to Lancaster to be recorded in the Recorder's office there, the rivalry reduced itself to a contest of speed between the representatives of the University and of the new society over the distance between Philadelphia and Lancaster. The respective charters were delivered to the agents of the two parties by Governor McKean at the same moment. The President of the new society had himself undertaken with a horse and sulky to take the document to Lancaster. The authorities of the University had engaged a man on horseback for the same purpose and, as it was asserted, had provided relays of fresh horses for him on the way. But the proverbial inefficiency of the hireling, who had no proprietary interest in the charity scholars, led to the defeat of the University; for as the two messengers sped through the city and along the Lancaster pike the University man, discouraged by his opponent's lead and the extreme heat, dropped out of the race. The man in the sulky, however,

did not learn this, or else had remembered with apprehension the fable of the hare and the tortoise, for when his first horse was exhausted he hired another from a plough team in a field, and afterwards still another from a traveller in a town, and finally reached Lancaster, a distance of sixty-six miles, within seven hours. The University charter was never enrolled, and some five years later the rival society obtained from the executors of the fund a sum equalling about \$13,000, which has been applied faithfully and advantageously to the purposes for which it was intended.



WILLIAM H. DE LANCEY

A few years later, however, the University was more successful in adding a somewhat similar bequest to the sum of their endowments. A citizen of Philadelphia named John Keble, who died in 1807, left his residuary estate to such charitable objects as should be chosen by his executors. In 1809 they decided that the property, amounting to \$10,000, should be handed over to the Trustees of the University to be used as a fund for the extension of the Boys' Charity School. The fund was allowed to accumulate until 1823, when it had come to produce about \$1000 a year, and accordingly a school was opened under the name of the "Keble Charity School," in which, as in the boys' and in the girls' school already existing, about fifty children were taught reading, writing and arithmetic; tuition, the cost of books, and all other expenses being entirely free. Thus in addition to the students in the College and the Medical School there were in the Academic and Charitable schools perhaps some three hundred or four hundred more, indirectly attached to the institution.

Among those projects which have been alluded to as being initiated during this period

only to end in failure, is to be mentioned a momentary revival of the law lectureship. This had fallen, since the interruption of Judge Wilson's second course of lectures in 1791, into a long desuetude. The matter was brought up in January 1817. March 20, 1817, Charles Willing Hare, Esq., was elected Professor of Law and delivered his introductory lecture a month later. He announced a series of three successive courses; the first, on Natural Jurisprudence, or the science of right and wrong, as discovered by human reason, compared with, illustrated by, and embodied in law; the second on International Jurisprudence, or the laws which regulate the intercourse of nations, the elements of sovereignty, the different forms of government, and particularly the theory and practice of the Constitutions of the United States and of the State of Pennsylvania; and the third on the Jurisprudence of the United States and of Pennsylvania as distinguished from the Common Law of England. The first of these courses only was given, the lectures being delivered during the season of 1817-18. Shortly afterward Mr. Hare lost his reason, and died in 1828. The lectureship remained vacant. In 1832 a vigorous petition for the appointment of a Professor of Law was submitted to the Trustees by a committee of the Philadelphia Law Academy, expressing regret that the facilities provided for law students at Harvard, Yale and the University of Virginia were not furnished in Philadelphia, famous for her judges and lawyers and rich in courts of justice. No action, however, seems to have been taken in reference to this petition, and the real organization of the Law Department was left to the very end of this period.

A second unsuccessful experiment was the

endeavor to establish a Department of Natural Sciences, with a botanical and experimental garden. An interest in matters of natural science was an old inheritance of the University. In Franklin's "Proposals" he had suggested the studying of "some of the best histories of nature, which would not only be delightful to youth, and furnish them with matters for their letters, as well as other history, but would afterwards be of great use to them, whether they are merchants, handicrafts, or divines; enabling the first the better to understand many commodities and drugs, the second to improve his trade or handcraft by new mixtures and materials, and the last to adorn his discourses by beautiful comparisons or strengthen them by new proofs of divine providence. While they are reading natural history might not a little gardening, planting, grafting and inoculating be taught and practiced, and now and then excursions made to the neighboring plantations of the best farmers, their methods observed and reasoned upon for the information of youth; the improvement of agriculture being useful to all, and skill in



JOHN LUDLOW

it no disparagement to any?"

As a matter of fact nothing of the kind was taught in the Academy or College, education being carried along on much more conventional lines. Yet even thus the prominence of "natural philosophy," or physics, was a marked characteristic in the whole history of the institution, and among the medical courses there was almost always a course of lectures in botany. In the meantime Philadelphia had become a centre of botanical knowledge and interest. Three generations of Bartrams, Adam Kuhn, Benjamin S. Barton, Pursh, Nuttall, W. P. C. Barton, Darlington, Baldwin, and Hors-

field, were all Philadelphians of the period before or shortly after the beginning of this century, and foreign botanists such as Kalm and Michaux, made repeated visits here. In 1807 there was promise of a tangible establishment for education in the field of natural history. The last instalment of the money owed by the University to the State in payment for the building on Ninth Street was still due, and the Legislature was induced to remit it in the form of a nominal appropriation of \$3000 for the creation of a botanical garden, "for the improvement of the science of botany, and for

Natural History, including Geology and Zoölogy, Thomas Cooper, Professor of Mineralogy and Chemistry as applied to Agriculture and the Arts, Thomas T. Hewson, Professor of Comparative Anatomy. These professorships brought no salaries, but it was apparently anticipated that there would be fees from students, and as the courses given by the first two gentlemen would be taken by many medical students, since their professorships had been detached from that department, the fees in their cases at least might be expected to be of an appreciable amount. Early in 1817 the



ARTS BUILDING, ERECTED 1829

From photograph 1860

instituting a series of experiments to ascertain the cheapest food for plants, and their medical properties and virtues." This was, however, merely the remission of a debt, not a grant of actual money, so, although the interest in the project was still kept up, nothing was done for some years. In 1815, however, a committee was appointed to prepare a plan, and in the spring of 1816 it was determined to buy a plot of land in or near the city, and to appoint a Faculty of Natural History. Subscriptions were asked for from the public to enable the Trustees to carry out these plans. In December, William P. C. Barton was elected Professor of Botany, Charles Caldwell, Professor of

University bought forty-two acres of land in Penn Township near the Canal Road for the purposes of the botanical garden, and enough for immediate uses was fenced off. With this amount of preparation, however, the progress of the new school seems to have stopped. The Professors petitioned for rooms and apparatus for lectures, but these could not be given them. There was no money to improve the garden, and the Professor of Botany had to be allowed the use of a part of the College yard for the cultivation of plants "at his own expense." A green-house was proposed, but not built. The courses of lectures were very irregularly given, and the Professors from time

to time resigned and were replaced by others, though always after considerable intermission. Finally in 1827 a committee investigated the whole question of the department of Natural Science, and the plan seeming to be hopeless, early in 1828 the Faculty was abolished. An additional reason for the dissolution of the department was found in the recent establishment of the Franklin Institute, which seemed to a certain degree to make its existence unnecessary. The Chair of Botany was re-established the next year as a part of the Medical Department, and an effort was made, though unsuccessfully, to do the same for the Chair of Comparative Anatomy. This department, therefore, also failed, as had the Law Professorship, and like it was relegated to the time of revival after the middle of the century.

Still a third tentative effort was made for an object destined to failure at the time but to success long afterward. This was a series of negotiations in the early fifties between the Board of Trustees of the University and the Board of Education of Philadelphia, according to which it was proposed that a number of scholarships should be established in the Collegiate Department of the University for boys of the public grammar schools. The plan came to nothing at that time, though in recent years it has become one of the most beneficent and satisfactory forms of the University's work. Rather more success was reached in another scholarship matter. This was in connection with the old Perkasic estate of the College. These lands had been given to it by the Proprietaries in 1759. One of the conditions of the gift was that the lands should never be sold by the College. Another was that when the income from the estate should rise to

£200 a year, the Trustees should maintain and educate two nominees of the grantor or of his heirs. It was provided that if these requirements should be violated the land should revert to its original owner. The first condition had in the course of time become a very onerous and apparently unwise one. The estate was difficult of administration, the taxes were burdensome, and the farming tenants on the land numerous. They were, moreover, willing to buy the lands at a good valuation. After the Revolution, and again after the

restoration to the College of its old property in 1789, correspondence was entered into with John Penn to obtain his permission for a sale of the lands. It was taken up again immediately after the union, and successive committees were appointed for a number of years and much negotiation kept up. Finally in 1816 an agreement was reached by which the Trustees undertook to establish a "Penn foundation" for the free maintenance and education in the University of two students to be nominated by the heirs of Thomas Penn; and in return John Penn gave to them the necessary release



CHARLES WILLING HARE

of the condition prohibiting the sale of the lands. The next year these were sold for \$60,500. Still later the right of appointment of the two beneficiaries of the Penn Foundation was transferred to the Governor of the state, by whom it is now exercised.

For a short period during these years the finances of the University were improved by an annual appropriation from the State Government. The old ideal of a close connection between the state and the University, at least to the extent of financial support from the former, was abandoned only very reluctantly by the Trustees. Immediately after the union

of 1791 and the re-organization under it, they laid before the Legislature a memorial recounting what they had done to put the institution into successful working order, calling attention to the fact that the appropriation of 1779 had never been completed, and expressing their trust that the government of the state would realize the propriety of making the necessary provision for its support. This memorial was presented by a committee of the Board the 5th of January, 1792, but nothing was done. Again a year afterward a similar address was sent and referred to a "grand committee," but got no further. Then as the prospect of new appropriations seemed to become less, the efforts of the Trustees were concentrated on obtaining the balance of the old appropriations, which were to have been made in the form of land, and apparently a judgment of the Supreme Court was obtained favorable to that end in the 1794 term, but still nothing was given. An unsuccessful appeal to the state government for the erection of a medical building was made by the medical professors in 1805. The remission of \$3000 of the University's debt in 1807 has already been mentioned. May 5, 1832, an Act was passed which exempted the property of the University in Philadelphia from local taxes for fifteen years, and six years afterward a general Act exempted its property along with that of all other educational institutions incorporated or established by the state from all county and other local taxes. In the same year, 1838, the Legislature at last gave an actual sum of money in the form of an annual appropriation of \$1000 for ten years to each University maintaining four Professors and instructing one hundred students. The University received this amount of money

from the state yearly for five years. Then in 1843 the state was in financial difficulties and the appropriation was reduced to \$500. After that year no appropriation at all was made until the year 1872.

In contrast with these unsuccessful financial and educational projects the medical branch of the institution grew and flourished. It was during this period that the Medical School forged distinctly ahead of the College, at least in numbers and national reputation. Previous to this period its graduates had averaged about eight a year, and had never been above seventeen in any one year. After 1802 the numbers began to rise. In the winter of 1803-1804, the total number of medical students was one hundred and fifty; three years afterwards it was two hundred and seventy. The average annual number of graduates for the half-century was more than one hundred, and several times before 1852 the number was as many as one hundred and sixty. Moreover, these students were drawn from many different lands and distant parts of our own. There were frequently more students from Virginia than from Pennsylvania. The reputation of the school constantly spread; its professorships were lucrative and honorable, and both attracted the ablest physicians and induced the most careful preparation and delivery of medical lectures by them. The old connection between the Medical School and the hospitals of the city was during this period drawn still closer. Dr. Bond, one of the Trustees, had voluntarily given clinical instruction in the Pennsylvania Hospital to the very earliest medical students of the College. Drs. Shippen, Morgan, Kuhn, Rush, Hutchinson, Wistar, Physick and Barton had all been physicians of



WILLIAM P. C. BARTON

the Pennsylvania Hospital as well as Professors in the Medical School before the beginning of this century, and the next generation of Professors had the same connection. The instruction at the actual bedsides of patients, which was the early custom, was superseded about 1834 by the later method of having the patients brought to the amphitheatre of the hospital and here lectured about, prescribed for, and operated upon in the presence of the class. The connection of the students with the Almshouse hospital had hardly been so close nor the freedom of their admission so early established nor so continuously allowed. Nevertheless the Professors of the Medical School had frequently served at the Almshouse, and from time to time, varying with the differing opinions of those in the management of it, medical students had been more or less freely admitted. From 1803 onwards, however, the barriers were gradually removed, the physicians allowed to give instructions there

to their pupils, and in 1807 a special lecture room was fitted up for the purpose. This concession on the part of the poor authorities of the city was partly in the interest of medical science, partly in return for a fee of \$8 charged to each student attending clinical instruction there. When the Almshouse was removed to the new buildings in West Philadelphia in 1832, the authorities of the Medical School and the Board of Guardians of the Poor of the City both placed so high a valuation on the opportunities of the students of visiting the Almshouse hospital that in 1834 a system of omnibuses was introduced by the latter to carry two hundred and twenty medical students twice a week from the centre of the city to the hospital at Blockley. New hospitals also were growing

up in Philadelphia, and these opportunities, along with the fame of its physicians and the central location of the city, helped to keep up and extend the prosperity of the Medical School of the University. Something will be said later of the internal development of the school. It is to be noted here that separate meetings of its Faculty and the election of a Dean with the keeping of minutes seem to have occurred for the first time in 1800 and only became regular by 1804.

More general in character was a petition sent in 1806 by the Medical Faculty to the Legislature of Pennsylvania, calling attention to the evils of medical practice by persons

quite unqualified, and soliciting the passage of a law by which no person should be allowed to practise in the state who had not a diploma from a regular Medical School or the approval of a government board. This effort, as were many later ones for the same purpose emanating from various sources,



MEDICAL BUILDING, ERECTED 1829

was unsuccessful. Somewhat later steps were taken to encourage the more scientific study of Pharmacy. In 1816 and again in 1817 the use of the College building was granted to Dr. James Mease to deliver the inaugural of a course of private lectures on the subject. In 1825 the University itself took the matter up, on the recommendation of the Medical Faculty, and declared its intention of conferring the degree of Master of Pharmacy on such persons exercising the profession of apothecary as they should consider qualified. The degree was then conferred upon sixteen men at that time practising in the city, but it was announced that in future it would only be given to those who had served three years as an apprentice to some regular druggist and taken two courses

of lectures on Chemistry and on *Materia Medica* and Pharmacy in the University.

In 1841 the Medical School opened its first dispensary clinic. This custom had been adopted before by the Jefferson Medical College at the time of its organization in 1824, but probably because of the close connection of the University School with the hospitals the plan had not been used by it. It was first carried on under the auspices of the University by Drs. Gerhard and Johnson, in the building of the Medical Institute on Locust Street above Eleventh. At the opening of the Medical courses of 1843 it was transferred to the University building and carried on under the immediate supervision of the Medical Professors.

This activity of the Medical School and its constant growth in numbers was of great if indirect advantage to the Collegiate department. Its need for more room caused the extension of the material equipment of the University, its reputation prevented the institution as a whole from falling into the insignificance of a purely local and provincial school, its popularity served as a constant incentive to the Board of Trustees to strive to bring about a similar success in the College or to establish new courses which might fulfil the needs of new students in other lines as completely as the medical lecture courses and clinics fulfilled those of their constituency.

CHAPTER VI

THE AWAKENING AFTER THE MIDDLE OF THE CENTURY, 1850-1868

WITH the passing of the middle of the century and the entrance of the University upon the second hundred years of its existence signs of re-awakening life were apparent, whose promise, though at first with many threats of a return to lethargy, has been justified continuously since that time.

One of these indications of a new activity was the appointment of a committee, in October 1849, to consider and report on any desirable changes in the undergraduate course of study, and on the possible introduction of lecture courses open to the public on new subjects. As one result of the work of this committee, early in the next spring, April 2, 1850, the old Professorship of Law was revived, and the Hon. George Sharswood, Judge of the Philadelphia District Court, was elected to fill it. The course was begun the 30th of September, 1850, and for some reason, to be discovered probably in the change of times, as well as in the personality of the Professor, succeeded where the two former efforts had failed. An appreciable number of students, undergraduates and some who were already practising at the Bar, attended the lectures and study classes.

The lectures were on the "Institutes of the Law of Pennsylvania"; there were two classes for study, each meeting two evenings a week and using Blackstone and Kent as text-books. There was a good deal of recitation; supposititious cases were propounded and more or less formal moot courts were held. At the close of the course the students passed resolutions of thanks to Judge Sharswood, accompanied by the following more general statements: "Resolved: that in the re-establishment of the Law Professorship of this University the Trustees have conferred a substantial benefit upon the Philadelphia Bar. Resolved: that the series of lectures delivered during the present term by Professor Sharswood have been listened to by the class with equal pleasure and profit, and have been marked by a sound, practical, useful and literary character eminently designed to aid the practitioner in his daily professional duties."

This course was repeated a second year, but before its close the inadequacy of one professorship and the possibility of success of a more ambitious plan were both so evident that on the 4th of May, 1852, a complete Faculty of Law was established, and regulations for

matrieculation and graduation adopted. There were to be three professorships, one, of the Institutes of Law, to include especially International, Constitutional, Commercial and Civil Law; a second, of Practice, Pleading, and Evidence at Law and in Equity; a third, of the Law of Real Estate, Conveyancing and Equity Jurisprudence. Judge Sharswood was elected to the first of these chairs, Peter McCall, Esq., to the Chair of Practice, and E. Spencer Miller, Esq., to that of Real Estate and Equity. Judge Sharswood was chosen Dean of the new Faculty, and a description of the courses was published in the University catalogue. The degree of Bachelor of Laws was to be awarded to students who attended four terms, that is, two years with each Professor, passing such examinations as were given in each of these courses, and being recommended by the Faculty. Certificates of proficiency were to be given to those who had attended any less number of courses. The students who had worked with Professor Sharswood alone for the preceding two years were given the degree of Bachelor of Laws at the Commencement held July 22, 1852.

Not much encouragement was given from outside to the school. Many of the most prominent lawyers were either doubtful of the advantages of such formal instruction or jealous of the invasion of their profitable office teaching, and adopted a somewhat scornful attitude to the new school. The rules of the District Court, the Courts of Common Pleas and the Supreme Court gave rather slight and grudging recognition to the School in their regulations for admission to practice; the Supreme Court requiring previous admission by a County Court, and the Philadelphia Courts still requiring of students with a regular office pre-

ceptor. Nevertheless students attended and the school grew strong.

Changes in the Faculty occurred from time to time. Peter McCall, one of the most able and lovable of Philadelphia lawyers and teachers, resigned in 1860, and after an intermission of two years, P. Pemberton Morris, Esq., was elected to fill his place. In 1868, Judge Sharswood resigned his position in the school, having been elected to the Supreme Court of Pennsylvania. He was himself a son of the University, having graduated in 1828. He became the true



GEORGE SHARSWOOD

founder of the Law School and for eighteen years had upheld it as a teacher by his thorough and interesting lectures, and as Dean by his energetic efforts for its advancement and by his undoubting faith in its future. As early as this period, a division showed itself between those who wished to strengthen and perpetuate the University connection of the Law School and those to whom its close identification with the courts and the lawyers' offices of the city seemed more important. The instruction was actually given in two of the rooms of the College Building on Ninth Street.

Professor Miller, however, advocated the removal of the School to the old building owned by the University on Fifth Street above Walnut. In 1867 he brought this proposal formally before the Board of Trustees, but after discussion they decided against it. During the Civil War the numbers of students and graduates fell off and it was some years before they increased again to their former numbers.

Thus in addition to the old departments of Arts and Medicine which had come down from before the Revolution, a third had been introduced, which had soon become co-ordinate with these, like them having its separately

organized Faculty and keeping its own minutes, the three having their only real union in their common dependence on the Board of Trustees. The Provost and Vice-Provost were nominally at the head of the whole teaching body, but in reality were Professors in the purely Collegiate Department and had all their connection with that department, except for the conferring of degrees.

Another department was struggling into life during the same period which was much more closely connected with the old collegiate course than were the Medical and Law Schools. This was the Scientific School. The old utilitarian ideals of the University and of the community in which the University is located, however inadequately embodied, had never for any considerable length of time been unexpressed. We hear almost nothing of any proposals for the teaching of theology in the College or University. The classics, metaphysics, pure mathematics and history, had to depend for their teaching on their own inherent value, on the enthusiasm of those who proposed to teach them, or on the strength of tradition in their favor.

On the other hand, the belief that the College should contribute to the practical needs of life and society, that it should teach "navigation and gauging," that it should keep up a botanic garden to "ascertain the cheapest food for plants and their medical properties and virtues," that "all should be taught to write a fair hand and swift, as that is useful to all," as Franklin said, and a dozen other forms of expressing the University's duty to prepare students for the actual work of life, — such a belief had never ceased to be held by many of the Trustees and by others in Philadelphia, notwithstanding the fact that every effort to put such plans into

practice had so far met with failure, and in fact were destined to for some time to come.

In the middle of the century the national interest in the development of mining, of chemical processes, of engineering in its various branches, of more scientific agriculture, and of the exploitation of the natural resources of the country generally was extremely strong. One response to this was the establishment in the University of a department of "Chemistry as applied to the Arts." In October 1850, a Professorship of that subject was created, and James C. Booth was elected to fill it. The number of students was restricted to ten, the intention being that they should work in the laboratory at actual experimental investigation under the immediate personal supervision of the Professor, who would also give informal lectures on "Mineralogy, Geology, Theoretic and Applied Chemistry." Professor Booth seems to have served without salary from the University authorities. Within the narrow limits of the plan it was successful and was continued, the number of students at one time rising to thirteen, till the death of Professor



PETER MCCALL

Booth in February 1856.

Another response to the prevailing scientific interest came from within the old Department of Arts itself. It was ordered in May 1852, that students who had taken various non-classical studies should receive the degree of Bachelor of Science and ultimately of Master of Science, these degrees being co ordinate with the older degrees of Bachelor of Arts and Master of Arts. The requirement of studies included all the work given in Mathematics, Natural Philosophy, Chemistry, and Natural Theology and the Evidences of Christianity, and two additional courses, either in the Modern

Languages, or in Moral and Natural Philosophy, or in Physiology and Natural History.

But the real germ of all the later technical scientific instruction given in the University was the adoption a few months later, in June 1852, of a scheme for the establishment of a "School of Mines, Arts and Manufactures." An extensive plan for the teaching of Chemistry, Metallurgy, Civil Engineering, Mining Engineering, Geology, Mineralogy, Paleontology,

students between November, 1855, and February, 1856. It was for the partial endowment of this department that the first considerable gift from any private person to the University since the Revolution was made. This was the bequest in the will of Mr. Elliott Cresson of \$5000, "to be applied toward founding a school of mines for developing the mineral treasures of my native State." Before the opening of the next College year a still more strenuous



UNIVERSITY OF PENNSYLVANIA, 1829-1873

From sketch made in 1830

Pure Mathematics, Mechanics, Mathematical Drawing, and other allied subjects was drawn up, and certain of the professorships nominally filled. But the actual establishment of the school and the initiation of instruction dragged on for one year after another, until a new access of vigor on the part of the authorities brought the Scientific Department ultimately into life in the fall of 1855. The first instruction was given by Professor Fairman Rogers, in the form of a course of twenty-eight lectures upon Civil Engineering given to a class of five

effort had been made to provide technical instruction in the Scientific Department, so that in 1856-1857, Professor John F. Frazer gave instruction in Theoretical and Applied Mechanics, and in Theoretical and Applied Chemistry, Professor Kendall lectured on Pure Mathematics and its connection with Practical Science, Professor Rogers gave fifty lectures on Civil Engineering and Surveying, and Professor Trego on Geology and Mineralogy. There were twenty-two students for the year, and this course might be considered to be fairly

launched. Three years later, Professor John Peter Lesley was elected to the Chair of Mining in addition to the four Professors already giving courses.

In 1864 great hopes were entertained by the University authorities of obtaining a sufficient endowment for this department in a grant of land from the United States Government. In 1862 the Government granted to each state from the public domain an amount of land equal to thirty thousand acres for each Senator or Representative to which the state was entitled in Congress. This made the share of Pennsylvania seven hundred and eighty thousand acres. It was required that the land should be used by the State Governments to endow Colleges or schools where instruction was given in Agriculture and the Mechanical Arts. In 1864 the University decided to apply to the State Legislature of Pennsylvania to become the beneficiary of this grant. The title of the Scientific Department was therefore changed to the "College of Agriculture, Mines, Arts, and the Mechanical Arts," and provision was made for the election of a Professor

of Agricultural Chemistry and Scientific Agriculture, an Instructor in Practical Agriculture, a Professor of Botany, and a Professor of Military Tactics, to give instruction in military drill. The land, however, was given to another institution, the University having failed entirely in its application to the Legislature. So the extension of equipment could not be made, and even on its old basis the Scientific Department was extremely hampered for funds and attracted no great number of students.

As closely attached to the Medical School as the Scientific Department was to the Department of Arts, was another new creation

of the period included in this chapter. This was the Auxiliary Department of Medicine. The Medical lectures ended at that time with the month of March. They were also necessarily somewhat narrow and technical, four short terms' instruction being quite insufficient to give anything like a comprehensive view of the various branches of medical science and those subjects most closely correlative to it. These facts were realized quite clearly by the Faculty and by the Trustees, but it was not thought practicable to make the term longer or to increase the whole course beyond two years. At the suggestion, therefore, of Dr. George B. Wood, who had been a Professor in the Medical Department for thirty-eight years, and after his resignation had been elected a Trustee, and on his promise of individual pecuniary support, the Board in April 1865, instituted a Faculty of five Professors in connection with the Medical Department, but which should be separately organized with a Dean of its own. Instruction was to be given during the months of April, May and June, after the regular course had been closed for the



GEORGE B. WOOD

year. Certificates of proficiency were to be given, and encouragement was given to Medical students to take the course by providing that certificates given medical graduates should be of a more formal character than those given to others, having the seal of the University and the signature of the Provost, and forming a sort of secondary diploma. In the fall of 1865, Dr. Harrison Allen was elected Professor of Zoölogy and Comparative Anatomy in the new Faculty, Dr. Horatio C. Wood, Professor of Botany, Dr. F. V. Hayden, Professor of Geology and Mineralogy, Dr. Henry Hartshorne, Professor of Hygiene, and Dr. John J. Reese,

Professor of Medical Jurisprudence. The Professors received salaries of \$500 apiece and such fees as should be paid by the students, these last being restricted by statute to \$10



HENRY VETHAKE

From canvas in University Chapel

from each student to each Professor. Dr. Wood supported this department during his lifetime, and at his death left a bequest for the same purpose. The first courses were given in the spring of 1866, and success seemed promised by the attendance of about one hundred students.

The old Arts Department also felt the stir of the times, though less effectively perhaps than did some other parts of the institution or than similar departments of some other institutions. Dr. Ludlow's Provostship continued till 1853, his successor being Henry Vethake, who had already been Professor of Mathematics for eighteen years and Vice-Provost for nine years. He resigned in 1859, and was followed by Dr. Daniel R. Goodwin. Dr. Goodwin in turn resigned in 1868. Dr. Stillé's election in that year marks in many ways a new epoch for the University.

The period closing was one in which several

of the Professors who were to fill a long service and to leave a deep impression on the Arts Department began their course, but much of the discussion of this must be relegated to another section. The election of George Allen as Professor of the Greek and Latin Languages, in 1845 has already been mentioned. Near the close of the period included in this chapter, in 1864, his chair was divided, his teaching being concentrated on the Greek Language and Literature alone. Francis A. Jackson, who had been since 1855 Adjunct Professor of the Greek and Latin Languages with Professor Allen, now began his long and influential career as Professor of the Latin Language and Literature. Professor John F. Frazer had begun teaching in 1844, Henry Coppéc was elected Professor of Belles-Lettres and English Literature in 1855, being succeeded by Dr. Stillé in 1866. Dr. E. O. Kendall also began his career as a teacher at this time, being called from the Philadelphia High School as



DANIEL R. GOODWIN

Professor of Mathematics in 1855, in which position he served for more than forty years becoming Professor Emeritus from 1895 till his death in 1899. The early and lamented

death of Professor Henry Reed fell within the early part of this period.

Various committees were appointed by the Board of Trustees to investigate and propose changes in the Department of Arts, numerous recommendations and proposals were considered and minor modifications made. The number of students still remained comparatively small, and the College Department proper still failed to draw any considerable numbers from outside of the city. There were usually about

twenty graduates in each class, and some one hundred and fifty students in the whole Arts Department. Whether from the character of the community in which it was placed, or from causes inherent in itself or changes in the times the old Arts course was becoming relatively a less important part in the University as a whole and this was destined to become still more distinctly true in the epoch of rapid development that was now to follow.

CHAPTER VII

THE REMOVAL TO THE NEW SITE. DR. STILLÉ'S ADMINISTRATION; 1868-1880

THE real entrance of the University upon a new life, its breach with restrictive traditions, its adoption of a progressive policy, fall within the period of Dr. Stillé's Provostship.

Now for the first time since the Revolution did it secure some of that attention and encouragement from the outside world which it had possessed in the days of the colonial College, and which it has obtained in so much fuller measure within the last twenty years. Reorganization of old departments and the founding of new, erecting of additional buildings, and sloughing off of unnecessary burdens, successful appeals to city and state governments and to private persons for contributions, and the beginning of varied and invigorating intercollegiate relationships, fill up the crowded annals of a period of increasing vigor and advancement. Of these changes the most conspicuous, and probably on the whole the most important was the change of location of the University buildings. What Fourth Street

had become by the beginning of the century, Ninth Street had become by the middle. The University was now in the heart of the city, surrounded on all sides by closely built up

streets and prevented thereby from increasing the size or number of its buildings. Its plot of land was of great money value, but the necessary use of it for its educational work prevented any income being drawn from it. Under these circumstances the question of a second change of location had been brought up repeatedly, but no practicable plan had been reached and the subject had been dropped for the time. A characteristic movement of the later sixties had been an effort to raise by public subscription an endowment fund to make possible some further development of the old De-



CHARLES J. STILLÉ

partment of Arts and to give support and equipment to the new Department of Science which had been struggling into life since 1850. This subscription had dragged along with small results, and was likewise in danger of being



COLLEGE CLASS OF 1854

dropped. In 1868 a happy suggestion was made which promised success at the same time to both of these incipient plans. In that year a vacancy in the Board of Trustees was filled by the election of Nathaniel B. Browne, a lawyer of standing, whose home was in West Philadelphia. He had observed in that section, lying to the south-west of Darby Road or Woodland Avenue, a large tract of land sur-

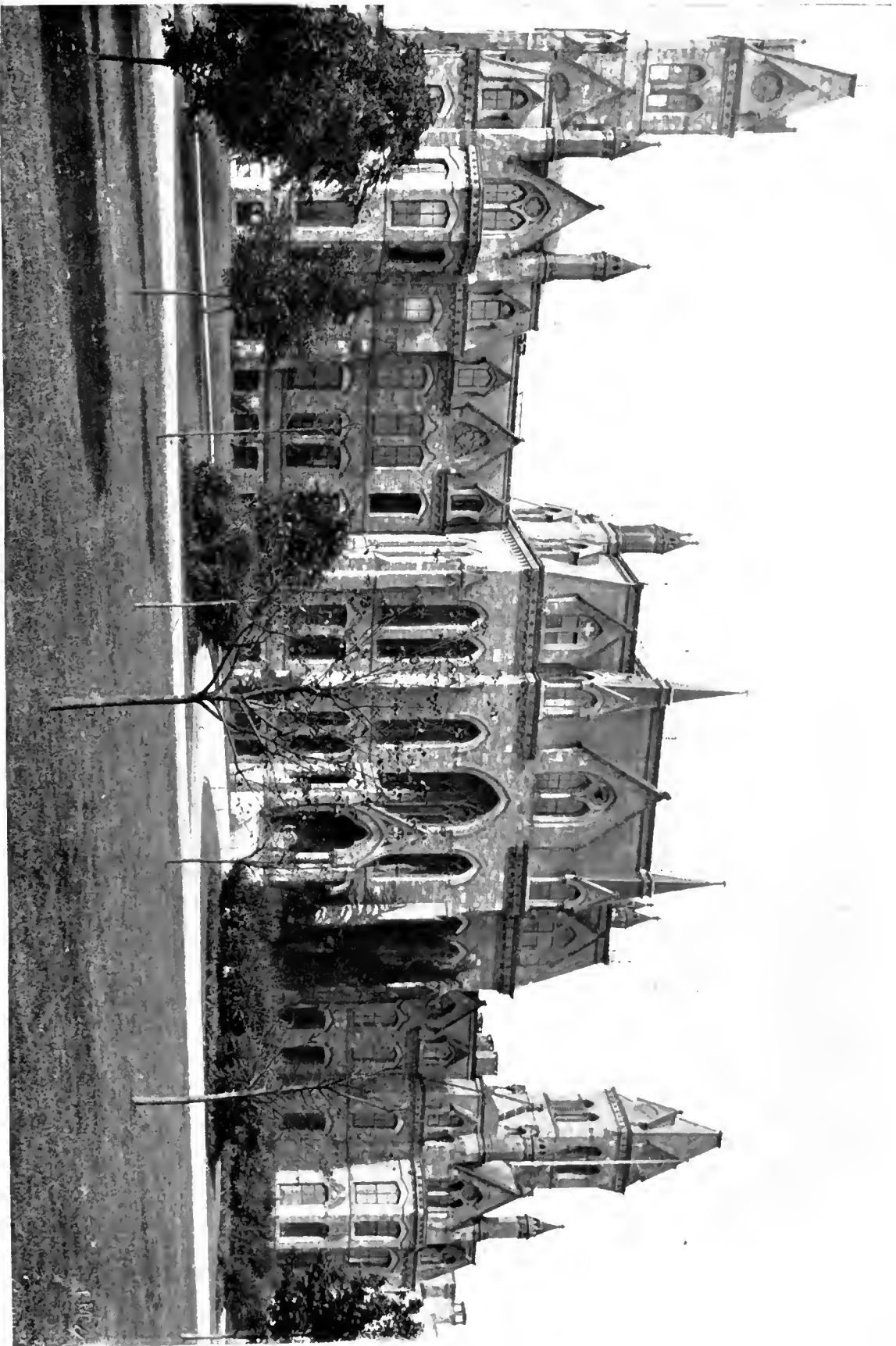
cils were not so responsive, so interested or so generous as their predecessors of 1750 had been, or as their successors have shown themselves, and the proposition met with doubt and delay and opposition. The Provost and several of the Trustees appeared before a Committee of Councils in advocacy of the plan. Select Council was inclined to insist on as large a price as \$15,000 per acre, and the grant at this



TOWER OF MAIN BUILDING—COLLEGE HALL

rounding the Almshouse and City Hospital, belonging to the city but being put to no use. Reverting to the policy of 1750 he now proposed to ask the city to donate or sell for a nominal sum to the University twenty-five acres of this land. Upon a part of it could then be erected the necessary buildings for its educational uses, and the rest could be sold from time to time, as it became more valuable, to furnish an endowment fund. In December 1868, a petition for the grant of this land was presented to the Philadelphia Common Council. Coun-

price of a much smaller area. Common Council favored a lower price and more liberal terms generally. The final outcome was the sale by the city to the University of ten acres of land at \$8000 per acre. In May 1870 the deed was executed. A year after that, in June 1871, the corner stone of "College Hall" was laid. In July of the next year, 1872, the University sold to the United States for the erection of a Post-office and Government Building the property on Ninth Street which had been the second home of the University, occupied for



COLLEGE HALL.

seventy years, as the earlier site had been by the College for fifty years. The new building was occupied for the first time in September 1872. In it and around it has since grown up the new University, extending its landed area, occupying many buildings, teaching many things, drawing to it a constantly increasing number of students, awakening the interest and obtaining the support of the community

Arts. The principal changes in that department at that time were, however, of an internal rather than of an external nature. A tentative element of election of studies in the regular Arts Course was introduced in 1867, a Professorship of History and English Literature was established in the same year and some other changes followed.

But still more closely connected with the



COLLEGE HALL, REAR VIEW

through public and private channels, deserving and securing the loyalty of its alumni, filled with a deepening life and vigor and capacity for development which has so far shown no sign of diminution or cessation. It is difficult to see how such a new life could have been entered upon except in some such new site as it obtained in 1870.

The immediate suggestion that had led to the movement for the acquisition of the new property had been the appeal of Dr. Stillé for a re-organization of the old Department of

adoption of the new site was the growth of the Scientific Department. The Scientific School, initiated in 1852 and actually organized in 1864, had preserved but a sluggish life. No increase of endowment had put it in an effective position, and its response to material interests was not evident enough to bring to it as to the Medical and Law Departments a supporting body of students who looked to it as a preparation for making their living. In the general discussions as to the re-organization of the old College courses in 1867, a committee report

says that, "The consideration of these changes and the reasons for them directed the attention of the committee to the Department of Agriculture, Arts, Mines and Manufactures that was established some years ago, and was partially organized and put into operation. It is believed that such a department is much needed in our city for a thorough course of instruction in the arts mentioned in its title, but it has languished for want of a sufficient endowment. If the proposed changes in the Department of Arts shall be adopted by the Trustees there will be a necessity for an appeal to the public for funds properly to endow the additional professorships, and such an appeal should include one for the real Scientific and Technological Schools above named."

In their final appeal therefore the Trustees included "a sufficient endowment for the Department of Agriculture, Arts, Mines and Manufactures." In the inaugural address delivered by Provost Stillé at the Academy of Music a year later, on the 30th of September, 1868, he gave to the completion of the organization of this Scientific School the most prominent place among his various pleas for the recognition, support and extension of the University. Finally, when the application to the city authorities for the West Philadelphia land was made it was based largely on the need of accommodations for technical scientific courses, as well as for the Department of Arts. Plans for this school were developed by the same committee as had charge of the erection of the new building, and the two plans reacted on one another. Therefore as the building approached completion, the Board brought these changes to a culmination, and in the spring of 1872 changed the name of the "Department of Agriculture, Arts, Mines and Mechanic Arts" to the "Department of Science," constituted a separate Faculty of the department, and issued a public announcement of the plans and objects of the course. The leading idea of the department was to combine a liberal education with technical training. To however great an extent this ideal has been since thought to be impracticable or unsuited to modern requirements, it was in its inception a carefully thought out plan by which the first

two years of the course should be given largely to general cultural studies, such as History, Mathematics, English and the Modern Languages, and to fundamental training in methods of scientific work, while the remaining two years should be given primarily to the technical teaching of Chemistry or Metallurgy, or some one of the various branches of Engineering, or to Architecture, as the student should choose. The Professors who had charge of the purely scientific portions of this course were at first Professor J. P. Lesley, who acted as Dean and taught Geology and Mining, F. A. Genth, Professor of Chemistry, L. G. Franck, of Civil and Mechanical Engineering; and soon there were added to these Professor Barker in Physics, Professor Haupt in Civil Engineering, Professor Richards in Drawing and Architecture, Professor Koenig in Mineralogy and Metallurgy, Professor Sadtler in Chemistry, and Professor Marks in Mechanical Engineering. For the more general studies, the Languages, Pure Mathematics, History, Moral and Natural Philosophy, the students went to those who taught the same subjects to the students in Arts.

Regular teaching in the Department of Science was inaugurated in the winter of 1872-1873. Students must have been transferred from other courses which they were already taking in the University or elsewhere, for the catalogue reports, eight seniors, nine juniors, twenty-one sophomores and forty-five freshmen. There were also some fifteen students taking special or partial courses, besides seven students taking scientific courses in the Department of Arts under the old elective system of 1852. The more practical and popular character of the new department was typified by the announcement in 1874 that the Trustees proposed to grant forty free scholarships in it to students from the public schools, ten of them to become available each year. More than a hundred students actually enrolled seemed to guarantee success at last for the Scientific School; but a still more important step in advance was to come to it within a year or two. This was the bequest to it of the residuary estate of John Henry Towne, one of the Trustees, on his death in 1874. The ultimate value of his gift was to be very con-

siderable, though the immediate income from it was small. It was restricted by the terms of the will to the payment of the salaries of Professors and Instructors, so there was no question of any extension or change in the building as a result of this bequest. In 1875 the Board of Trustees passed the following resolution, "That as a proper, just and grateful tribute to Mr. Towne's memory, and as one means of perpetuating the same, the Department of Science, which he has so munificently endowed, shall hereafter be known as the Towne Scientific School of the University of Pennsylvania."

The Towne Scientific School was nominally a fifth school or Faculty in the University, the four older departments being the Department of Arts, the Medical School, the Law School, and the Auxiliary Faculty of Medicine, but as has been intimated, the inosculation, so to speak, of its teaching force with that of the Arts, their use of the same building, the common attendance of students from both departments in some of the same classes, all connected it even more closely with the Department of Arts than the Auxiliary Faculty of Medicine was with the main Medical School, so that the number of entirely separated departments was still only three.

The sale of the Ninth Street buildings in April 1872, of course brought up the question of what should be done with the Law and Medical Schools. As for the former, the old division between the more professional and the more scholastic ideal sprang up again at once. Professor Miller, who had been Dean of the School since the resignation of Judge Sharswood, represented the former and brought up again the proposition to place the Law School

in the midst of lawyers' offices in the old building owned by the University on Fifth Street above Walnut. His plan was that the building should be remodelled so that the first floor should consist of offices which he himself would occupy, and pay a rent for equalling that received at the time for the whole building, and he offered himself to pay the expense of rebuilding. The upper floor would then be available for the uses of the school, and Professor Miller would allow to the students the use of his own law library. A number of arguments

against this plan were placed before the Board and several alternative plans were proposed. They were all finally rejected, with the understanding that in future the law lectures would be held in the new building across the river.

This decision led to Professor Miller's resignation, after a period of twenty years of service, dating from the creation of the Faculty in 1852. E. Coppée Mitchell was elected in 1873 to succeed him. The departure to the new building was not made immediately. During the winter of 1872-1873 lectures were given in one of the rooms of the Ninth Street building; in



JOHN HENRY TOWNE

From canvas by William Morris Hunt, in Univ. Library

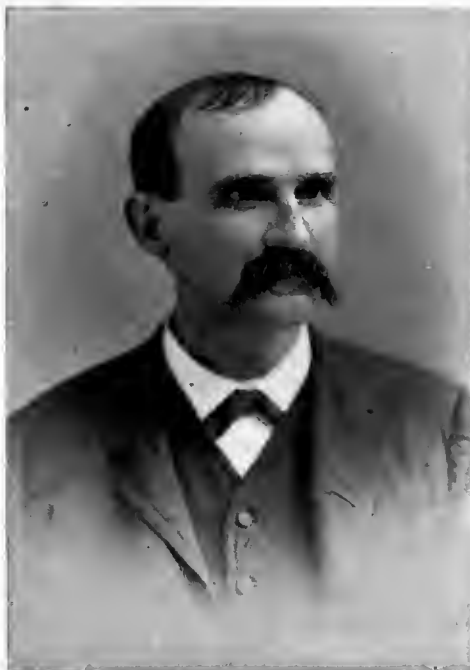
the season of 1873-1874 in the "Paine Building" on Ninth Street below Locust, leased by the University for the temporary use of the Law and Medical Departments. Finally in 1874 the Law Department was regularly transferred to the largest room in the new University building at Thirty-fourth Street and Woodland Avenue. Accompanying this change of location were several other distinct steps in advance. An important reorganization of the school in the direction of greater breadth and efficiency was made. Two new Professorships were added, the one of Personal Relations and Personal

Property, and the other of Medical Jurisprudence. The second of these lectureships was never placed on the same plane as the others in the school, attendance was not compulsory, and eventually, notwithstanding its evident value, it was abolished altogether. To the former chair were assigned the subjects of Personal Relations, Corporations, Agency, Partnership, Insurance, Title to Personal Property, Contracts of Sale, Bills of Lading, Bailment, Common Carriers, Pledges and Chattel Mortgages, Executors and Administrators. James Parsons was in 1874 elected to this Professorship, and John J. Reese, M.D., already Professor of Medical Jurisprudence and Toxicology in the Auxiliary Faculty of Medicine, to the other chair. It was arranged that there should be two terms in each year, covering the months from October to May, and that the required course should be for two years. The requirements for graduation were made more strict. The full course of instruction including both lectures and examinations with every Professor except the lecturer on Medical Jurisprudence, must be taken. More formal general examinations

must be taken each year, and the candidate must present an essay on some legal subject. Moot courts were re-arranged so as to fall on special evenings, access to the Library of the Law Association was obtained, and various prizes were established; lastly, the Philadelphia courts, notwithstanding considerable professional opposition and jealousy, adopted rules admitting graduates of the Law Department of the University to practice if they also passed the usual preliminary examinations designed to test the possession of an ordinary English education. Thus the Law School at the end of its first quarter-century of existence had

a Faculty of five members, a group of students averaging about one hundred and twenty-five, with rigorous requirements for its degree, although with very little in the way of entrance requirements, and with a growing, if long delayed, recognition on the part of an exceedingly conservative profession.

The other professional school might well have hesitated even longer than the Law School at the removal from the centre of the city. So many of the clinical opportunities for the students, so close a connection on the part of the Professors existed with the old Pennsylvania Hospital at Ninth and Spruce Streets, that a removal of the school to West Philadelphia was a most serious matter. And like the Law School, there was a transition period in which the medical courses also were given, for two years after the sale of the Ninth Street building, either there or in the building provided for them jointly with those of the Law School on Ninth Street below Locust. During this time, however, a building was being put up especially for the Medical School in West Philadelphia in the same square of ground as the main



E. COPPÉE MITCHELL

building, but facing on Thirty-sixth Street. To this they moved in the fall of 1874. The Almshouse Hospital was of course closely adjacent, but the use of the old Philadelphia Hospital would have been too sorely missed. The recognition of the desirability of keeping all departments of the University together and at the same time providing ample facilities for clinical study had suggested the establishment of a new hospital in the immediate vicinity of the University. There was abundant need for such an institution. In this respect, as in so many others, Philadelphia had early attained a preëminence which she had allowed to slip from

her during the middle years of the century. There had been a time when the Pennsylvania Hospital had been perhaps the best equipped in the world; certainly the best conducted and most liberal in its provision for patients of any hospital in any community in America. But in 1872, while New York City with its population of about a million had six thousand three hundred and twenty-five free beds in hospitals, Philadelphia, with some seven hundred thousand population, had only one thousand one

brought a daily harvest of accidents, happening for the most part to those who were least able to afford good medical treatment at their homes. Therefore when Dr. William Pepper, Dr. Horatio C. Wood, Dr. William F. Norris and others proposed the founding of a new hospital, there was abundance of argument to be brought forward for its propriety; argument that might appeal to men interested in the advancement of the University, patriotic citizens of Philadelphia, or of Pennsylvania, and



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hundred; that is, with almost three-quarters of the population it had much less than one quarter as many free hospital opportunities. Since the middle of the century the population of the city and the state had been growing rapidly, their wealth even more rapidly than their population. Pennsylvania's manufactures, its internal commerce, the products of its mines, had increased many fold, but the accommodations of Philadelphia hospitals had not quite doubled. Moreover, the railroad service, manufacturing and other dangerous occupations

to those actuated merely by humane sympathies. The movement was initiated by the calling of a mass meeting of alumni of the Medical School for June 12, 1871. At this meeting it was decided to recommend the project to the Medical Faculty and to the Board of Trustees. The Faculty took up the matter with enthusiasm, and appointed a committee to act with the committee of the alumni. The Trustees, led by the personal enthusiasm and activity of Dr. George B. Wood, gave immediate approval and appropriated

ground for the purpose. The joint committee which had been formed by the alumni and Faculty asked a number of prominent citizens to join with them in the effort to obtain funds for the projected hospital. Within the year 1872 three forms of appeal were made by them, and responded to with unexampled liberality. To the government of the state they appealed, partly on the ground that accident and other cases would come to the hospital from all over the state, partly on the ground that the University was a state organization and so should be aided by state appropriations in carrying out its various forms of usefulness. As a result of this appeal the Legislature in April 1872, granted to the University for the purpose of building a hospital a sum of \$100,000, on condition that \$250,000 in addition should be collected from other sources, and that at least two hundred free beds for injured persons should be maintained forever. To the government of the city they appealed on the ground of the direct need of the city for more hospital facilities and the insufficiency of the ground which could

be afforded from the tract already in the possession of the University. City Councils therefore in May 1872, granted five and a half acres adjoining the existing site on condition of the hospital furnishing fifty free beds for indigent sick. To the charitable public generally similar appeals were made. Subscriptions were asked for, payable in four annual instalments. \$3,000 or multiples of that sum it was arranged should give the donor the right to nominate one or more free patients in the hospital. Smaller sums than \$3,000 were also asked. One picturesque incident, at least, arose in this private subscription. Isaiah V. Williamson was a man

noted for his wealth but also almost equally for his unwillingness to give from it. Two members of the committee, however, one of whom was Dr. Pepper, with some reluctance, braved his repellent reputation, visited him in his dark little office in an obscure building on a narrow street, and laid their request before him. He allowed them to talk for almost half an hour only asking two questions, and then brought the interview to a close saying he would think the matter over. In a few weeks the hospital committee were surprised to receive

from him a subscription of \$50,000, the largest single contribution to the hospital fund. But curiously enough from that time forward Mr. Williamson became a liberal giver to philanthropic objects. He gave \$50,000 more to the University and left \$100,000 to it in his will, and his office became a regular calling place for those interested in various charities. His largest gift was approximately \$3,000,000 to found a school for training mechanics. Other liberal gifts were made and no ultimate difficulty was found in obtaining from private sources the \$250,000 necessary to

make the gift of the state operative. At the session of the Legislature in the next year, 1873, a request for an additional \$100,000 for the hospital fund was made in the name of the University by the Judges of the Supreme Court and of the City Courts and by a number of prominent citizens who had been interested in the movement. This sum was appropriated in April 1873, on condition of the collection of a further sum of \$100,000. In these various ways within a period of three years, \$552,042 had been collected besides land sufficient for any probable extension of the hospital. The erection of the building was begun in the spring



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ISAIAH V. WILLIAMSON

of 1873, it was dedicated in June and opened for patients in July 1874. In 1875, its first calendar year, the hospital received six hundred and forty-two patients and its seven dispensaries treated four thousand five hundred and sixty-nine cases. A Board of Managers of the Hospital was created composed of five Trustees of the University, seven members of the Medical Faculty, three persons elected by the

was created whose services in overseeing the various parts of the hospital, in collecting money for various minor purposes and in creating a general interest in the institution have been inestimable. All these officers served without pay. In 1874 an unsuccessful request for a third appropriation of \$125,000 was made to the State Legislature. Thus within a period of five years a veritable new



MAIN HOSPITAL BUILDINGS

general contributors and three elected by the Medical alumni. Dr. Wood was its first President, Dr. Alfred Stillé its Secretary, and Saunders Lewis its Treasurer. Three Professors of the Medical School, and nine clinical Professors and Lecturers not on the Faculty, made up the Medical staff; there were two resident physicians chosen from the Medical alumni for a service of six months, and seven chiefs of the respective dispensaries with assistants. In 1875 a Board of Women Visitors

department, though not of a scholastic character, was added to the University; and one whose good work, whose good name, and whose continually expanding field of service has been of the greatest advantage to the University, as it has been to the community.

There were now three buildings on the new location, and with the exception of one additional building intended partly to give additional room to the Medical School, partly for another department, which was built facing

Spruce Street on the same square of ground in 1879, there were to be no more buildings erected during the Provostship of Dr. Stillé. Of less material development and expansion, however, there was no lack. In 1877 a Department of Music was founded. Dr. Hugh A. Clarke was elected Professor of the Science of Music, the intention being to afford opportunities for the study of counterpoint and harmony to advanced students, giving the degree of Bachelor of Music to those who had fulfilled the requirements of a two years' course. The instruction was given in the College building. The one remaining new foundation of this period was the Department of Dentistry. A School of Dentistry had been established in Philadelphia as early as 1850, known as the Philadelphia College of Dental Surgery. After four years it was re-organized as the Pennsylvania College of Dental Surgery. At a later time the Philadelphia Dental College was also established. The growth of dental science, the rise of its practice to a higher plane, and the development of dental associations and of independent Dental Schools attracted much attention in the two or three decades just before and just after the middle of the century. It seems to have been felt that the subject should of right be connected with the teaching of medicine as one of its subordinate branches. In 1878 the Trustees of the University made propositions looking toward an absorption of the Pennsylvania College of Dental Surgery as one of its departments. The offer was declined although the two principal Professors in that institution, Drs. E. T. Darby and C. J. Essig, accepted the invitation for themselves personally. On March 6, 1878, the Trustees passed resolutions that there should be a Dental Department of the University with a separately organized Faculty. Two Professors were to be chosen, one for the Chair of Mechanical Dentistry and Metallurgy, and one for that of Operative Dentistry and Dental Histology. There were to be five other Professors, but they were to be the same as those who taught the respective subjects to Medical students. A laboratory building, already referred to, was built during the winter of 1878-1879, for the use

of the Medical and Dental Departments jointly. The gentlemen already named were elected to the specifically dental chairs and proceeded to the work of organizing the department. The course was to be of two years, and involved examinations in all the subjects given, before obtaining the degree of Doctor of Dental Surgery.

An explanatory letter was issued, intended to conciliate the hostility or prevent the misunderstanding of those who felt that a Dental Department was something of a degradation to the institution. In the circular the Secretary of the Faculty of Medicine says:

"So many inquiries have been made and so much misunderstanding appears to exist with regard to the Dental Department of the University of Pennsylvania in its relations to the Medical Department, that it has been deemed advisable to prepare the following circular letter for those who may desire further information. The Dental Department was instituted on the principle, now admitted by all the better class of dentists and liberally disposed physicians, that Dentistry should be a specialty of medicine just as Ophthalmology, Otology, etc., have become.

"The University of Pennsylvania now proposes to establish a course, the first session of which is identical for medical and dental students so far as anatomy, chemistry, physiology, and materia medica are concerned. As a part of this course is included laboratory instruction in chemistry three hours per week, in which the student personally practises the required manipulations under the direction of demonstrators precisely as he does practical work in mechanical and operative dentistry. In addition to this, the dental student has regular instruction from the chairs of operative and mechanical dentistry, which the medical student does not, of course, receive. For the present the dental student is excused from the practical work in the histological laboratory two hours per week and work in the pharmaceutical laboratory two hours per week. A comparison of these studies with those of the ordinary, or dental curricula, will show that the dental student of the University pursues in his first year a course wider and

more thorough than the medical student of all but one or two medical colleges in the United States."

Work was begun regularly in the fall of 1878 with fifty-three matriculates, and at the Medical Commencement of 1879 graduates in Dentistry appeared also.

One more change belongs to this period, in this case a restriction rather than an extension of the field of work. From its very earli-

school and was finally closed altogether. The Charity Schools were in a different category, as their support was a legal trust which the Trustees were bound to carry out. The need for them, however, had almost if not quite disappeared. The development of the free public school system now furnished abundant facilities for the education of all children, however indigent, and the entire inappropriateness of carrying on such education in any kind of connection with



OLD DENTAL HALL, NOW LABORATORY OF THE MEDICAL DEPARTMENT

est days, the University had been entrusted with the carrying on of the Academy and the Charity Schools in addition to its more purely collegiate work. The Academy had been gradually gotten rid of. At first almost indistinguishable from the College work, in 1791 and still further in 1810, the Academy or Grammar School was separated off under the care of teachers distinct from the Professors who taught in the College. Somewhat later it was removed, as has been said, from the Ninth Street Building to the Fourth Street Hall, and here it became a mere preparatory

that given in the University was of course manifest. In 1877, therefore, the matter was referred to a committee for investigation and advice. In accordance with their recommendations it was determined to discontinue the schools in their old form on the 1st of July, 1877, the income resulting from the trust being applied for the future to the free education of young men, not able otherwise to pay for tuition, in the Department of Arts or the Towne Scientific School, in the West Philadelphia building. The removal of these two lower educational burdens left the institution

more free to carry on its higher task of College and University work.

This work had been progressing, as has been said, with much increased vigor. The number of graduates in the Collegiate Department had risen to thirty or forty annually, while there was a still larger number of students in each class who for one reason or another did not graduate. But as far as this department of the University went it was still eminently local in its character. The larger life that comes from much intercourse with other Colleges on the part of administrative Officers, Professors and students; that comes from obtaining students from all parts of the country, from gathering around her buildings a cosmopolitan, though temporarily, a strongly local and loyal life, was not hers, except in as far as the Medical and Dental Departments drew students from a distance. The University was still, in its Board, in its Faculties, and in its body of students, preeminently a local Philadelphia institution. Moreover her material equipment, though so far in advance of her earlier limitations, was still restricted. The Library was heaped in one room of the College building, the Law Department had no library and possessed but a single room for lectures and study, however spacious that one may have been; there were no dormitories and no restaurant, and the students had no gathering place except in the "Assembly Room" of the College building; all University life had to exist in the three buildings or scattered and dissipated in the homes and the boarding houses of the students. Two of the principal characteristics of the next period, the administration of Dr. Pepper, were to be found in these points, the decreasingly local character of the University and the great addition to its material equipment.

With the recent growth of the University the question of its official organization, and especially of the powers of the Provost, had come up time and again. In the original plan of the institution no individual administrative head had been contemplated. The powers of the Board of Trustees had not only been supreme but they had been intended to extend to the regulation of the minute questions of detailed regulation. The Board had an annually elected

President and Secretary, and appointed committees from time to time. These, it was expected, would do the actual work of carrying on the institution. When Dr. Smith became Provost his energy, assertiveness, ability and success soon made him the head and front of the whole institution; but this was simply a matter of personal domination, from which the Trustees revolted occasionally, asserting their position and power to control the administration of the College.

One of the earliest disputes in its history had been between the Provost and the rest of the Faculty, in 1757, as to whether he alone or the Vice-Provost and other Professors also should sign the diplomas. But even when Dr. Smith was at the height of his power and influence his only official relation to the Board was that of Secretary. He had no voice nor vote nor position on Committees, and no administrative powers except such as were obtained by his personal assertion. In later days, however, when new departments were added, and when less vigorous men occupied the Provostship, the position became practically that of the head of the Arts Department, only distinguished from the Deanship of the Medical and Law Schools by the fact that the Provost presided at Commencements and conferred all degrees. He never attended the meetings of the Board of Trustees except when he was specially summoned to give information. The real initiative in the institution, as far as there was any, was taken by, and the administration was centered in, the various committees of the Board of Trustees, except when individual professors chose to submit proposals voluntarily to the Board. That "peculiar American institution," the American College President, had no existence at the University, whose administration was a veritable government by committees. During Dr. Stillé's term of service, however, the prominence, the influence and the importance of his office was being increased steadily although without nominal change of organization. He had been chosen largely because of the initiative he had taken in the proposal of modifications in the Arts course, and with the hope that new vigor would be thereby infused into the affairs of

the University. Soon after his accession to office he had published a "Memoir of the Rev. William Smith, D.D., Provost of the College, Academy, and Charitable Schools of Philadelphia," a tribute to, and glorification of the most vigorous and self-assertive of his predecessors. In 1871, a Committee of the Board at Dr. Stillé's suggestion recommended a change in the rules by which the Provost's position should be made one of greater power and responsibility. This proposition met with opposition because it would have made him head of all the Faculties, including that of Medicine, which had always maintained a quasi-independent position. The plan was finally defeated in the Board. In 1874 he brought the matter up again but it led to nothing except that the Provost was given the privilege of attending meetings of the Board of Trustees in order to give information to its members. He had no vote or official voice or influence, and was looked upon in this position as simply an organ of communication between the Faculties and the Board. As a matter of fact he seldom attended the meetings and the growing influence and importance of his office arose simply from the natural requirements of the position. Although the members of the Board were extremely able and eminent men, they had neither time, knowledge, patience nor judgment to attend to the details of administration of an institution constantly growing in extent and diversification of parts. The lack of official powers therefore acted simply as an obstacle to the Provost in the performance of his work and placed the University at a distinct disadvantage in comparison with other American Colleges with a more centralized and efficient organization. The dissatisfaction with this condition of affairs culminated in 1880, when Dr. Stillé on the 30th of January sent a letter to the Board of Trustees declaring his inability to continue to do good service as Provost with the limited powers attached to his office, and announcing his intention of resigning from it. Other elements in the situation of the University no doubt combined with this matter to produce a certain amount of willingness on the part of the Trustees to contemplate Dr. Stillé's resignation without regret.

The financial condition was becoming steadily worse as the new development was carried on without any commensurate increase of funds. Conflicts of authority had arisen on questions of discipline between the Board, the Faculty, and the Provost. Certainly nothing was done to make the changes in organization which would have enabled Dr. Stillé to withdraw his declaration, and a committee was appointed in February to provide a successor to the Provost. Dr. Stillé's resignation was finally sent in and accepted, September 7, 1880. In the meantime the committee on the new Provost after much consideration, investigation, and negotiation, had obtained the consent of Dr. William Pepper to accept the Provostship, but only on condition that those changes which had been recommended by Dr. Stillé should be introduced in their fullest form. December 7 the Committee introduced a report in favor of amending the by-laws of the Board on these lines. The principal object of the amendments is expressed in the following clause: "The Provost shall be the chief executive officer of the University. He shall be the presiding officer of the Board of Trustees, in the absence of the Governor, and shall have the right of offering resolutions and of speaking on all questions that may come before the Board, and shall be *ex officio* a member of all standing committees. He shall be a member of and President of each Faculty, and when present at a Faculty meeting shall preside thereat."

The Committee accompanied the recommendation of these changes with a statement of the conditional character of Dr. Pepper's willingness to accept the Provostship. He was nominated at the same meeting. On the 12th of January, 1881, the amendments were adopted and Dr. Pepper unanimously elected. He attended the meeting of the Board on February 1st, when his letter of acceptance was read. At this meeting the Provost presided over the Board for the first time in the history of the University. The new position of the Provost as veritable head of the whole University in law and in fact was to be another of the characteristics of the next period.

CHAPTER VIII

THE EXTENSION OF MATERIAL EQUIPMENT UNDER THE ADMINISTRATION OF DR. PEPPER,
1881-1894

DR. WILLIAM PEPPER was inaugurated as Provost at the Academy of Music, February 22, 1881. He was at the time Professor of Clinical Medicine in the Medical Department of the University. His whole career and even ancestry had been closely connected with the University. His father, Dr. William Pepper, though a graduate in Arts of Princeton, obtained his Medical degree at the University and was Professor of the Theory and Practice of Medicine there from 1860 to 1864. The younger William Pepper graduated at the University in the College Class of 1862 and in the Medical Class of 1864. He became Lecturer on Morbid Anatomy in 1868 and was always afterward connected with the Medical Department, rising through successive grades to the same professorship his father had

held. His interest in the University might therefore be counted on as being bred in the bone. His energy in the display of this interest had become evident in his work in connection with the creation of the University Hospital. He was one of the first to suggest it, the most constant to advocate it, and as chairman of the commission which was formed to bring it into existence showed executive ability of a very high order. On the resignation of Dr. Stillé therefore and after a somewhat prolonged search for a successor the Board of Trustees asked Dr. Pepper to accept the Provostship. His acceptance was, as already

stated, made conditional on the completion of the process by which the Provost was becoming the real executive head of the institution. According to the Act of 1791 under which the University was organized the Governor of the state was *ex-officio* President of the Board of Trustees, and had originally acted as such. But as a part of the gradual dissolution of close connection between the State Government and the University, the Governor early ceased to attend the meetings or to take any part in the business of the Board. Since that time some member of the Board had been habitually chosen to preside at each meeting, but this involved no further administrative duties. After 1881 the Presidency *pro tem.* of the Provost was virtually a real Presidency both of the Board and of the University. He was not a member of the Board but he pre-



WILLIAM PEPPER

sided, appointed committees, and represented the Board in financial and legal as well as in academic affairs. It has since that time moreover been understood that the Provost is to act in every organization which draws its authority from the University, and no considerable action of any kind is taken without his knowledge and approval. The fact that Dr. Pepper was not a Professor in the College Department as all his predecessors had been, made a still more distinct change from the Provostship of the past. The teaching side of the office disappeared altogether, as did the disciplinary, except in grave cases, while the administrative side was

broadened and strengthened, and raised above all the other elements in the government of the institution, except in case of last resort, when of course ultimate power and authority resides in the Board of Trustees. The individuality of the Provost has therefore counted for vastly more during the last two periods than ever before, and no account of the history of the University since 1881 which did not take into account the vigor and versatility of Dr. Pepper and the equally well marked characteristics of his successor would be recognizing the true forces at work in its development.

One of the first movements under the new administration was an application to City Councils for a grant of more land. The original plot of land in West Philadelphia, increased as it had been by the grant to the Hospital was already so far occupied by the four buildings erected upon it as to limit the formation of any far-reaching plans. On the other hand, such plans were filling the heads of more than one man connected with or interested in the University, besides the Provost. A petition signed by various influential citizens was therefore placed before the Mayor and by him sent with a strong recommendation for favorable action to Councils, in January 1882. As a return the University offered to establish and maintain fifty free scholarships to be awarded to students of the Philadelphia public schools. These were intended in part to be substitutes for the forty free scholarships previously established without endowment or permanent foundation in the Towne Scientific School, and were estimated to have an annual value of at least \$7500. The proposal commended itself to City Councils, the return seemed fair and an ordinance was passed in the same month giv-

ing to the University the city land lying between Spruce Street and Woodland Avenue, and the Almshouse building, and extending from Thirty-sixth Street almost to Thirty-ninth. This increased the property of the University in West Philadelphia to twenty-seven acres, and made possible the erection of buildings for the new uses that were now being proposed.

The first extension of the sphere of University activity to be made during the new administration did not however, involve a new building. During the exercises of Dr. Pepper's inauguration he was

informed of the intention of Joseph Wharton, a prominent Philadelphia business man, to endow in the University a new department, to be devoted to the teaching of matters connected with finance, business, economic processes and relations, political science and history. Mr. Wharton's proposals were subsequently brought before the Board of Trustees and accepted by them. They involved the gift of \$100,000, and the formation of a new Faculty. The department was to be known as the "Wharton School of Finance and Economy." The endow-



JOSEPH WHARTON

ment was not really sufficient to support as extensive a plan as the founder had sketched out, but as the requirements were not rigid the school soon took shape as an adjunct to the Department of Arts and the Towne Scientific School, utilizing part of the teaching force of these departments and adding simply those required by the new subjects of study introduced. The additional chairs required were created and in 1883 filled as follows: Albert S. Bolles, as Professor of Mercantile Law and Practice; Edmund J. James, as Professor of Finance and Administration; John Bach McMaster, as Professor of American History, and Chester N.

Farr, as Instructor in the Theory and Practice of Accounting. The original plan of a three-years course was changed to that of a two-years course, parallel to the Junior and Senior years in the other two departments with which it was allied. The foundation of this school has a special interest, apart from the good work it was destined to perform, in being in many ways a return to Franklin's ideas of a purely utilitarian education. To train young men for the actual business life they would probably be engaged in, to make the subjects of their College course exactly those which would be in line with the subjects of interest in their later callings, to make College education "practical," was alike the thought of Franklin and Mr. Wharton; and it is an ideal very different from that which looks upon College education as a form of general culture, as training the powers of observation, arousing interests, cultivating tastes, maturing judgment and creating an appreciation of all aspects of life and society, quite apart from any connection of these with the present or future material interests of the student. The actual development which the Wharton School took has been somewhat less practical and more cultural probably than was the original expectation, but it has always attracted a class of students who otherwise would probably not have gone to College at all or would have left at the end of their first or second year, preferring to begin at once some direct preparation for the material work of life. This school also was perhaps the first branch of the Collegiate Department to attract students from a very great distance to Philadelphia, as contrasted with the almost purely local clientage of the Department of Arts up to and even beyond the time of the foundation of the Wharton School.

During recent years the Scientific Department had been growing in number of students and in clearness of plans on the part of its Faculty. In 1882 its course was lengthened to five years, so that in future the old ideal of a combined cultural and technical course could be kept up and yet time obtained to make the latter part of the work thorough. An increase in the entrance requirements was also intro-

duced beginning with 1884. For a few years also the professional degrees of Civil Engineer, Mechanical Engineer, and Mining Engineer, were given at the expiration of the fifth year of study in addition to the degree of Bachelor of Science. Later however, after 1886, the degree of Bachelor of Science was given at the end of the fourth year, instead of being given with the professional degrees, till a few years afterward the conferring of these latter was suspended and for them was substituted the general degree of Master of Science. The entrance requirements for the Department of Arts were advanced at the same time, and some extension of the elective system was also made.

By this time the complications of several Faculties legally separate, but as a matter of fact made up largely of the same Professors, occupying the same rooms, and closely related at many points, had become a serious matter; and a great step in simplicity of organization was brought about in March 1883, by which the "College Faculty" was created, made up of the former Faculties of Arts, of Science, of Finance and Economy, and of Music all of which were now relegated to the position of Standing Committees of the Faculty only. There was also for the future to be but one Dean and Secretary for the united body. The College was therefore coordinate in organization with four other departments; Medicine, Law, Dentistry, and Sciences Auxiliary to Medicine; and with a fifth which had been established in 1882.

This was the Department of Philosophy, the systematic arrangement of advanced work, for the most part in the subjects taught in undergraduate form in the College. In 1852 Bishop Potter, then a member of the Board of Trustees had proposed that post-graduate instruction should be substituted in great part or entirely for the undergraduate teaching then being given in the Department of Arts, relegating this elementary work to the lower schools. Each member of the Faculty was asked to give his opinion, which they did, in each case adversely, and the matter was then dropped. Since that time advanced courses had occasionally been offered beyond those provided

in the regular curriculum, and students had frequently asked for post-graduate instruction. Nothing however, had been done to systematize or to develop this work. Most of the Professors however were willing to add such advanced courses to the undergraduate courses which they already gave, and to many of them it had long seemed that this was the logical and necessary culmination of truly University teaching. By resolution of the Board of Trustees therefore, in 1882, a Faculty of Philosophy was established to conduct and supervise such instruction and to grant the degree of Doctor of Philosophy to graduates who passed satisfactory examinations. At a meeting of a number of the Professors interested held at the house of Dr. Pepper, December 9, 1882, this Faculty was organized and a general system of post-graduate instruction agreed upon. The new courses were mentioned in the catalogue of 1882-1883, and a separate announcement was soon issued. Courses were offered by fifteen instructors, and the requirements for the degree stated. But the organization was defective, the rules indefinite, and the interest felt by some of the members of the Faculty very slight. For some years therefore but little progress was made. At no time were there more than a dozen students, and in several important departments the teaching was perfunctory or non-existent. In the winter of 1888 a new plan of organization was adopted, and during the winter of 1889-1890 a distinct advance was made. Courses were offered by twenty-five instructors, there were thirty-three matriculated students, and more attention began to be given to graduate work. From this time the progress of the Graduate School was constant and it rapidly became one of the most valued and distinctive departments of the University although appealing necessarily to the interest and appreciation of a somewhat small class in the community. Even more than the department the foundation of which was last described, it drew its students from outside of Philadelphia. In 1892 there were about a hundred students and among them were graduates from thirty-seven different Colleges. For some years this remained about the average number of students, but there was a distinct

improvement in the adequacy of their previous preparation, and an increase in the seriousness of the study, as well as a rising interest in this part of their work among the Professors, most of whom were giving undergraduate courses also. In 1886 three or four Professors had been added to the Faculty to teach in this department only, but this policy has never been carried to any appreciable length.

The next department to be established was necessarily dependent on the erection of a new building. This was the School of Veterinary Medicine. Like many other educational movements this had been anticipated in a much earlier period of the University's history. The introductory lecture to the regular course on the Institutes and Practice of Medicine, given by Dr. Benjamin Rush, November 2, 1807, was "Upon the Duty and Advantages of studying the Diseases of Domestic Animals and the Remedies proper to Remove them." In his conclusion Dr. Rush, says "I have lived to see the Medical School of Philadelphia emerge from small beginnings and gradually advance to its present flourishing condition, but I am not yet satisfied with its prosperity and fame, nor shall I be so until I see the Veterinary Science taught in our University." He proposed the establishment of a chair of Veterinary Medicine in the Medical Department of the University. A period much longer than that which had then elapsed from the beginning of the Medical School was destined to pass before Dr. Rush's anticipations were to be fulfilled at the University, or elsewhere in America, for that matter, and when "Veterinary Science" did come to be taught it was not under the auspices of the Medical School but independently. The time did finally come and in the fall of 1882 and the spring of 1883 two contributions of \$10,000 each were made by J. B. Lippincott and J. E. Gillingham for the purpose of establishing a Veterinary School. The Trustees formulated plans for the organization of a Faculty, providing that most of the teaching should be given by Professors in the Medical School and the College, but that in addition to these there should be distinctive teachers of certain branches peculiar to veterinary medicine. Dr. Rush Shippen Huide-



VETERINARY HALL AND HOSPITAL

koper, who had studied at various European Veterinary schools was elected Professor of Veterinary Anatomy and Internal Pathology. Later Dr. William Zuill was elected Professor of Surgical Pathology and Obstetrics. The remainder of the instruction except purely mechanical parts was furnished by the Professors of the Medical Department. A three years' course was provided for, giving to students a general course in medicine and a special training in the medical and surgical knowledge involved in the treatment of domestic animals. Land was set apart for the uses of the new school from the tract lately given by the city, the year 1883 was used in the collection of further funds and the erection of buildings, and on October 2, 1884, the school was opened for its first session with an enrolment of twenty students. The need for a hospital for animals was felt to be as great as in teaching medicine in its application to human beings, and the erection of hospital stables was soon begun. In 1887 an appropriation of \$25,000 was secured from the State Legislature for this purpose conditioned on the establish-

ment of twelve free scholarships to be held by students nominated by the Governor of the state. As in the University Hospital, the administration of the Veterinary Hospital was put in the hands of a Board of Managers, consisting of five Trustees, two members of the Faculty and seven citizens. On the death of J. B. Lippincott, who was in a sense the founder of the school and had been the most liberal contributor to its support, his interest was continued by his family, and one of his sons has since been continuously Secretary and Treasurer of the Board of Managers, Mr. Gillingham, the other founder, being its President.

Within a few weeks of the opening of the Veterinary School, instruction was begun for the first time in the School of Biology. Some of the early efforts to introduce courses in natural history into the University have already been mentioned. Except as an adjunct to the technical study of medicine these had obtained no permanent foothold. Even as represented in the courses auxiliary to medicine and in a course preparatory to medicine introduced into the College in 1882, they were still looked upon from a purely utilitarian point of view and treated as merely preliminary to medical study. In the year 1884, however, a school was projected in which the biological sciences should be studied, not only for this purpose but for their own sake. This department was largely the creation of Dr. Horace Jayne, who was a graduate of the College of the Class of 1879 and of the Medical School of the Class of 1882. He had studied abroad and at Johns Hopkins University, and in 1884 took up the work of placing the teaching of the natural sciences at the University on a more independent and more worthy footing. The



J. E. LIPPINCOTT

result of the efforts then made and of the liberal money contributions made by Dr. Jayne himself was the foundation of a School of Biology, the assignment of a tract of land at the extreme western end of the University's property for its building and for a botanical garden, the erection upon this of the Biological Hall, the organization of a Faculty and the commencement of instruction on December 4, 1884. Dr. Joseph Leidy was Director of the School, in addition to his work in the Medical Department, Dr. J. T. Rothrock, Professor of Botany, Dr. Horace Jayne, Professor of Vertebrate Morphology, Dr. Benjamin Sharpe, Professor



BIOLOGICAL LABORATORY

of Invertebrate Morphology, and Dr. N. Archer Randolph, Instructor in Physiology.

A peculiarity of this department was its rule of admission of women upon equal terms with male students, this being at that time an entire anomaly in the University. The school immediately obtained a certain clientele, partly of those who anticipated taking a medical course later, partly of those who were engaged in preparing to teach similar subjects, some who simply chose these subjects as parts of their College course of study, and a few advanced students engaged in independent investigation. An early addition to the Faculty was Dr. John A. Ryder whose wide learning and original studies in Embryology and in other branches of Zoölogy showed him to be a really great scientist, and whose enthusiasm as a teacher and kindness of disposition made him a most valuable member of any organization and brought a general feeling of consternation at his early and unexpected death. Dr. Chas. S. Dolley, Dr. E. D. Cope, Dr. W. P. Wilson, Dr. George H. Horn and Dr. John M. Macfarlane became also somewhat later, members of the Biological Faculty. The School was officially a part of the College, not an independent department.

An offshoot from this, or rather, a part of its equipment, was the Laboratory of Marine Biology established in 1891 at Sea Isle City, New Jersey. Some five acres of ground on Ludlam's Bay were given to the University by Charles K. Landis, the principal landowner of Sea Isle, and an industrious collection of funds by some of those interested in the school made possible the building of a Laboratory with aquaria and other necessary furniture, boats, dredges, etc. The object was to give facilities for investigators and students, especially during the summer months, and some good work was done, especially in testing the possibility of artificial propagation of oysters on the New Jersey coast. No sufficient support however was obtained, the location was somewhat remote, and the principal promoters of the plan either lost their interest in it or were forced to devote their time to other things. The Laboratory therefore gradually sank into a condition of disuse from which

only occasional and temporary revivals have roused it.

During these busy years of the extension of the University's teaching work, other important lines of development were being entered upon which must be mentioned here though their fuller discussion belongs to another connection. The increasing claims of the University to public attention appealed of course first of all to the Alumni. An interest during later life in the institution from which they had graduated had never been a conspicuous characteristic of Pennsylvania, though an association of the Alumni of the College had been formed in 1848, of the Law Department in 1861, and of the Medical Department somewhat later. In 1881, however, an official sanction, and a much more important function was sought to be given to the Alumni by the creation of the so-called "Central Committee of the Alumni." Representatives of the graduates of each of three departments, College, Medicine and allied courses, and Law, to the number of ten from each, were elected by the general body of the alumni, and provision was made for the annual renewal of one-fifth of the body by a similar vote. To this body, organized and divided into sub-committees on the various departments, the Board of Trustees by resolutions adopted December 6, 1881, gave the power to nominate to every third vacancy on that Board, to make recommendations to the Board as to desirable changes in the various departments, and to be furnished annually with a copy of the Treasurer's accounts and report so that they might know the financial condition of the University and cooperate with the Trustees in securing additions to its resources. By the creation of this Committee it was hoped to secure the more active interest of the alumni, to break up any tendency to stagnation or persistence in unwise routine in the departments, and perhaps to receive valuable new suggestions or financial assistance. The right of nomination for new members of the Board has been regularly exercised in the cases to which it was applicable and the nominees have invariably been elected, but the other functions of the Committee either because they have been some-

what incompatible with other tendencies of the time or for other reasons, have not been effective.

Athletics and the physical interests of the University also received at this time official recognition. In the year 1882 an Athletic Association composed both of graduates and undergraduates was formed and immediately submitted to the Trustees a request for the assignment of a piece of land for athletic uses. In accordance with this and some other propositions on their part, in May 1882 a portion of the land recently given by the city was set apart by the Trustees as an athletic field, a new department of the University was created to be known as the Department of Physical Education, and it was provided that there should be a Director of Physical Education with the same status as other Instructors in the University. A Standing Committee of the Board on this Department was also created. A year later, Dr. J. William White, already an Instructor in the Medical Department, was elected Director of Physical Education, but the subsequent history of the department belongs more properly to the development of athletic interests than to the general interests of the University.

In the year 1887 two investigations carried on under University auspices were brought to at least a temporary completion and the results published. In 1883 Henry Seybert had bequeathed to the University \$60,000 for the endowment of a Chair of Intellectual and Moral Philosophy, accompanied with the condition that the University should appoint a Commission to investigate the subject of modern spiritualism. The Commission appointed by the Board of Trustees consisted of the Pro-

vost, Rev. G. S. Fullerton, the incumbent of the chair, Dr. Joseph Leidy, Professor R. E. Thompson and Professor George A. Koenig, to whom were later added Dr. Horace Howard Furness, Dr. S. Weir Mitchell, Dr. J. W. White, Dr. Calvin B. Knerr and Mr. Coleman Sellers. This was a very able and distinguished body of men and they entered upon the investigation with earnestness and interest. After a somewhat extensive series of *séances* with various mediums, and the collection of a considerable body of spiritualistic literature, they

made a preliminary report in May 1887, which was published in the Provost's annual report, and separately. No favorable results were obtained and the investigations have never been renewed in any systematic manner. At about the same time as the Seybert Commission was formed, another University Commission was appointed to oversee the investigations and labors of Eadweard Muybridge in the photography of animals while in motion. The money needed for this purpose, a very considerable sum, amounting to over \$30,000 before the work was completed, was advanced by certain persons



HENRY SEYBERT

interested, on condition that the University should take the supervision of the work. An immense number of photographs were obtained possessing a certain amount of scientific and artistic interest. They were published in a handsome series and in two or three less sumptuous forms, and a volume of text suggested by the results of the experiments was also issued.

Somewhat analogous to these investigations, though destined to pass far beyond them in extent, in importance, and in permanence, was the series of Babylonian explorations which were begun under the auspices of the Uni-

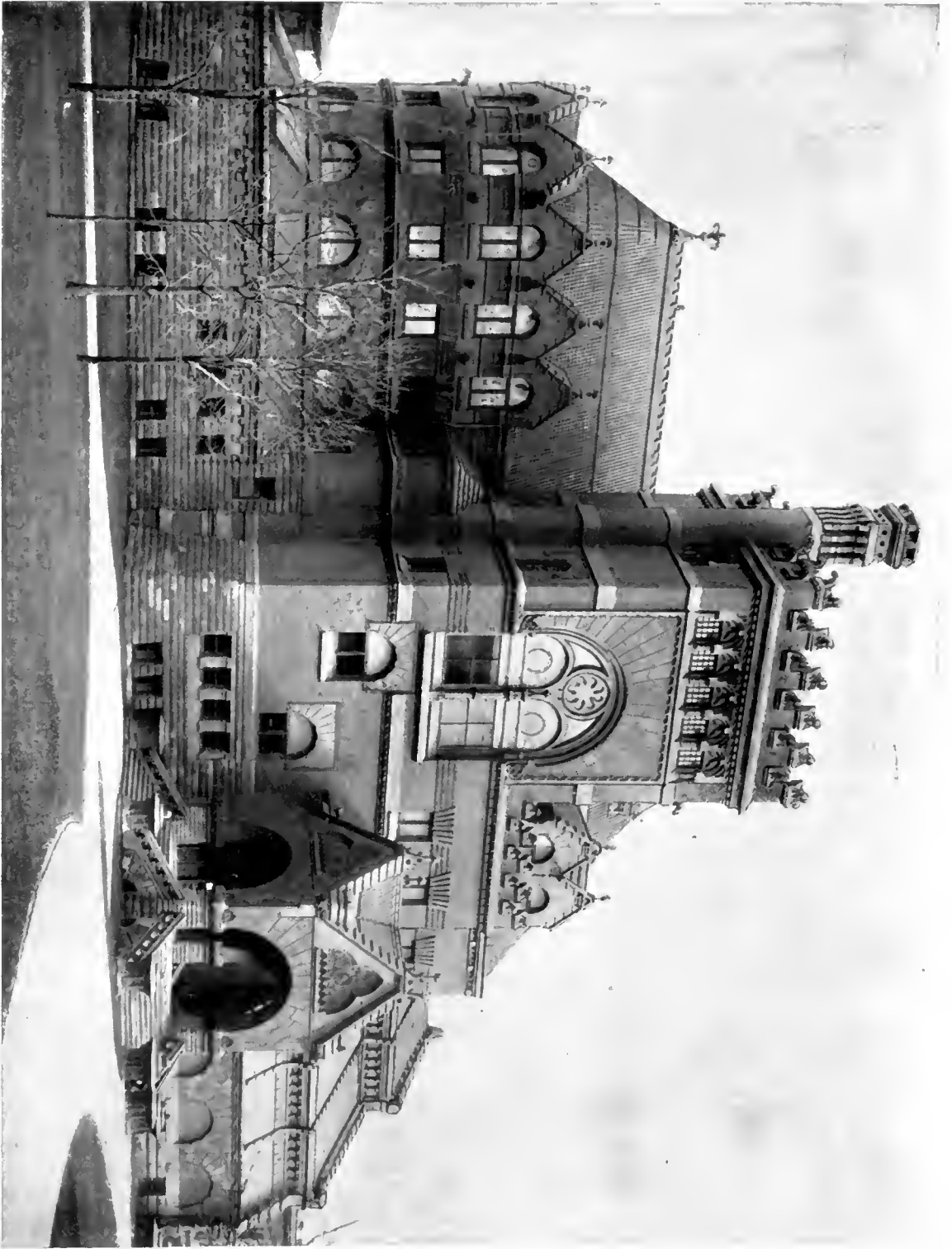
versity in 1888, and the foundation of the Museum which was so closely connected with these explorations. Dr. John P. Peters had been much interested in the Wolfe expedition for archaeological research, sent to Babylonia in 1884 and 1885, and had continued to agitate for funds for the same purpose during the succeeding years and after his election as Professor of Hebrew in the Department of Philosophy of the University in October 1886. In 1887 several wealthy men in Philadelphia became interested in the proposal for an exploring expedition and it was suggested that the movement be connected with the University. In the meantime Dr. Hermann V. Hilprecht who had been elected December 7, 1886, Professor of Assyriology in the Department of Philosophy of the University, and had been intrusted with various interesting objects of antiquity by persons who were willing to give them to the University had proposed to the Provost the formation of a museum as a place of deposit for such objects. The preliminary steps to the establishment of a museum had been taken when the proposition from those interested in the Babylonian expedition came to the Provost asking that he should act as President of the fund, and that the University should put up a building with proper accommodations for the results of the expedition. A meeting was held at the house of Dr. Pepper, November 30, 1887, at which some twenty-five or thirty persons were present and Dr. Ward of New York explained the work of the Wolfe expedition and the possibilities of further exploration in Babylonia. A request for subscriptions was immediately issued and on March 17, 1888, the Babylonian Expedition Fund was organized with the Provost as President, E. W. Clark as Treasurer and Dr. Hilprecht as Secretary. A sum of \$13,500 was obtained for the first year's work and the expedition was inaugurated by the departure of Dr. Peters as its leader from this country June 23, 1888. After manifold difficulties and delays and unsuccessful efforts to obtain the cooperation of other American institutions and European Governments, work was actually begun in Babylonia in the early months of 1889. Very little was accomplished that season but

during the next winter the systematic excavation and exploration of the ancient city of Nippur was begun and since that time a remarkable series of "finds" has rewarded the continued efforts of the association with a continuous flow of the most valuable material for archaeological knowledge.

During this year a gentleman of deep interest in archaeological matters, Francis Campbell Macauley came to reside in Philadelphia and at a dinner given October 23, 1889, at which were present Dr. Pepper, Dr. Leidy, Maxwell Somerville, Dr. Brinton, C. C. Abbott, H. C. Mercer and E. D. Cope, made proposals for a museum of a much more educational and systematic character than had been conceived of before. These suggestions were approved and it was decided to begin the work with a Museum of American Archaeology. So many forms of interest in general archaeology having shown themselves, a University Archaeological Association was formed in the same year, 1889, with a body of officers and a Council representing various departments of archaeological research. The first three of these departments to be organized were known as the Babylonian, the Egyptian, and the American Exploration Funds. In May 1890 the "Museum of American Archaeology" was opened in the University Library Building, and the other departments began to exhibit their collections in the same building.

The Association and its collections met with a wide and somewhat unexpected interest and approval.

Many people who had taken but a languid interest in other sides of the University's work were attracted and aroused by the inherent interest of the problem of rediscovering and reconstructing the history of a past which has otherwise been lost to us, and became enthusiastic members of the Association and contributors to its funds. Gifts were made, collections were bought, the products of the explorations in Babylonia and elsewhere began to arrive, so that very soon all the available space in the Library Building was occupied, and much material remained in unopened packages. In 1891 a Department of Archaeology and Palæontology was created by the Trustees as a full

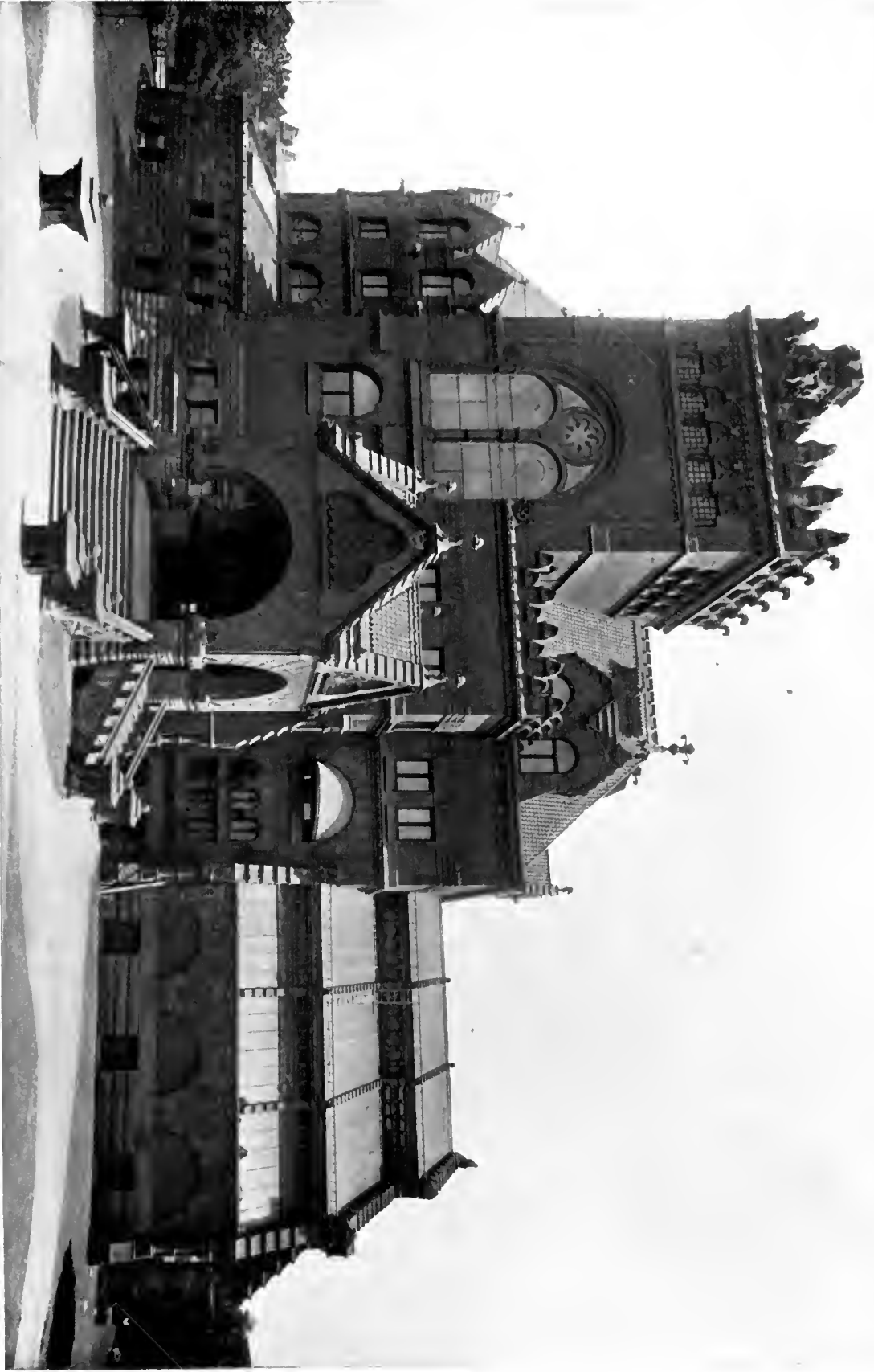


UNIVERSITY LIBRARY, WEST FRONT

Department of the University, with seven sections devoted respectively to American and Prehistoric Archæology, Asia and General Ethnology, Babylonian Archæology, Egyptian and Mediterranean Archæology, Glyptology, Casts and Paleontology. The department was placed under the control of a Board of Managers, consisting of thirty persons, of whom six were to be appointed by the Trustees of the University, the remainder by the Archæological Association. The Association agreed to bear all the expenses of the new department. The educational feature of the work became more and more prominent, several valuable monographs were published, and a group of specialists were brought into the service of the department and of the Museum, which assimilated it more and more to the other parts of the institution. The need for a special building became clearly evident, and in 1891 the task of providing one was deliberately taken up, but not brought to completion until after the close of Doctor Pepper's administration as Provost.

Mention has been made in connection with the Museum of Archæology of the new Library Building. This was brought to completion in 1891. The Library has been mentioned from time to time in the progress of the University's history. Its development was on the whole proportionate to the growth of the institution. During the pre-Revolutionary period occasional gifts of books were made to the Library, appropriations were made for their purchase from time to time, certain fees and fines were attributed to the use of the Library. Each graduate in Arts was bound to pay fifteen shillings for the benefit of the Library and after the foundation of the Medical Department each graduate in Medicine one dollar. Each absence of a Trustee from a regular or special meeting, as noted before, was supposed to be commuted by the payment of a shilling for the purchase of paper, quills and books. In April 1752 it was ordered that "no holiday be granted to the scholars at the request of any person unless at the same time he makes a present to the Academy of a book worth ten shillings." But these were precarious forms of library extension, and for a long period there is no evi-

dence of any great growth. Nevertheless the Library, like the College itself, in those days occasionally emerged into a sudden prominence not usual later. For instance, in 1784 it received the special gift of about a hundred books sent directly from Louis XVI as before described. Again in 1788 came a group of volumes on Oriental literature and philology presented by Francis Gladwin, who lived in the East Indies. In 1786 a catalogue was ordered to be prepared in two copies, one for the use of the faculty and students, the other to be kept by the Secretary of the Board of Trustees. During the first half of this century the Library shared in the general quiescence of the institution. In fact, there was little to bring it into great prominence or interest. The methods of teaching were not such as to involve much use of general works other than text-books. The Philadelphia Library had from early times been an available resource for books, and somewhat later the Athenæum, Apprentices', and such libraries gave facilities in number, variety and location quite equal to anything the University was likely to furnish. Moreover, since far the greater part of the students were residents of Philadelphia and belonged to the well-to-do classes, books were generally available in their homes to an extent which they would not be where students were living away from home and where the location of the College was not in the heart of a large city. So that in 1824 it was noted as apparently something extraordinary that one hundred and five volumes had been added within the year, and in 1832 the total number of books in the Library was sixteen hundred and seventy. Nevertheless, it did obtain occasional attention and support. In 1811 a regular standing committee of the Board, "on the Library," was provided for; some years later the books of the late Provost, Dr. McDowell, were received by bequest, and in 1822 a resolution was passed, though apparently not carried out, to appropriate some sum of money annually for the purchase of books, and to solicit donations. In 1829 another catalogue was prepared. After 1850 the same awakening was felt in the Library as in other directions. In 1855 one of the Professors was appointed



UNIVERSITY LIBRARY, WEST FRONT

regular Librarian, and some rather large appropriations were made from time to time to its expenses. With the removal to West Philadelphia began a much more rapid extension of the size of the Library though even yet its use was extremely restricted. The principal characteristic of its new period was the addition by gift or otherwise of libraries on special subjects. In 1871, for instance, the Wetherill Library of works on Chemistry was presented by the widow of Professor C. M. Wetherill who had collected it; in the same year the Rogers Engineering Library was founded by Fairman Rogers; in 1873 the Classical and Military Library of the late Professor Allen was purchased, partly by subscription, partly from University funds, and presented to the Library. In 1874 the Bouvier Library of Civil Law was given by Dr. Peterson; a collection of works on Italian, French and German Literature by Dr. Alfred Stillé, and somewhat later the whole Medical Library of the latter. In 1876 the Colwell Library on Social Science, a most interesting and valuable collection, was presented and a few years later this was supplemented by the Henry C. Carey bequest. Subsequently a number of collections of the same nature have been donated, the McCartee collection of Chinese and Japanese literature, and the Brown Library on the same subject, the Hayden, the Ashburner and the Leidy collections of books on Geology, Palæontology, Zoölogy and Botany, and the Paine collection of works on Engineering and Electricity, the Biddle Law Library, the Pepper and the Physick collections of medical works.

By the later years of Dr. Pepper's administration the collections small and large, the gifts of individual works and of numbers of books on the same or on miscellaneous subjects, which were coming into the possession of the Library became too numerous to name in detail. Very similar in character, however, to such collections, but obtained by different means, were several foreign libraries bought *en bloc* by subscriptions collected through the efforts of certain Professors. Such were the Pott Library, purchased in this way on the recommendation of Professor McElroy, the still larger Leutsch Library consisting of about twenty thousand

volumes, suggested in the same way by Professor Jackson, two or three collections on various aspects of Oriental language and literature, obtained by the efforts of Professor Jastrow, the collection of Congressional and state documents made by Professor Thorpe for the School of American History and Institutions, a collection on German literature due to Professor Seidensticker, and in 1895 the Bechstein Library of works on German and other modern philology, bought at the time of the election of Professor Learned to the Chair of German Languages and Literature.

Some of these collections were endowed so as to provide for their future increase and completion by purchase of more recent works on the same subjects. Still other funds were established during the same period for the permanent increase of the Library in special lines or in general works. The first of these was the Tobias Wagner fund, an endowment of \$10,000 presented in 1874 by Miss Elizabeth Rhoads, the income of which, amounting to between \$400 and \$600 a year, was unrestricted in its application. In 1883 the Henry Seybert Library of Spiritualism and Cognate Subjects was founded to be supported by the income of a certain part of the Seybert bequest. In 1887 a memorial fund for Vice-Provost Krauth, was created by the alumni for the continuous purchase of books on philosophy. In 1891 the J. B. Lippincott Library of English literature was founded by the gift of \$10,000, one third of which was immediately spent, the rest retained as endowment. In the same year the Isaac Norris Library was endowed by Mrs. Cochran and has since produced approximately \$300 a year. The Pepper Medical Library and the Biddle Law Library were also endowed, in addition to the original gift of books. The latter was also brought rapidly into very much more extensive proportions by added contributions of books and by the annual appropriation of twelve per cent of the tuition fees of the department, soon amounting to almost \$2000 a year, for the purchase of legal works.

In these various ways the number of books in the possession of the University Library and the additions that were being made to them so rapidly, came to be entirely impossible of ac-



UNIVERSITY LIBRARY, EAST FRONT

commodation in the room set apart for Library purposes in the College Hall. Moreover the number of students was increasing and the methods of teaching were changing so as to require a much more extensive use of books by the students than had been customary before. The absolute necessity for a special building for the Library was quite apparent. The acquisition of books, their use, the improved teaching that would be made possible

In 1887 Mr. Barnwell resigned to become Librarian of the Philadelphia Library, and Gregory B. Keen became Librarian of the University. The next year Dr. Morris Jastrow, Jr., was elected Assistant Librarian, and the force of attendants increased. But these changes had only brought into clearer light the limitations of the room and the greater possibilities of the Library if it were given adequate accommodations.



READING ROOM, UNIVERSITY LIBRARY

by their possession and convenient accommodation were all being held back by the lack of room for Library use and growth. In 1884 a Librarian, J. G. Barnwell, had been elected to give all his time to the oversight of the Library. In early times the Provost, in later one of the Professors, as has been noticed, always acted as Librarian. This, however, had limited the opening of the Library to certain hours only; and practically nothing could be done towards cataloguing the books. The room was now always open and the work of cataloguing, with the help of one or two assistants, taken up.

In 1887 therefore, the work of erecting a separate and suitable building was seriously undertaken. The allusion to the matter in the Provost's report for that year is so characteristic of the change that had come about in the University, of the larger plans and larger ideals which have distinguished its recent from its earlier life, and so characteristic also of the man who was doing so much to formulate this progressive tendency that it is well worth quoting as typifying the spirit that was creating not only a great Library but a great University. "Unquestionably the most urgent need

at present is that of a Library building. The space available for Library purposes in the College building is far outgrown. The accumulation of valuable books, pamphlets, and journals progresses rapidly, but it has long been impossible to provide shelf-room so that they might be accessible to students. A rich and well-arranged Library is as necessary to the growth and activity of a University as is an active circulation to the health of the body. The University life centers in it, every teacher and every student draw from it facts, knowledge, and inspiration. The use made of a Library is a good index of the condition of a University, and of the extent to which it is discharging its duty of stimulating thought, inquiry and research as well as that of merely affording instruction. There is no complaint to be made on this score at the University. The difficulty is that the rich collections in her possession are, from want of space, inaccessible to the rapidly increasing number of eager readers. Clearly it is not only the University but the entire community which suffers from this, since every argument tells in favor of opening such a Library to the public as a free Library of Reference. There is such general appreciation of the necessity in Philadelphia of increase in library facilities that there should be no difficulty in securing the amount required for the building, and for a fund for the current expenses of a great University Library conducted on the above basis. The proposal should appeal to all, and might reasonably receive substantial aid from the municipal government. The total amount required is not less than \$150,000 for the fire-proof building, and from \$150,000 to \$250,000 as a fund the income of which would be used for maintenance and extension. So numerous and valuable are the gifts of printed matter that it is clear that when a safe and spacious building is provided an extraordinary growth will follow." Such were the generous plans and enlightened ideals for a great Library building. To transform them into reality required another hand. The work was however done, the building before its completion proving to cost something more than \$200,000. The collection of this large sum of money, the

largest single fund collected by subscription up to that time in the history of the University, with the single exception of that for the Hospital, was almost entirely the work of Charles C. Harrison. Mr. Harrison had been elected Chairman of the Committee on Finance and Property, the successor of the old Committee of Ways and Means, in 1886, on the death of John Welsh. The Library Building was the immediate object of interest at the time he took up the responsibility of that position, which was fast becoming, in the rapid development of the University, in the need for financial judgment from the large investments and expenditures involved, and the equal need for influential solicitation to meet the great pecuniary requirements, second in importance to the Provostship only. Such a large part of the money required was soon obtained that the erection of the building was begun in the year 1888, the corner-stone being laid with Masonic ceremonies.

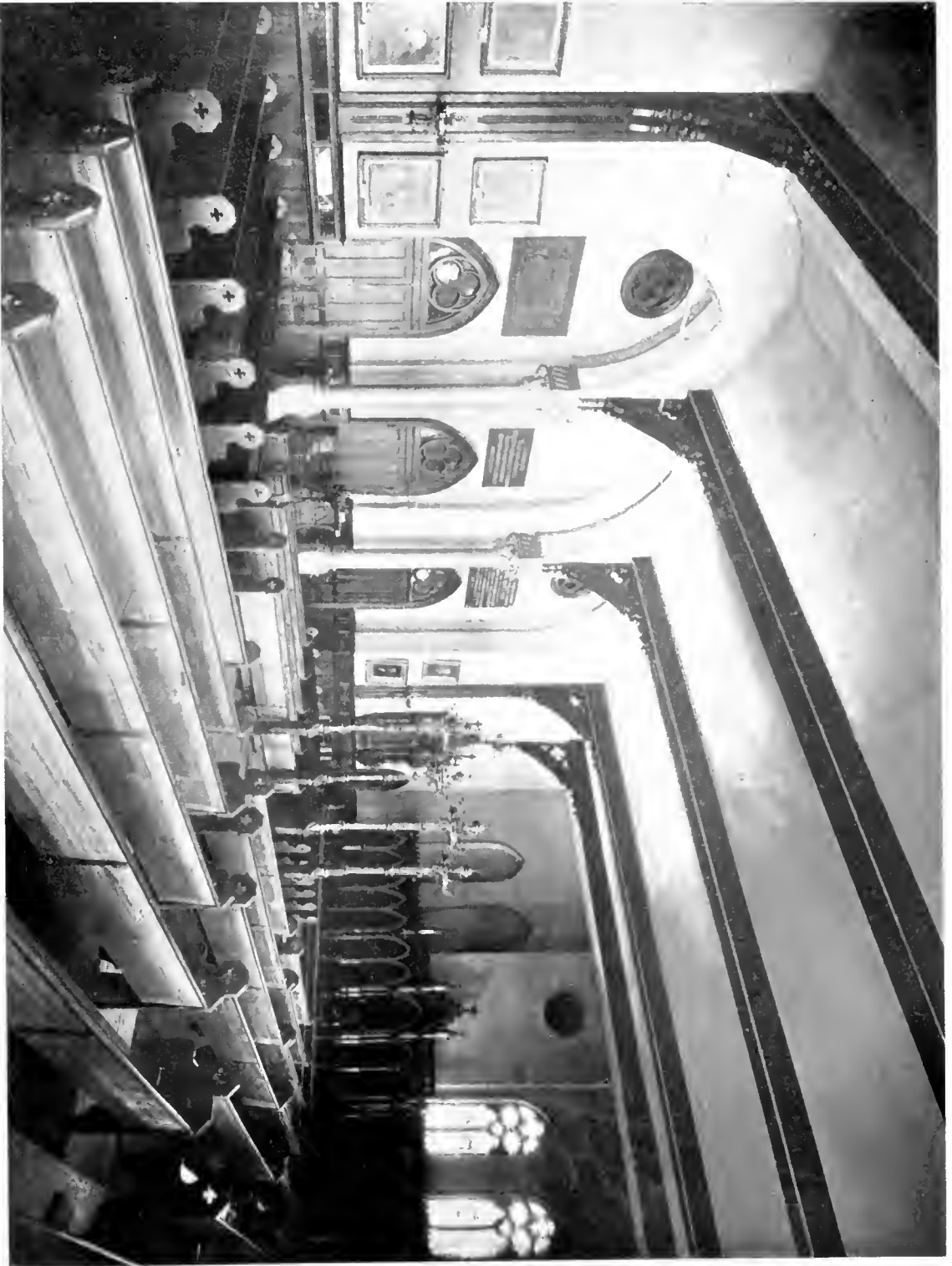
Great care was exercised in obtaining the best results suggested by experience in the construction of Library buildings, and after the preliminary plan had been prepared a conference of Librarians from various cities was held at the University, and the plan examined and criticised minutely. Many changes were introduced as a result of the suggestions at this conference, and when the building was completed in 1890 it was considered to embody the very best arrangements for the storage of three hundred and fifty thousand books, with the possibility of extension for an indefinitely larger number, with the best conveniences for reading, study, entry, delivery, cataloguing and the other needs of a library. It also included a considerable number of rooms which were intended temporarily for museum purposes, but ultimately for seminary rooms for post-graduate study. The books were transferred to the new building during the summer of 1890, it was opened to students in October of that year and officially dedicated with interesting ceremonies, February 7, 1891. It would be almost impossible to overrate the importance of the Library building in the subsequent history of the University. Not only did its great reading room furnish a place for

many gatherings of various kinds, some of them, it is true, quite different from the primary purpose of the building, through several years, until its more strictly literary requirements put a stop to these hospitable occasions; but within its large bounds, encouraged and made possible by the accommodations it offered, have eventually grown up complete collections of books in certain scholarly lines, full sets of reference works of the most varied character, an almost exhaustive list of current periodicals, an improved catalogue, a highly developed administration, and a group of seminar rooms with their special libraries. The Library is also a great unifying force in the University. Specialization and the very vigor of growth of the various parts tend constantly to separate its departments and its men, and any influence which combines their interests is an influence for good. Similarly to the students the Library has stood and stands for purely intellectual interests, and to the community generally it furnishes a free Reference Library where much may be sought and found not accessible anywhere else in the city. Some of the more specific occurrences in the subsequent history of the Library must be postponed for mention in their proper chronological order under the next administration.

The erection of the Library Building was made, under the thrifty policy of the managers of the University at the time, the occasion for a request for more land from the city, as an equivalent for the free use of the Library for reference purposes by the citizens. There was a piece of land lying between Woodland Avenue and Spruce Street and between Thirty-sixth Street and a city police and fire station which was now detached from the main body of the city's land in West Philadelphia. This was asked for on the conditions mentioned above and granted to the University by an Ordinance approved March 21, 1888. A year later several acres of ground on the other side of the previous domain of the University, lying between Thirty-fourth Street and the Westchester and Philadelphia Railroad and above South Street, were purchased from the city in its interest by one of the Trustees for \$149,800 and ultimately transferred to the

University. In 1892 a small triangle of land lying at the Northeast corner of Thirty-fourth and Spruce Streets was given to the University by the city, and in March of 1894 a tract of about eight acres, opposite to this on the south side of South Street was conveyed by the city to the Trustees of the University, in trust, to be utilized as the site of a museum, botanical garden and park. Thus the original plot of ten acres purchased by the University from the City in 1869 had grown and extended itself by various steps and under every form of grant, from sale at the full market price to free gift, to a tract of somewhat more than fifty-two acres. From time to time ordinances were passed vacating some of the streets which would have intersected these lands, thus allowing buildings to be erected without fear of future disturbance and keeping the whole body of land essentially one domain. Various portions of it were also burdened with certain trusts but these were all closely in line with the objects of the University's work and simply added to the homogeneity of the institution and to the closeness of its connection with the community which the city government represents.

This acknowledgment by the University of its opportunities and functions as an intellectual force and a natural leader in the higher interests of the community in which it exists, and on the other hand the recognition by the community of its own connection with and interest in the University had been long delayed, but was now very evidently coming into existence. The very material equipment of the institution made it more conspicuous. Its constant appeals for land, for funds, for students, for visitors to its buildings, readers at its Library, auditors at its public addresses, based as these were on claims of reciprocal services, demanded the attention of many people, even of those who were in the first place reluctant to agree to the requests or to acknowledge the services. The increased number of students drew into the circle of University affairs greater numbers, and the new departments conciliated the interests of new classes of people. Moreover the life of the University came to be very much more in



THE CHAPEL

evidence. Not only athletic contests, which will be quite sufficiently elaborated somewhere else in this narrative, but more intellectual activities came before the public eye. In 1886, for instance, a number of the students, under the direction and advice of Professor Easton and Dr. Clarke of the University, and of Dr. Klapp, Head Master of the Episcopal Academy, gave on several successive nights at the Academy of Music the Greek play of "The Acharnians" of Aristophanes. This not only attracted much attention and interest in Philadelphia but elicited a request to the Provost for a repetition in New York signed by the Presidents of Columbia, the College of the City of New York, Johns Hopkins, Amherst, Trinity, Cornell and Yale, and by the Professors of Greek at Harvard, Amherst, Johns Hopkins, College of the City of New York, Princeton, Wesleyan, Cornell, Trinity and Columbia, and a number of other men prominent in literature or learning. The play was given in New York on November 19, 1886, and brought in a money return of \$1378.09, which was donated to the American School of Classical Studies at Athens. Again in a somewhat different sphere, during the celebration of the Centennial celebration of the adoption of the National Constitution in 1787, the University took the leadership, in association with the American Philosophical Society, the Historical Society of Pennsylvania, the College of Physicians of Philadelphia, the Franklin Institute, the Academy of Natural Sciences, the Pennsylvania Academy of the Fine Arts, and the Law Academy, in giving a banquet to the distinguished guests of the celebration, and in publishing the account of the celebration with the addresses made and of the other occurrences. In the same year, again, the University Lecture Association was formed. For a number of years individual lectures and courses of lectures had been given from time to time more or less completely under the direction of the University authorities, and usually in the University Chapel; entrance being sometimes by invitation, sometimes on payment. In the fall of 1887 an association was formed consisting of about a hundred ladies and gentlemen interested in literary and artistic matters in

Philadelphia but not, except in a very few cases, connected with the University. They used the University's name in the title of their association and made the Provost and Secretary *ex officio* members of their Executive Committee, to elect which and to guarantee the payment of any deficit were the principal objects of the society. Their Committee arranged a number of interesting and well attended courses of lectures, which were given for some years at the College and then at Association Hall nearer the centre of the city, until the work was combined with that of the Association Centre of University Extension.

The share of the University of Pennsylvania in this last-named movement is again one of the many bonds formed during this period between the institution and the community. In 1871 Professor James Stuart of Cambridge, England, organized a number of classes and local centres in which lectures should be delivered by some of the Cambridge Professors. In the same year he published a pamphlet explanatory of the movement in which the title "University Extension" was given to it. During the next two decades the work spread in England and was organized from different centres until it became an acknowledged part of the English educational system. Dr. Pepper became aware of this work and was largely instrumental in bringing about its organization in Philadelphia, on the 1st of June, 1890, in the form of the "American Society for the Extension of University Teaching." This body had no organic connection with the University of Pennsylvania, but Provost Pepper became its honorary President, Professor James of the University was for several years its President and guiding spirit, and for a long time most of its lecturers were Professors in the University. Later this closeness of connection was partially lost; the system of staff lecturers to a considerable extent superseded the practice of calling upon the University instructors; Professor James left Philadelphia; and the sessions of the Summer School which had been held under its auspices in the University Buildings were suspended. Nevertheless, the relation between the University extension movement as it exists in the vicinity of Phila-

delphia and the University has always remained one of mutual good-will, support and partial connection.

Very much the same statements are applicable to the organization and early history of the "American Academy of Political and Social Science," and to its publication, the "Annals." A group of men principally belonging in Philadelphia, several of them connected with the Wharton School in the University, and under the influence of Professor James, formed this association for the encouragement, the discussion, and the publication of papers on the subjects indicated by its title. As in the Society for University Extension, an Advisory Board was created including the officials and Professors of Political Economy and allied subjects in several other Colleges and Universities. The number of its members in the United States and abroad became large and the "Annals" succeeded in obtaining a very wide circulation and attracting a quite cosmopolitan group of contributors. But the meetings of the Academy were always held in Philadelphia; the publication offices of the "Annals" were established in the University building, the officers were mostly men connected with the University, and the Academy and its organ have therefore remained in a quasi-official University connection.

More narrowly in the field of the older College work was the University's participation in the formation of the "Association of Colleges and Preparatory Schools." The Colleges and the fitting schools had been for some time, — indeed are still, dissatisfied with one another. The former have felt that the latter were sending to them students ill-prepared; neither well-trained in habits of study nor thoroughly familiar with the fundamental subjects on which their College course was expected to be built up. The schools on the other hand were inconvenienced not only by the frequent changes in the entrance requirements of the Colleges, but still more by the lack of uniformity among the Colleges in these requirements. Any one school might have to prepare students for half a dozen different Colleges and the entrance examinations of all these might be different in subjects, in amounts and in the

text-books required. Many other questions of common interest existed among the schools, among the Colleges, and between these two classes of educational institutions. In 1886, therefore, an association which included the masters of many of the leading schools in Pennsylvania was formed and held its first meeting at the University. The papers and discussions were of such common interest as to make the continuance of the meetings quite certain. Closely following this in response to a call issued at the suggestion of President Edward H. Magill of Swarthmore College, a number of representatives of the Colleges of Pennsylvania met at Harrisburg, March 1, 1887. Here it was determined to organize a permanent association of the Colleges of the state which was done in a meeting held at Franklin and Marshall College at Lancaster July 5 of the same year. So far the connection of the University with the movement was slight, but during the succeeding winter the meetings of the Executive Committee were held at its building. The second annual convention was held there in July 1888, and the third in November 1889. In the meantime other Colleges of the Middle States and Maryland were invited to join the association, and the name was accordingly changed to the "College Association of the Middle States and Maryland." Many of the subjects which came up for discussion at the early meetings seemed to be of quite equal interest to the lower schools and as these were anxious to join, at the meeting of 1892 it was agreed to admit all normal and high schools and others preparing students for entrance to College. The name was accordingly changed for a second time, becoming the "Association of Colleges and Preparatory Schools of the Middle States and Maryland." The Association continued to meet in the Thanksgiving recess every year, visiting the various College centres of its bailiwick. The University has through this association been brought into close connection with all the adjacent institutions with which it would naturally have relations, and over which it should have an influence; its Professors have been regularly represented at the meetings and its Secretary and most active officer has been

continuously a Professor of the University of Pennsylvania.

An effort at a still broader unification of the interests and life of the educational and scientific institutions, of Philadelphia at least, was made in the year 1889. When the land to the eastward of Thirty-fourth Street, was purchased in the interests of the University, Dr. Pepper had formed the scheme of inviting a number of the learned institutions of Philadelphia to move to this site, the University disposing of the land to them at its cost price, and reciprocal advantages being expected from the concentration in one locality of the collections and the teaching of institutions with cognate objects. The expectation or at least the hope was to make this West Philadelphia location a great centre of scientific and educational activity, by bringing into material juxtaposition and into harmonized administration a group of institutions of the character described, independent in their powers but avoiding as far as possible unnecessary duplication, as well as unnecessary waste of time by their students and members. It was believed that increased strength, dignity, and effectiveness would come to all the bodies so located, and withal, as the greater attracts the less, the University would have a natural hegemony in the group. The first institution to receive an invitation to this effect from the University was the Academy of Natural Sciences. This body, however, was not attracted by the offer, and in May 1889, at the first meeting after the proposition was made, declined to accept it. After this no further steps were taken to offer the same opportunity to other bodies, gradually the whole plan was abandoned, and the University soon found need for all the land in its own extending functions.

Before describing these, however, it may be well to try to measure the change in the relations between the University and the community which the mention made above of the more popular and less rigidly pedagogical lines of University development naturally suggests. Before the close of the first decade of Dr. Pepper's administration the old isolation of the University, its almost entire separation from the work, the interests, the knowledge of the

mass of the people of the city, the state and the country, had become a thing of the past. As a result of its increasing vigor and success in its old lines of work, of the establishment of the many new forms of activity just mentioned, of the knitting of so many bonds with various classes and interests, of its ubiquity in all intellectual lines, and of the ever potent influence of the conspicuous athletic events in which its students were concerned, there could be but few persons of any intelligence in the community who had not become somewhat familiar with the name of the University; and a very large number must have been drawn into some degree of sympathy and interest with one or another phase of its work. That these changes reacted on the internal character of the University goes without saying, and the results were beneficial. Some of that corporate life which animates a whole people reinforced the more purely institutional life of the educational body; a broader, more wholesome judgment of men and things came to be exercised; a sympathy grew up which led men of more exclusively intellectual and men of more exclusively practical life to give of their best to one another. Many of these changes can be better measured in connection with the story of the internal development of the various branches of the University, but enough can be seen simply from this account of external changes to see that the old type of College and coordinated Professional Schools had passed away, but that a University with new and better ideals was growing up to take its place.

But the acquisition of more material equipment and the extension of the field of purely scholastic work during the later years of Dr. Pepper's administration as Provost and Mr. Harrison's as Chairman of the Committee on Finance and Property must now be further described. In 1889 Henry C. Lea offered to pay the expense of the construction of a building for a Laboratory of Hygiene for the University, if funds should be raised to equip and endow it, if Hygiene was made a compulsory study in certain courses, and if the Trustees would enter into an engagement to add as soon as possible an additional year to the Medical course, thus making a fourth year compulsory

for all students. These conditions were agreed to by the Trustees, a piece of land set aside, and the construction of the building immediately begun under the personal supervision of Mr. Lea, and Dr. John S. Billings, who had been appointed Director. On the 22d of February, 1892, the Laboratory of Hygiene was formally opened and instruction immediately begun.

interested in the subject; there was additional danger of fire; and withal the work of a vigorous and growing department was restricted by lack of accommodations. In 1892 plans for a special building were prepared, and almost the whole of the cost of construction was contributed by Messrs. Charles C., Alfred C., and William W. Harrison. The laboratory was named by the Trustees from their grandfather,



LABORATORY OF HYGIENE

Following this immediately in date, as well as contiguous in position on the grounds was the "John Harrison Laboratory of Chemistry," for the College and Department of Philosophy. The difficulties of having a large Chemical Laboratory in the general College building had proved to be very great. It required more room than any other subject of study, room now sadly needed for other purposes; some of the by-products of chemical study in a building not specially constructed as a laboratory were far from agreeable to those not directly

John Harrison, one of the founders of chemical manufacture in Philadelphia and America. By the winter of 1893-1894 the building was completed and the laboratories were opened in it.

Some of the reasons for the unsuitability of having the Chemical Laboratories in the College building were common to all technical departments, and in the case of the mechanical engineering work there was an additional reason for the erection of a separate building in the possibility of connecting it with a badly needed rearrangement of the system of heating,

lighting and ventilating the buildings which were now becoming so numerous on the University grounds. In these buildings were all kinds of systems of heating, good, bad, and some which were good but inadequate; the lighting was by gas only, in some there was no artificial ventilation at all, in some it was but slightly effective and so of all grades of efficiency up to the perfection of the Laboratory

of their course. The excellences of this arrangement were self-evident and it was determined upon and the work carried out under the direction of the architects and of Professor Henry W. Spangler, head of the Department of Mechanical Engineering, who had been made Director of the station. The heat and electric light from this central establishment were introduced gradually into one building



JOHN HARRISON CHEMICAL LABORATORY

of Hygiene. It was now proposed to build a great central heating and lighting station which might send steam for heating, electricity for lighting, and forced draught for ventilation through tunnels to all the group of buildings. In connection with this plant additional accommodations would be furnished for the laboratories, draughting rooms, and lecture rooms of the Department of Mechanical and Electrical Engineering; the students also utilizing the engines, boilers, dynamos and other equipment of the plant as part of the illustrative material

after another, each department being charged with a proportionate part of the expense of the actual service. Active operations were begun in the fall of 1892, and the Mechanical Engineering Laboratory connected with the plant was dedicated to its educational uses, May 26, 1893.

During the same years as those in which these two comparatively old departments were obtaining separate establishments of their own: as an offshoot from the Medical School, another new department, somewhat detached



CENTRAL LIGHT, HEAT AND POWER STATION

from the University in organization, although completely a part of it in functions, was being founded and equipped with a completeness which but few other parts of the institution could rival.

The beginnings of the Wistar and Horner Museum have already been related in the account of the Medical School during the early part of the century. The addition to it of specimens from time to time had gone on

tees to provide at his own expense and to suitably endow a fire-proof building with facilities for the storage and display of the Wistar Museum, for the collection of specimens of general and human anatomy, and for advanced study and investigation in anatomical lines. The conditions of the gift were the foundation of a separate corporation to be known as the "Wistar Institute," in which, however, the Board of Trustees should have a controlling



WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

ever since its foundation. A fire which occurred in the Medical Building on the morning of May 31, 1888, inflicting some injury upon the contents of the Museum and upon the Stillé Medical Library, called attention to the danger its valuable contents were subjected to in being placed in an ordinary building. This fact suggested to General Isaac J. Wistar, the grandson of the founder and a man of wealth and influence, the establishment of a special institution of which the old Museum should be the centre. He offered to the Board of Trus-

tees, the transference to the Institute of a suitable piece of land, and the restriction of the building to the uses of its trust forever. These conditions were accepted, permission for the transfer of the land obtained from the city, and the fine lot on the west side of Thirty-sixth Street given to the new Institute. A handsome building was erected during the year 1893, and formally opened on May 21, 1894. Up to that time General Wistar had expended about \$265,000 on the building, its equipment and accompanying expenses, and

he has since continued to make liberal expenditures in bringing the Institute gradually into a position of maximum usefulness and interest as an educational and scientific centre of influence. Dr. Harrison Allen was its first Director. After his resignation Dr. Horace Jayne was appointed Director. Much of the work of equipment and installation has been from the beginning under the charge of Dr. Milton J. Greenman, Assistant Director.

nascent University was entrusted. In the agreement of 1749 by which the Trustees of the Academy obtained the old hall, as well as by their subsequent charters and by the state laws, they were bound to keep up two charity schools one for boys and the other for girls. This they did until 1877 when, as already mentioned, by judicial advice they decided to change the form in which the obligations of the charter were carried out to the granting of



WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

During these same years between 1890 and 1894 two or three new schools were being organized, some destined to speedy growth, one at least to only a temporary existence. The Graduate Department for Women, organized during the winter of 1890-1891 but formally opened only on May 4, 1892, like so many other elements in the University, was connected, curiously enough, by an obscure line of inheritance with the Charity Schools which were the earliest responsibility with which the

free scholarships in the Scientific Department of the College. But as scholarships were only practicable for young men, unless the whole system of the College was to be changed, it was arranged that young women should be admitted free of expense to certain courses of lectures given in the College. In 1879 Mrs. Bloomfield H. Moore presented to the University as a memorial to her deceased husband \$10,000, the income of which was to be used to give free instruction to young women then

or prospectively teachers, in such courses as might be open to them. Certain of the newly established departments, such as Music and Biology, gave admission to women, and other isolated courses were from one cause or another open to them. Moreover, during the decade between 1880 and 1890 repeated and strenuous efforts were made to introduce the system of general co-education into the University. Indeed at one time the College Faculty voted in favor of recommending this change to the Board of Trustees. The proposition was rejected by them, however, and the ideal of the ultimate foundation of a separate Women's College, as a Department in the University, was substituted. In the fall of 1889 this object seemed to be brought into the field of possible attainment by a gift from Colonel Joseph M. Bennett. His letter to the Provost was as follows: "Dear Sir: I hereby donate to the Trustees of the University of Pennsylvania the two adjoining properties on the south-east corner of Thirty-fourth and Walnut Streets, clear of incumbrances, to be occupied for the purpose of a College for Women in connection

with said University, said College to be under the direction of a Board of Managers to be appointed by the Board of Trustees. I do this because I am desirous of promoting the higher education of women, and yet recognize the difficulties connected with complete co-education." The properties thus given by Colonel Bennett were two four story brick dwelling houses, well suited to be a residence hall, but of course providing no endowment on which a separate College for Women could be founded. This was the time, however, of the early development of the graduate work in the Department of Philosophy and a quite practicable

plan naturally suggested itself that the facilities of this department should be thrown open to women and that the gift of Colonel Bennett be utilized as a basis for the enjoyment of these facilities. An appeal was therefore made for moderate additional funds as an endowment for expenses, and for the endowment of as many as eight fellowships for women. With the year 1890 the Graduate Department for Women was regularly organized with a Board of Managers similar in construction to those of the Hospital and of the Department of Archaeology, consisting of several of the Trustees of the University and a group of prominent women interested in women's higher education. The required funds were obtained, and the department and Bennett Hall formally opened, as has been said, on May 4, 1892. The Faculty of the Department was practically the Faculty of the Department of Philosophy, and to all graduate work in that department women were admitted on exactly the same conditions as men.

In the same year instruction was begun in the "School of American History and Institutions,"

which had been founded the year before by resolution of the Board of Trustees as a separate school in the College. The increase of popular interest in our own national history and institutions has been a matter of comparatively recent growth. Previous to the Civil War not only was there practically no writing of American history, but no instruction except of the lightest character, was given on the subject in any of our Colleges and schools. Between 1870 and 1880, however, there was a great awakening of attention and interest in the earlier movements of our history, and this was reflected in the establishment of Profes-



MRS. BLOOMFIELD H. MOORE

sorships on the subject in a number of the larger Colleges or the devotion of serious courses to the subject by teachers, part of whose time was also given to other matters. At Pennsylvania not only was there from the year 1883 a full Professorship of American History, but much of the work of the Wharton School lay in lines of especial interest in the study of the development of American financial, social and political institutions. Under these circumstances much attention was naturally coming to be given at the University to this subject. Moreover the interest in all branches of history was becoming a special characteristic of the University. The initiation of a department especially devoted to the study of the various aspects of American history was due to Professor Francis N. Thorpe, who had proposed the organization of such a school when Fellow in History and Political Science at the University in 1886. He began about that time to collect funds and to purchase books for the uses of such a prospective department, so that by the time the plans were actually formulated and submitted to the Trustees,

a library of some thirteen thousand volumes had, through the generous contributions of a number of men, been collected. These were largely public documents of the national and state governments and of American municipalities, collections of laws, and of the sources for the history of special movements in American history. The sets of legislative records, laws, constitutional documents, reports of administrative departments and such public documents were so nearly complete as to seem to furnish facilities for investigation unequalled elsewhere. The school was organized under Professor J. B. McMaster, Professor of Ameri-

can History, and Professor Thorpe, for whom was created a Chair of American Constitutional History. Teaching already given in other courses in the College was utilized to complete the curriculum of the new school, whose special field, it was anticipated, would be the careful investigation of problems in American history. At least two difficulties faced this school from the outset. The first was the narrowness of the basis of interest on which it was built up. Broad as the field of American history seems to the special student, it is after all,

but one of many fields of study, of training, of culture, of interest, to the student who is not a specialist. It has but little utilitarian value and its greatest educational value must always be in connection with other subjects of liberal study. Secondly, the endowment which it had been anticipated that the school would receive failed it, because of the financial difficulties of one of its early patrons; and a second anticipated endowment was also finally withheld. Under these circumstances the School of American History gradually dropped into the position of a subor-



JOSEPH M. BENNETT

ordinate group of studies in the College, and finally in 1894 was abolished as a separate department by the Board of Trustees.

In a similar position to this school, so far as its origination from an awakened interest in the community, and its dependent position in the College goes, though happily its fortunes have steadily risen instead of sunk, was the new School of Architecture. There had been in the University since the foundation of the Scientific School a course in drawing and architecture under Professor Thomas W. Richards, architect of the first four of the group of University buildings. In this depart-

ment was given all the drawing required in the various courses as a matter of general culture, and technical draughting for engineering purposes, as well as the architectural training of those students who made that their special professional preparation. Most architects, however, were still, as most doctors and lawyers and engineers had formerly been, brought up in the offices of actually practising professionals, so that but few students desiring a thorough education as architects came to the school. In the meantime, however, along with the vast amount of building in progress throughout the country, and with the increased familiarity of many of the more well-to-do classes with European buildings, there had grown up not only a distinct interest in architectural matters, but a great dissatisfaction with the degree of training and ability possessed by the average practising architect. Under such a stimulus to improvement many young men went abroad to study in the European schools, and also there was soon created a group of much better equipped schools in America, and a much greater attendance of prospective architects upon them.

By the beginning of 1890 the desirability of reorganizing the course of drawing and architecture at the University so as to give in it the facilities that were offered in similar schools in Boston and New York had come into serious notice and discussion, and within that year was finally undertaken. A "School of Architecture" was established, Professor Richards resigned, and under the direction of Theophilus P. Chandler Jr., and afterwards of Warren P. Laird, who was made Professor of Architecture, and with the advice of leading professional architects, a thorough reorganization

of the group of courses was made. As in other similar cases, teaching in the less technical subjects was done in the same courses as those given to other College students, but in addition to these there were five regular instructors in the various branches of architectural training. Besides the regular instructors, the managers of the school were successful in obtaining the interest and help of several of the most prominent and able of the younger architects of Philadelphia and New York, who were led by their interest in their profession and in the growth of the new school to give much valuable time to special courses of lec-

tures, to advice to students, to service on committees of examination and award, and to promoting the work of the school in many other ways. The School of Architecture was given a suite of rooms in the College building and made as a matter of organization a portion of the Towne Scientific School in the College.

Following closely upon the organization of this four years' course in Ar-

chitecture, similar courses were added to the old regular five-year courses of the Scientific School, in Chemistry, and Civil and Mechanical Engineering. The reasons for this addition will be given in connection with similar processes of change in a later section of this history. In fact, there are almost as many internal as external changes belonging to this busy period of the University's development. To realize the activity of the time and the rapidity of its growth it will be necessary to turn from the account just given of new departments added, new equipments secured, and experiments successful and unsuccessful made, to the account of the internal change, and adjustment of educational work as given



BENNETT HALL



PEPPER CLINICAL LABORATORY AND UNIVERSITY HOSPITAL

in the second part of this history and to the corresponding progress in the student world as given in Book III. But it will be proper before closing the narrative of the external events of the period of Dr. Pepper's administration to give in their chronological position at least a list of the most important changes in the history of those departments of which no mention has previously arisen in this chapter, and then some statement of the changes in the numbers of Faculties and students and in the value of property.

In the College the elective system was carried somewhat further than it had been before, in 1882, and a definite "group system" established in 1892. A plan of admitting students to the College Freshman class without examination when they presented a certificate of proper preparation for entrance given by their teacher was adopted in 1886 and remained in existence, of doubtful utility, and causing increasing dissatisfaction, till its abolition ten years later. A dining hall and a universal intermission of lectures from one o'clock to two, after 1889, improved the health and happiness of the student; a board of University Chaplains was elected and its members served one week at a time successively, remaining also for a few minutes for possible consultation with the students after chapel, for a period of three years, but was after that time given up, and the Chapel services taken charge of by the Dean; changes in the marking system in the direction of greater simplicity, and the substitution of "honors" in specific subjects for a graded list of honor men were made in 1890. In 1893 a chapter of the Phi Beta Kappa was organized at the University, some post-graduates were elected to it, and the regular succession of undergraduate members was begun. The number and variety of courses of teaching given were enormously increased, and many additions of the greatest importance were made to the Faculty, as well, of course, as the inevitable losses through death and various forms of retirement.

In addition to those who have been mentioned as added to the College Faculty in connection with the courses in Science, Biology, Architecture, and Finance and Economy, and

with the Seybert bequest Dr. M. W. Easton became Professor of Comparative Philology and of English. Professor W. A. Lamberton succeeded Dr. Muhlenberg in Greek on the resignation of the latter, and became a valuable and influential member of the Faculty in its organizing and administrative as well as in its teaching work. In 1886 Dr. John P. Peters became Professor of Hebrew, Dr. D. G. Brinton of American Archæology and Linguistics, and Dr. Hermann V. Hilprecht was called from Erlangen, Germany, as Professor of Assyrian, all in the recently organized Department of Philosophy. Professor S. N. Patten was added to the Wharton School as Professor of Political Economy, and Professor J. F. Johnson in charge of the course in Journalism. Professor F. E. Schelling as Instructor assisted Professor J. G. R. McElroy, and after his death, successively as Assistant Professor and Professor of English Literature, reorganized the work in that department. Professor Edgar F. Smith took charge of the work in Chemistry after the retirement of Dr. Genth, and the resignation of Professor Sadtler, and Professor Edgar Marburg of Civil Engineering after the resignation of Professor L. M. Haupt in 1892. In the same year Professor R. E. Thompson retired and subsequently became President of the Philadelphia City High School. Professor Seidensticker after a long and honored career as Professor of German Language and Literature died in 1894. Within the same period most of the younger men who are now carrying on the bulk of the teaching work of the College became connected with the Faculty as Instructors or Assistant Professors. The very much larger number of teachers in subordinate positions was becoming even more marked than the increase in the number of subjects taught and subdivision of old subjects, which necessitated an increase in the number of full Professorships. There has come to be therefore a constant flow of able young men into and largely through these positions, usually obtaining promotion in some other academic or professional connection or in some cases after a more or less long apprenticeship being advanced to more important positions in the University. To name these, even the ones

who have become most conspicuous, is evidently impracticable. In a great institution the penalty of obscurity must usually be paid by the great number.

It was from the College that the call for a system of dormitories was becoming louder and louder. The increasing total number of students, the increasing proportion of them who were coming from outside of the city, and the

by the College Faculty were not attained within this period.

In the Medical School the courses had been lengthened in 1877 from two to three years and the length of term from five to six and one half months. Within less than ten years of that time the question of increasing the course to four years and also of lengthening the annual term had come into discussion. In 1883



AGNEW MEMORIAL SURGICAL PAVILION

increasing feeling of responsibility for their well-being on the part of the authorities were all alike making this need and the recognition of it clearer and clearer. In 1889 the students of this department who came from outside of Philadelphia and its suburbs were twenty-one per cent of the whole number, in 1890 they were twenty-three per cent, in 1891, twenty-seven per cent, in 1892, thirty per cent, and in 1893 something over thirty-three per cent. Nevertheless the dormitories although recommended from year to year by the Provost and

a voluntary fourth year was established with full arrangements for continuing instruction by all the Professors, but almost no students remained for it, the largest number in any one year being less than half a dozen. Nevertheless deeply impressed with the necessity for a fourth year in order both to relieve the pressure upon the hard-working students of the studies of their last year, and to give fuller instruction, especially clinical instruction, the Trustees and Medical Faculty established the compulsory four years' course, beginning with the session

of 1893-1894. In the meantime the annual term had been lengthened from six and a half to seven months, and in 1893-1894 along with the change of length of course the Medical



MATERNITY PAVILION COURTYARD

School year was lengthened to be the same as that of the other departments, that is of full eight months.

The adoption of the four years' course was made dependent upon the securing of a guarantee fund of \$20,000 a year for five years to cover possible losses from a diminution of the number of students, and of \$50,000 for the further equipment of the Medical Department. The latter sum was shortly afterward offered as a subscription by Dr. Pepper, payable in five annual instalments. At about the same time an application had been made to the State Legislature for \$80,000 to build additions to the Hospital. This was granted on condition of a similar sum being donated by private persons for the same general purposes. In the meantime it had become evident that the new four years' course was going to be a success and would not involve any diminution of the income of the Medical School. The Faculty and the Trustees therefore agreed to the proposition of Dr. Pepper that this appropriation be secured, and a further addition to the equipment of the

Hospital, and therefore of the school, be obtained by diverting the \$50,000 which he had promised and was now willing to pay over immediately, to the erection of a Laboratory of Clinical Medicine in connection with the Hospital. This was named after Dr. William Pepper, the father of the Provost and was placed at the western end of the hospital buildings previously erected. At the same time the widow of Dr. D. Hayes Agnew gave in addition to the \$50,000 bequeathed to the University Hospital in his will the sum of \$25,000. With these funds the easternmost wing of the Hospital was erected and named the "D. Hayes Agnew Surgical Pavilion." In the years just previous to these additions several other extensions had been made to the group of hospital buildings. As early as 1883 the "Gibson Wing for Chronic Dis-

eases" was built; in 1886 a Nurses' Home was added, the gift of the family of Juliana Wood, and in 1888 a small Maternity Hospital was built and equipped from funds raised for the purpose by Professor Barton Cooke Hirst.



NURSES' HOME

In 1890 a mortuary building and chapel was erected, in 1891 a children's ward was established, and within the ten years between the earliest and the latest of these dates three new

wards were built and endowed by special legacies. Thus the Pepper and the Agnew wings and the extension of the Maternity ward in 1894 were only the culmination of the equipment of the Hospital, which had amounted in value up to that time to about \$1,350,000.

The personal changes in the Medical School were more numerous than in any department of the University. The change already referred to as occurring in the College by which a very large number of teachers in subordinate positions, and frequently only serving in them for a small number of years, had become necessary to meet the necessities of the increased number of students and variety of courses, was even more marked in the Medical and allied schools. There were therefore, many changes in the personnel that had not at all the significance that a similar number of changes would have had in previous years. Nevertheless, it is in

this period, as is true of the College, that the men became connected with the University who are now in the main carrying on the teaching and administrative work of the Medical Department. Some of those who thus entered on their service in the University were Dr. J. William White, Dr. Charles H. Mills, Dr. John Marshall, Drs. Wharton, Deaver, Reichert, Piersol, Duhring, Guitéras, Griffith, Musser, C. B. Penrose and Davis. Connected more temporarily with the University, though prominent and influential during the time of their service were Dr. William Osler, Dr. Samuel Dixon and Dr. John S. Billings. The last, though holding a position of only secondary importance in the Medical School, left a distinct impress on the organization and administration of the Laboratory of Hygiene and the Hospital

before he resigned to accept the position of Librarian of the United Public Libraries of New York. The same period marks the close of the University career of several of the older and more distinguished Professors. Dr. Alfred Stillé resigned and became Professor Emeritus in 1884, Dr. R. A. F. Penrose and Dr. D. Hayes Agnew in 1888. Dr. Robert Meade Smith and Dr. William Goodell resigned their chairs in 1893. Dr. Joseph Leidy, perhaps the most eminent man in pure science connected with the University during its whole history, died while still holding his Chair of Anatomy, in

April 1891, and Dr. Agnew, as Professor Emeritus just a year later.

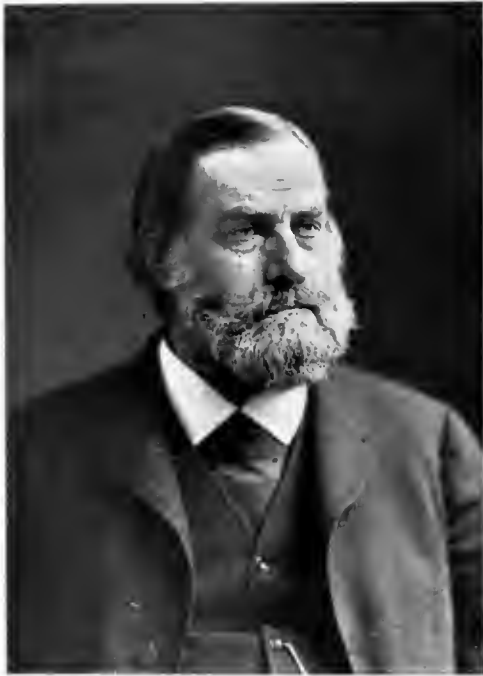
In the Law Department also the generation of men who had brought to the school its early growth, passed away, and were replaced by another group. In 1884 Professor Morris resigned to become Professor Emeritus,

in 1887 Professor Mitchell died, and in 1889 Judge Hare became Professor Emeritus. Taking their places, though in some cases subdividing the work were elected Professor George Tucker Bispham in 1883, C. Stuart Patterson, in 1887, and somewhat later Judge Dallas, Mr. Hollingsworth, Mr. Graham, and in 1893 George Wharton Pepper. Between 1887 and 1891 A. Sydney Biddle played his brilliant and sadly short part as a teacher. In the year of his election to the Faculty he and other members of his family presented to the Law School as a memorial of their father the late George Biddle, the Law Library purchased from the estate of Benjamin Harris Brewster. This Library became the nucleus of a Library of the Law Department, kept separate from the general University Library,



MORTUARY

and endowed by the permanent appropriation of twelve per cent of the annual income of the Law School. It has rapidly advanced to the position of a first rate professional



JOSEPH LEIDY

library. During the latter part of the decade between 1880 and 1890 the old difference of opinion in the Law Faculty between the advocates of a professional and of a scholastic atmosphere veered toward a decision in favor of the former and in 1891 the school was transferred from College Hall, in which it had met since 1874 to rented rooms in a large building at Broad and Chestnut. At the same time a vigorous appeal was issued for funds for the erection of a special building, an object that was not reached at that time, and has finally been attained only just in time to be recorded in the nineteenth century.

The Dental Department had progressed steadily during this period in number of students, fulness of teaching, and in recognition of its branch of medicine and of the status of its students. In 1882 the Dental School increased its course from two to three years and in the next year lengthened its term, along with the Medical and Law Departments to eight

months. In 1883 Dr. James Truman was appointed Professor of Dental Pathology, Therapeutics and Materia Medica. He was subsequently elected Dean of the department and remained such during the whole of this period. Here as in the other departments there was a constant addition of a larger and larger number of capable young men as subordinate teachers to fulfil the requirements of the larger number of students and greater complexity of the courses given.

From the Deanship of the Veterinary School Dr. Huidekoper retired in 1889 after giving to it by his six years of service a completed organization and an adequacy of courses of teaching almost unknown in this country up to that time in this branch of medical science. Dr. John Marshall, Dean of the Department of Medicine was also given charge of the Veterinary Department as Dean. Dr. Simon J. J. Harger, Dr. Leonard Pearson, Dr. John W. Adams and Dr. Leo Breisacher were added to the Faculty as



D. HAYES AGNEW

Veterinary Professors and a number of lecture-ships and demonstratorships were created and filled. The most interesting addition to the equipment of the Veterinary Hospital was the

erection in 1893 of a canine hospital. A separate building of two stories was put up, divided into two entirely distinct parts and devoted to the treatment of sick dogs and other small animals. The Veterinary Hospital had come by this time to treat over two thousand animals a year and this addition allowed at the same time an extension of its sphere of operations, an improvement in methods of treatment, and the utilization for the larger animals of the space thus vacated in the old hospital building.

The development of the College has been touched upon from time to time in this chapter in the mention of the organization of new departments, the provision of new equipment, the erection of new buildings, and its life was certainly no less vigorous than that of the newly created schools. Nevertheless many and perhaps the most important of its changes were rather internal than external, development from within, not additions without.

When the growth of the educational and social sides of the University's life comes to be traced this department will come into its proper relative prominence, though there is little that is distinctive to be added in this connection. In the winter of 1882 occurred the death of the Professor of Intellectual and Moral Philosophy, Dr. Krauth, who had been since 1868 Vice-Provost of the University and Dean of the College since 1873. In his Professorship he was followed in a few years by one of his own students Rev. George S. Fullerton. Dr. E. Otis Kendall was appointed Vice-Provost and Dean and so remained until 1889. In this year the two offices just named were dissociated, and while Professor Kendall remained Vice-Provost,

Dr. Horace Jayne, who had become conspicuous by his work in connection with the Biological School, became Dean of the College. He raised this office to one of much greater activity and importance and continued to occupy it till the close of Dr. Pepper's term of office.

This event came in the year 1894. On April 23 of that year Dr. Pepper sent to the Board of Trustees his letter of resignation as Provost of the University and President *pro tem.* of the Board. He gave as the reason for his resignation his growing realization of the impossibility of his carrying on his practice and

his teaching as a physician at the same time with the administrative work of the Provostship, and the evident need of the University for the undivided energies and devotion of its Provost. Dr. Pepper might well speak with pride of the changes that had taken place in the University during the thirteen years of his ad-



CANINE HOSPITAL

ministration, as a result of his own labors, of those of the Chairman of the Committee on Finance and Property, and of those who were associated with them. In 1881 its site had covered fifteen acres, in 1894 it extended over more than fifty-two acres. The total value of the University's property in 1881 was estimated at \$1,600,000, in 1894 it was estimated to equal something over \$5,000,000, though this valuation has since proved to have been excessive. At the earlier period the number of the teaching force in all departments was eighty-eight, at the later, two hundred and sixty-eight. In the year in which Dr. Pepper became Provost, there were nine hundred and eighty-one students in the University, in the year in which he resigned there were two thousand one hundred

and eighty. In 1881 there were four buildings, in 1894 there were twenty-two. The material equipment included in these buildings and represented by these sums of money was moreover only a slight indication of the real addition to the University's possessions. The increased libraries, museums, collections of instruments, facilities for teaching, for study and comfort represented added intellectual opportunities far beyond those measured by the mere increase in the number of teachers and students. Still more important had been the growth and diversification of teaching. Individual teachers had given and certain individual students had received in earlier periods teaching equal in its value to any subsequently provided in the University, but the adaptation by which all kinds

of specialized instruction were offered to students of all forms of requirements was the special creation of these latest decades of the University's development. Again, the new position which the University had come to hold in the community in 1894 as compared with that which it had held in 1881 represented no less of a revolution than the additions to its material and educational equipment. Finally a momentum, so to speak, had been obtained, which, created by and in turn reacting on the life of each individual part of the University, set a standard of vigor and activity and accomplishment which has furnished an incentive to, at the same time that it has placed a burden of responsibility upon, each man connected with the institution.

CHAPTER IX

GROWTH AND UNIFICATION UNDER THE ADMINISTRATION OF MR. HARRISON, FROM 1894 TO THE PRESENT TIME

WHEN Dr. Pepper's resignation was presented the thoughts of all members of the Board of Trustees were turned toward Charles C. Harrison as his natural successor. Mr. Harrison had been a member of the Board since 1876 and Chairman of the Committee on Finance and Property since 1886. In the actual form which the development of the University had taken in recent years, the constantly increasing expenditures, and the necessity for securing corresponding sums of money, this position had become, as already intimated, scarcely second in importance to the Provostship itself. Mr. Harrison's strikingly successful administration of that office, the large private gifts he had obtained for the University, his own liberal contributions, his increasing devotion of his time and interest to the University, the necessary dependence on his judgment in undertaking or deciding against new projects, had combined to give him already a very considerable influence and to obtain for him the entire trust and confidence of the other members of the Board. Curiously enough he and the late

Provost had graduated from the same class in the University. Subsequently Mr. Harrison had obtained a success in business life as conspicuous as that of Dr. Pepper in professional life. Mr. Harrison had been for some years giving his time and thought and labor more and more completely to the University as he withdrew partially from his larger business interests. It was therefore only natural that the committee which was appointed to secure a successor to Dr. Pepper should write almost immediately to Mr. Harrison asking permission to nominate him for the Provostship. He was however reluctant to take the office and announced his preference for continuing to work for the University but under some other suitable man as Provost. He was then asked to serve temporarily with the title of Acting-Provost, until some other candidate should be selected, though it is not probable that the committee really contemplated further search. To this Mr. Harrison consented and he was elected Acting-Provost, May 15, his acceptance being announced to the Board on June 12, 1894. Within the course of a year his suitability for

the position must have become as manifest to himself as it had to all others connected with the University and on June 4, 1895 he was elected to and accepted the full position of Provost. His administration from that time to the present has obtained the devoted and even affectionate loyalty of all connected with the University, the general approval of the community, and a success which can be partially judged by the material advancement of the institution, but more fairly measured by many equally important but less conspicuous changes.

As to the former class of changes this period has been to a great extent a time of fulfilment of long delayed projects. The Library Building, although completed in 1890 was essentially, as has been said, a part of Mr. Harrison's work, as was even more personally the Chemical Laboratory, completed in 1893. Following upon these has come the erection of the Flower Observatory, of the Dormitories, of Houston Hall, of the Museum of Archaeology, of the Dental and Law Buildings, and additions to many of the others; and already planned and in the near future to be added to them, a Physical Laboratory, a Gymnasium, and a group of Medical Laboratories. These do not represent new departments or fields of work but are rather the embodiment of plans long ago formed, the gratification of hopes long held, the proper equipment of departments previously long condemned to inefficiency by the inadequacy of their material basis. The tendency of the period has been rather toward simplification of organization, combination of departments and strengthening of the lines of work already inaugurated than toward a continual addition of new departments and taking up of new fields, as had

been characteristic of the preceding twenty years.

The first new building to be brought to completion after Mr. Harrison became Provost was however a new departure or at least the culmination of a comparatively recent movement. This was the Howard Houston Hall. For some years there had been an effort in progress among the students, principally inspired by the Young Men's Christian Association, to collect funds for the erection of a students' hall intended for various purposes,



CHARLES C. HARRISON

including the holding of religious services. This movement was brought by Mr. Harrison to the attention of Henry H. Houston, a member of the Board of Trustees, and on November 6, 1894, it was announced to the Board that Mr. and Mrs. Houston had given \$50,000 each to carry out the original plans and such extension of them as was made possible by this large sum and some other gifts which followed. The gift was intended as a memorial to their son Howard Houston who had died in the midst of his College course. The Trustees resolved therefore that the building

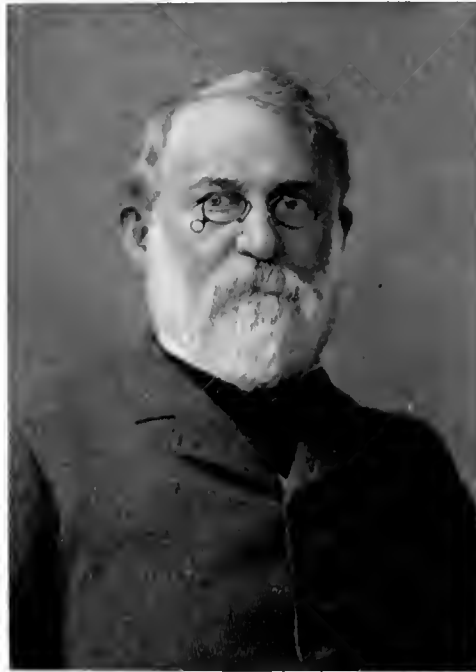
should be known as "Howard Houston Hall." When completed it proved to be the most beautiful and artistic building in the University group, with every appointment of good taste and convenience, and suited to a very great variety of student uses. It contains a swimming pool and baths, gymnasium, bowling alleys, billiard, pool and chess tables, lunch counters and facilities for more extensive repasts, reading and writing rooms, an auditorium and smaller rooms for religious services, and a large number of separate rooms for the use of Committees, the Athletic Association, the Young Men's Christian Association, for the College

papers, for the Musical Clubs, and a dark room for photographic purposes. The Hall was opened January 2, 1896. Student self-government was applied by putting it under the immediate charge of a House Committee composed of students, with one member of the Faculty, and in case of need an ultimate right of veto at the hands of a Board of Directors consisting of the Deans of the various Faculties. For the enjoyment of its facilities the "Houston Club" was formed, by which students and alumni could at a small cost obtain its use and the running expenses be provided for. Since its opening it has been used by averages varying from one thousand to one thousand five hundred persons a day during the whole of term time. The influence of Houston Hall over the physical, mental, and moral life of the students has been most beneficent. Few if any gifts to Colleges have exerted a more varied or more continuous influence for good.

Later in the year the "Flower Observatory" was opened. Some years before, Reese Wall Flower had left as a bequest to the University a piece of land amounting to about one hundred acres, lying some distance outside of the city limits, for the purpose of establishing an Astronomical Observatory and for the endowment of a Professorship in that subject. Undergraduate courses had been regularly given in Astronomy, but the fund had not been large enough to build and equip an Observatory, so the teaching had remained on a comparatively low and unsatisfactory level, and original or advanced work was of course impossible. In 1895 however building operations on the Flower farm were begun and during that and the succeeding year a residence for the Director, a library wing, a transit house and

its attachments and an equatorial building were finished and instruments of the most approved modern character were installed. Professor Charles L. Doolittle was called from Lehigh University to take charge of the Observatory as Director, and to occupy the position of Flower Professor of Astronomy, now made vacant by the resignation of Professor E. Otis Kendall. On May 12, 1897 the Observatory was formally dedicated, though its instruments had already been in service for some time.

The dormitories are a typical instance of what has been described as the fulfilment of a long delayed project. Before the Revolution the University had provided some dormitory facilities for its students, but after the confusions of that period these had never been reopened, and with the small number of students in the Arts Course during more than half of the century and the habit of looking upon students in the other courses as connected with the University only by an outward and professional bond, there had been but little attention given to the subject till about 1885. From this time onward however it was a constant



HENRY H. HOUSTON

object of agitation. One project after another for the construction of dormitories was brought forward, one Faculty after another called the attention of the Trustees to the need for them; statistics of the number of students boarding in the vicinity of the University, of the rates of board and the nature of the accommodations were collected; the Provost urged their erection year after year in his report. But nothing was really accomplished except the creation of a wide spread interest in the subject. It was felt that the health of the students was endangered by the unhygienic conditions in which they frequently lived, that they were



HOUSTON HALL

in many cases subjected to temptations to vice or dissipation by the absence of wholesome and cheerful surroundings, and that a great opportunity was being lost to create that "College spirit" which only thrives among students in constant contact with one another at times of recreation as well as of study, and in which the University had always been somewhat lacking. These and other considerations influenced Mr. Harrison even before his accession to

was laid November 5, 1895, and this portion, making up something less than one-third of the ultimate plan, was brought to completion, and its rooms occupied, in the fall of 1896. The long line of buildings, continuous externally but subdivided into different residence houses internally, was built along Woodland Avenue and on the line of Pine Street from Thirty-seventh to Thirty-ninth Streets, facing on an interior triangle and a small quadrangle open-



HOUSTON HALL

office to take the matter of dormitories up with interest, and within two years he collected more than \$350,000 for the building and furnishing of them. In 1894 a general plan for their construction recommended by the Department of Architecture of the University was approved, a definite site selected and work was ordered to proceed as rapidly as means could be obtained. The plan adopted contemplated a scheme which would only be completed after some years but portions of which might be built from time to time as they were needed. The corner stone of the first group of buildings

ing beyond it. This group of buildings accommodating something over three hundred students, after the first year was fully occupied, and projects for its extension were considered. In the fall of 1899 a line of buildings was begun across the eastern side of the triangle on the line of Thirty-seventh Street. The architectural effect of these buildings has been most gratifying and within the last few months a worthy culmination has been approaching completion in the "War Memorial Tower," erected in memory of those students and graduates of the University who took part in the war with



DORMITORIES, WOODLAND AVENUE FRONT

Spain in the summer of 1898. This structure makes the general entrance to the whole group of buildings and gives it a dignity and impressiveness not anticipated when the buildings were begun. The succeeding portions of the buildings will have to be placed on a lower level than those so far erected. As the scheme is carried out therefore by the continuance of the line around the great square from Thirty-seventh to Thirty-sixth and from Spruce to Pine Streets the two parts will be connected by means of the section just approaching completion, opening on one side on the old triangle, and on the other on a terrace over a line of cloisters, looking out over what will ultimately be the great quadrangle.

During the same years that the dormitory system has been at last coming into existence there has grown up on the streets in the vicinity of the University a series of Fraternity houses which represent on the one hand a part of the social life

of the students, but on the other furnish living facilities for a hundred or more students and are thus allied to the University Dormitories.

The Museums of Archæology and Palæontology have been the result of a very different set of interests from those which brought the dormitories into existence and have not involved the same personal participation on the part of the Provost. Dr. Pepper on his resignation from the Provostship in 1894 had announced his intention of devoting his University interest for the future especially to the work of that department and to the erection and development of the Museum which had become its most immediate need and field of action. He was therefore elected President of the department and of the association. The first step to the actual erection of a Museum

Building was the acquisition from the city by the University of a tract of some eight acres, subsequently increased to nine and a quarter, in trust to be maintained as a park and botanic garden and site for a free Museum. This ground was situated at the easternmost extremity of the University's possessions and was sufficient for the most extensive group of buildings which could be contemplated for Museum purposes. In fact plans were soon adopted which provided for a series of sections to be built successively as means should be obtained and which eventually should make one symmetrical whole, occupying this entire tract and costing about two and one-half mil-

lion dollars. The land was placed by the Board of Trustees at the disposal of the Department of Archæology; it was agreed that the westernmost wing should be built first and the collection of funds was vigorously begun. In the year 1895 the Trustees of the University carry-

ing on the policy which had held a prominent place in the early history of the institution and which had been reverted to again in recent years for hospital purposes, made an appeal to the State Legislature for an appropriation of \$500,000, on condition that an equal sum should be obtained by them from private sources. An agreement had been previously entered into by the Trustees that \$150,000 of the grant should go to the Archæological Museum. An appropriation was actually made of \$200,000 on the conditions offered. The Association soon collected more than a sufficient sum to obtain this appropriation and work was begun in 1897 on the building. This work was brought to completion and the "Free Museum of Science and Art of the University of Pennsylvania" transferred from the Asso-



FLOWER ASTRONOMICAL OBSERVATORY



DORMITORIES, PINE STREET FRONT

ciation to the University and opened to the public with the usual ceremonies, December 20, 1899. This first section of the building, which cost something over \$400,000, was the result of the most thoughtful and original architectural planning and of long investigation as to the needs and possibilities of a Museum Building as experience had been gained at other institutions. Moreover, dur-

sociation it had been determined to ask the Board of Trustees to merge the two bodies into one under the name of the former. This was done November 7, 1899, and it was provided that this Department should in future be governed by a Board of Managers of fifteen, three of whom should be Trustees of the University.

The transfer of the Archæological objects



CLASS OF 1873 GATE

ing the process of the construction of the building there had been a constant increase in the archæological material in the possession of the department, and building and contents have exercised a most impressive effect upon those who have now seen for the first time the collections so long labored over and at last so nobly displayed.

In the meantime, in the spring of 1899, at separate and then at joint meetings of the Department of Archæology and Palæontology and of the University Archæological As-

sembly from the Library building to the new Museum left several rooms in the former building free to be utilized for the other alternative purpose which had been originally suggested for them, that is, as seminar rooms and special library and study rooms for the various departments of post-graduate study. Under the direction of the Chairman of the Library Committee they were therefore during the year 1899 subdivided, rearranged, and furnished in such a way as to give most excellent accommodations for students and Professors in the Department



“THE TRIANGLE” — DORMITORIES

of Philosophy, and thus to make unnecessary the special building for that Department which had long been considered one of the *desiderata* of the University. The graduate work itself had in the meantime been put upon a very much more effective and advanced footing by the gift from Mr. Harrison of \$500,000 as the "George L. Harrison Foundation for the Encouragement of Liberal Studies and the Advancement of Knowledge." The educational

ogy. The first of these represents as before described an old project of University ambition, which after frequent early failures became practicable at last by the possession of some available land near the Biological building, by the energy of the present Professor of Botany and by the gift of some money, only too limited in amount, for that purpose. The last addition was rather a result of the requirements of changed methods of teaching than an old



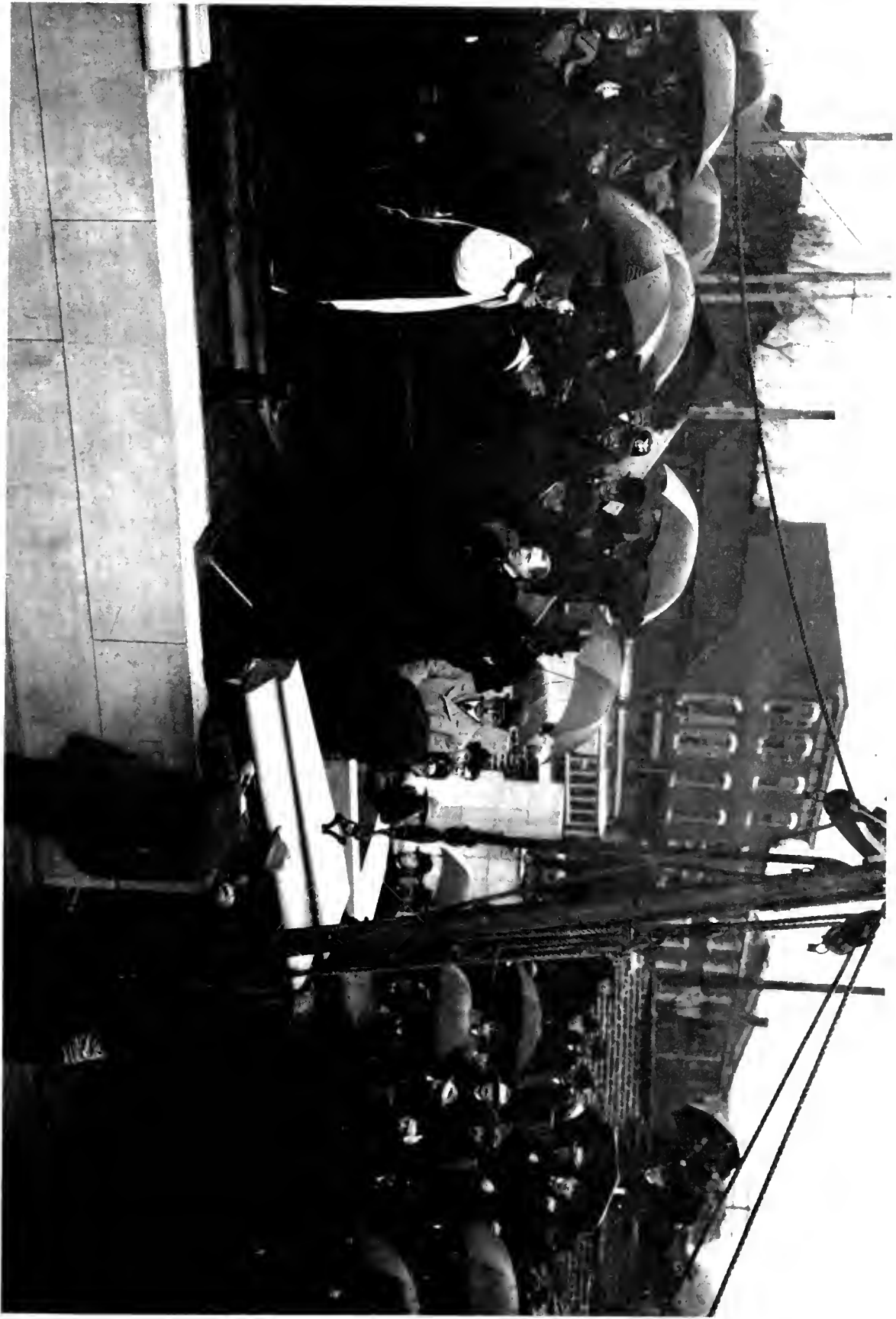
"THE LITTLE QUAD" — DORMITORIES

side of this endowment will be discussed later, but as its income went largely to the creation of a number of fellowships and scholarships in the Department of Philosophy, it immediately gave to that school a nucleus of picked students devoted to the most advanced work and whose attainments and character reacted on the whole body of its students, and added to the interest of its teachers in their work.

Somewhat analogous to the Museum has been the formation of the Botanical Garden and the Vivarium for the preservation of living animals, in connection with the School of Biol-

ogy, since it offers for almost the first time an opportunity to study scientifically the life history of a considerable variety of animals.

The Dental Department had grown steadily in numbers of students and instructors, in variety of teaching, and in necessity for constantly improved equipment, until it became quite impossible to be accommodated in the building which had been originally erected for its uses and part of those of the Medical Department. A new building with every advantage of size, convenience and furnishings was therefore erected on quite another part of the University



GENERAL MILES LAYING CORNER STONE OF MEMORIAL TOWER

property and opened for the use of students in the fall of 1897.

During the five years last past as well as during the previous period there have been erected numerous additions to the Hospital, especially Maternity Wards, operating rooms, extensions to the nurses' home and general wards, until this section of the University has become an extensive, complicated, largely endowed, and active institution in itself, with more than a hundred officials and employees and several thousand patients in the course of each year.

The last considerable addition to the buildings or the material equipment of the University actually completed before the writing of this historical sketch was the Law Department Building, situated at Thirty-fourth and Chestnut Streets. The Law School had migrated from the West Philadelphia buildings to hired rooms in the centre of the city in 1888. Upon the evacuation of the old rooms attached to the State-house by the County and State courts in 1895, when they were removed to the new Public Buildings, these rooms were loaned by the city authorities to the Law School, whose lecture rooms and Library were thus from 1895 to 1900 located in the midst of lawyers' offices and in the very atmosphere of legal and judicial tradition. Nevertheless it was far from the rest of the University; students and Professors felt detached from that academic and social life in which all the other departments shared, and the accommodations were unattractive, inconvenient and incapable of extension. The tenure of any site moreover was realized to be precarious until the School should be established in a building of its own. For some time therefore a strong desire had been expressed that a Law School Building should be erected and there was an increasing number in the Faculty, as there was already a great majority among the students, who wished to have this building placed in the same group with the others in West Philadelphia. Several causes were making this more practicable. The access from West Philadelphia to the Law Courts was now quicker and easier than it had been, the custom of each student being enrolled and studying in a lawyer's office during his Law School course was going out of existence, and

most of the members of the Faculty were giving a larger proportion of their time to teaching as compared with private practice than had formerly been usual. Ultimately, in 1897, the Faculty of the Law School unanimously recommended the adoption of such a plan. Vigorous measures were taken to collect funds, a site was secured within a block of the other buildings, and a building adequate in size for a great school, impressive in appearance, and possessing every convenience in internal arrangements that can be demanded or utilized in class or individual study was erected. This building was dedicated with dignified ceremonies in which representatives of a large number of educational institutions and judicial bodies in this country and abroad took part on the 21st and 22nd of February, 1900. The books of the Law Library had already been removed thither, and it was regularly occupied by the school immediately afterward.

Mention should be made here of the purchase by the University during the past year of a piece of ground with the buildings upon it formerly occupied by the "Foulke and Long Institute," lying between the grounds on which the Laboratory of Hygiene and the Dental Building are situated, and the row of houses lately bequeathed by Mr. Bennet for the extension of the teaching of women. The tract of land belonging to the University is thus made continuous, and upon this most recently acquired piece are to be erected the Laboratory of Physics, which has just been provided for by a gift of \$250,000, and the Gymnasium, for which funds are being collected. A site has also been selected between the Veterinary and the Biological buildings, plans have been partly drawn, and other arrangements made for a Laboratory of Pathology, Physiology, and Experimental Therapeutics for the Department of Medicine.

While these buildings have been gradually covering the greater part of available land in the University's West Philadelphia domain, the residual strips, openings, passage ways between, and adjacent streets have been taken under the charge of a generous lady who is fast seeing that they are laid out with shrubbery, planted with trees, and the whole reduced

to a unity of treatment, as far as its possibilities extend, in the direction of landscape gardening that is no longer possible, unfortunately, in the style and material of the buildings.

"Hamilton Walk" has been created to bind together some of the more distant parts of the grounds, and surroundings that were, and are in the memories of most alumni a waste of ugliness or neglect have now been brought to a degree of grace and taste and beauty that

charters in the future must appear, and previous to receiving the power to grant degrees must show sufficient endowment and adequacy and excellence of equipment to guarantee that the degrees will only be properly given. Of this Board Provost Harrison became and has remained Chairman.

A new group of classes had been growing up during 1892 and 1893, to which courses in American and European History and perhaps



UNIVERSITY MUSEUMS

will increase from year to year. At the same time with these additions of land and buildings, and accompanying equipment, the process adverted to in the previous chapter, by which the lines of connection between the University and the city and State have been drawn steadily closer, has been continued in two or three further forms. The University has continued to take a prominent part in the work of the Association of Colleges and Schools, and the meeting of 1900 will be held here.

In 1896 a law was enacted by the Pennsylvania State Legislature creating a Commission before which all institutions applying for

one or two other subjects, were given on Saturday mornings, especially suited in character as well as in time of appointment to the needs of teachers in the public schools of the city and vicinity. In June 1894 this work was more formally arranged, given into the charge of a committee of the College Faculty, and a greater variety of courses offered for the succeeding year. In that year there were sixty-five students enrolled, in the next year one hundred and eighty-one, in the next two hundred and eighty-two, and the number has increased almost steadily since, adding another to the only too few bonds between the University

and the public school system. The University has also made itself felt by offering to send anywhere in the state one of its own Professors to deliver without any charge a single lecture or a short course of lectures on any subject which may be desired, the lectures to be given under the auspices of local educational authorities. To this offer there has been a more or

practical problems of sanitation, that might arise in the experience of local Boards of Health. A suggestion was made at the same time that at various points in the State Laboratories for sanitary investigation should be established, with the expectation that the University Laboratory would be a natural centre of such a system. The State Board of Health



UNIVERSITY MUSEUMS

less ready response and such lectures have been given from time to time since that date. At first this work was in the hands of a committee of the Faculties but later it was placed in the charge of Eugene Ellicott, Assistant to the Provost.

Later in the same year, 1897, the Provost sent a circular letter to the authorities of the principal cities and towns in Pennsylvania offering to them the free services of the staff of the Laboratory of Hygiene of the University in giving information, advice, or decisions on

was consulted as to both the offer and the suggestion and gave them its hearty approval, but as yet there has been no appreciable public response. In the Legislative session of 1899-1900 a bill was passed authorizing the grant of a diploma of Public Health under certain prescribed conditions, and it is possible that this provision will be the beginning of recognition of the vast importance to the community of scientific instruction and training in the field of sanitary science.



BOTANICAL GARDEN, AND REAR OF BIOLOGICAL BUILDING

In 1898 the Veterinary Hospital put some of its ground and its rooms at the disposal of the State Live Stock Sanitary Board for the erection of a temporary building and its other uses in the prosecution of certain research work which had been recently provided for by law. A partial direct return was thus made for appropriations which had been received from the state, though in the view of the authorities of the University the principal and far more than proportionate return has been made in the form of physicians trained to contend with the diseases which are so destructive to the domestic animals.

In the same general direction of greater union between the University and the general community which surrounds it have been the frequent official or unoffi-

cial visits for various purposes of members of the State Legislature and of the City Councils. The Governor has become a frequent if not quite regular attendant at the greater University functions, and for a moment a similar connection was made with the National Government through the delivery by the President of the United States of the University Day address, February 22, 1898, an address notable alike for its own contents and for the critical juncture in the nation's affairs in which it was delivered.

But neither this continuance in the process of creating close reciprocal relations between the University and the state and city, nor the mere fulfilment of old plans, before adverted to, have been the most fundamental characteristics of Mr. Harrison's administration during the five and one-half years that have now elapsed since its commencement. It has been marked by three quite distinctive features. First of these is of course the enormous addition to the

wealth, the facilities, the capital and income of the University. This has been sufficiently indicated by the detailed statement of some of the forms in which it has been embodied given in the last few pages; but it may be summed up in another form by stating that the gifts to the University during this period have amounted to more than \$3,000,000. The greater part of this has of course been expended upon permanent equipment, but a considerable part also upon objects of immediate need for expenditure.

There is in existence an account of the income and expenditures of the institution for the first two and one-half years of its existence, i. e. from December 27, 1749 to June 10, 1752. It may be of some interest to compare this with some of the correspond-

ing figures for the last two years and a half. The former are as follows:—

Received from—

Original Subscriptions . . .	£1,530	18	0
Benefactions	478	10	0
Entrance and Tuition Fees	577	6	7
	<u>£2,586</u>	14	7
	= about \$7,760		

Paid for—

Arrears on "New Building" . . .	£775	18	11 3/4
Alterations and Furnishings . . .	1,104	16	3/4
Additional grounds	393	6	3
Books and Instruments	173	10	0
Fire-wood for Two Winters	52	17	10
Salaries to Rector, Masters, and Tutors	902	8	5
	<u>£3,402</u>	17	6 1/2
	= about \$11,909		

From the spring of 1897 to the fall of 1899 a table of corresponding income and expenditures would be approximately as follows:—



VIVARIUM

Received from —	
Gifts	\$1,344,000
Tuition and Graduation Fees	819,000
	\$2,163,000
Paid for —	
New Buildings	\$738,000
Salaries	878,000
	\$1,616,000

That is to say, expenditures and income in corresponding lines at the two dates are to

equal to the gifts and acquisitions during all the former periods together. In Mr. Harrison's first report to the Trustees he called attention to needs of the University which would demand the expenditure of well on to \$2,000,000. More than this sum has since been obtained, but several of those needs are still unsatisfied and new ones have shown themselves; so that the Provost has in his most recent report placed the early require-



DENTAL HALL

one another about as one to two hundred and fifty. There have been six periods in the history of the University in which special efforts have been made to increase its financial resources, by Franklin and his fellow Trustees at the foundation, by Dr. Smith some twenty years later, by the new Trustees after the reorganization in 1779, and by Dr. Stillé, Dr. Pepper, and Mr. Harrison, respectively. The additions to its possessions made during the last one of these periods have been more than

ments of the University at \$3,000,000 more. The University of Pennsylvania now stands either fourth or fifth of American Colleges in the money value of its property.

The second and third characteristics of Mr. Harrison's administration have been respectively an internal unification and growth of homogeneity in the whole University, and a much deeper interest in and provision for the ordinary every day life of the students.

At the very beginning of his administration

the present Provost proposed "a general reorganization of administrative duties." There has not yet been, in pursuance of this, any formal deliberate scheme of reorganization carried out or even formulated. Nevertheless the partial changes that have been made from time to time have all been in one direction, that of greater simplicity and uniformity, and their total result has been to make the institution more

almost if not quite every one of its subjects with some one of the other Faculties. Each of its members was therefore already a member of some other Faculty. The objects for which it had been originally created had been accomplished, and the whole work of the Medical School had risen to a level of inclusiveness and effectiveness which had been un hoped for at the inception of the auxiliary courses.



LAW SCHOOL

compact and homogeneous in its organization than it has ever been before, notwithstanding its greater extent and variety of functions. In the fall of 1894 the teaching work of the University was with a few small exceptions all grouped into seven distinct and coordinate Faculties; those of the College, of Medicine, of Law, of Dentistry, of Philosophy, of Veterinary Medicine, and of Sciences Auxiliary to Medicine. The work given under the last of these moreover was coming to be connected in

In the fall of 1899 therefore the Faculty of Sciences Auxiliary to Medicine was merged into that of Medicine, leaving only six Faculties. Apart from these remain the Laboratory of Hygiene, the Observatory, and the Department of Physical Education, each under the immediate charge of a Director, who reports directly to the Provost; and the Library, the Wistar Institute, the Hospitals and the Museums, which are variously and in the last three cases more or less separately

governed. Each of the six Faculties has its Dean and Secretary.

The Deanship has become more and more of an administrative office, and much of the activity and advancement of the respective Departments have come to depend on the personal characteristics of these officers.

In the fall of 1894 the Board of Trustees created a Board of Deans consisting of these officers and the Provost and Vice-Provost. As a result of the existence and frequent meetings

ties was created in 1896 for the regulation and supervision of non-athletic organizations. Thus for purposes of discipline and in many other lines of interest there has come into existence a practically complete unification among all the departments of the University that include any considerable number of students.

In the financial relations of the Faculties to the Board of Trustees there has come about a similar systematization and centralization. In the earlier periods of all departments there had



HAMILTON WALK, LOOKING WEST

of this body, uniformity has been introduced among the departments to a degree never before possible or even realized as desirable. This Board has been entrusted with the ultimate control of Houston Hall and the Dormitories, and upon its recommendation a University Committee on Athletics was created in the spring of 1893. This committee includes a representative from each of the six Faculties, and has general control of this branch of student interest for all departments of the University. From analogy with this committee a similar group of representatives of the various Facul-

ties had been independent reception of fees and partial payment of expenses by the members of the respective Faculties. In the College this had long been abandoned and given place to the mere reception of salaries. In the first few years of post-graduate teaching the fees of students had gone to the instructors, but this also was soon given up. In the case of the Medical, Dental and Law departments and that of Sciences Auxiliary to Medicine, however, the Faculty still, as before, received the fees of the students, and more or less complicated and frequently changed arrangements existed

by which their proportionate parts of the expenses of their respective departments and of the institution were met by payments into the general Treasury, the remainder going to the Professors as salary. The Provost was distinctly opposed to this system and a number of the members of the Faculties concerned held the same view of the case. In the spring of 1895, therefore, it was arranged that the Professors in the Dental Department should receive fixed

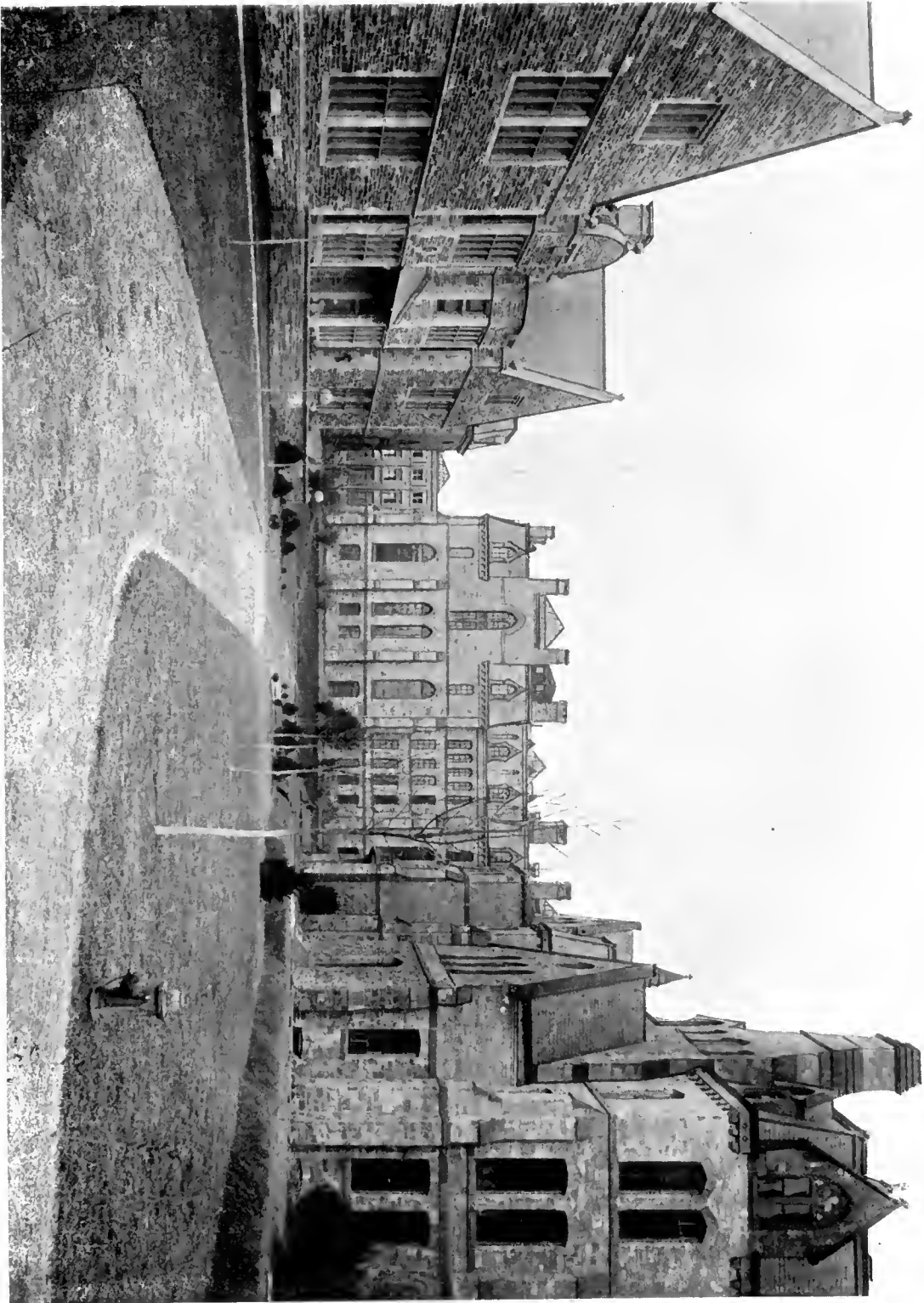
The new location of the Law Building, the occupancy of the dormitories, the use of Houston Hall, the growth of athletic interests, and many other influences of the time, some of them already acting under the previous administration, have all combined with the policy of the Provost to bring about this nearly complete internal cohesion, the centralized administration, the recognition of reciprocal interests and responsibility in all parts of the University.



CLASS OF 1872 MEMORIAL GATE

salaries for the future and no longer have any direct interest in the fees paid by students. A year afterward the same change was made in the Medical School, and in the following winter, that of 1896-1897, the Faculty of Law requested the Trustees to change the financial relations of their department in the same way. The one remaining irregular case, that of the Department of Sciences Auxiliary to Medicine ceased to exist in 1899. Thus all payments made for instruction in the University now go into the general Treasury, and the salaries of all teaching officials are paid directly from it.

Of the changes which have brought about and embodied this unity of the University, none have been more far-reaching in their results, or more characteristic of the present régime, than those which have to do with the life of the students outside of the class-room. This must be referred to again under the head of student life, but some mention of it belongs here as being also one of the outward characteristics of the administration of Mr. Harrison. The building of the Dormitories has not only given an attractive, a healthful, and a moderately priced home to more than three hundred



HOUSTON, MEDICAL AND COLLEGE HALLS, REAR VIEW

students, soon to be four hundred, but it has gathered them from every department of the University and brought them together into a common life, so far as the interests of their dwelling-house extend, when otherwise they would have had no relation or only the slightest with one another.

Even more effective has been Houston Hall in furnishing opportunities for enjoyment and social life of all kinds, and in uniting students from all parts of the University in the use of these. The fifteen hundred or more entrances daily represent the entry of a great many students from each department of the University, and their participation when there, irrespectively of departments, in all the associations, permanent or temporary, which make the Hall their home. The interest which Mr. Harrison and the Board of Trustees have taken in the creation and extension of

these two centres of student life has been with a full realization of and interest in their significance for the life of the students apart from the specifically educational work of the University. Of all the additions to and development of the material, educational and administrative equipment of the University during the last five years, no elements will probably in the long run prove to be more important than those parts which have been conducive to the growth of internal uniformity and of intelligent provision for the social life of the students.

It remains to chronicle some of the more important changes of personnel during this same period. The death of Dr. Pepper came suddenly during the summer of 1898, and was followed by a memorial meeting participated in officially by a large number of societies and held in the University Chapel on November 29, 1898. The demise of Dr. Charles J. Stillé, his predecessor as Provost, occurred in 1899.

The death of Dr. Kendall and that of Professor Ryder have already been mentioned. Many others have been removed from the Board of Trustees and the Faculties during the same period. Vacancies caused by the death of Mr. Houston, Judge Reed, Dr. Schaefer, Mr. Scott, and Mr. McKean and the resignation of Mr. Hunt, Mr. MacAlister, and Mr. Tower have been filled successively by the election of Dr. Lewis, Mr. Rosengarten, Randall Morgan, James McCrea, Samuel F. Hous-



DETAIL OF DORMITORIES

ton and Dr. J. M. DaCosta. The election of Mr. McCrea represented a change of policy in the fact that he is a resident of Pittsburg, while the invariable custom of previous times has been to elect only citizens of Philadelphia or its immediate vicinity. This change is in line with other efforts to make the University a representative of a wider constituency than it has formerly served. In the Faculties, partly as a result of death, partly of resignation, there has been a very considerable change. Professors Hollingsworth, C. Stuart Patterson

James Parsons, W. H. Carson, G. S. Graham and Charles C. Townsend of the Law Faculty; Professors Breisacher, Harrison Allen, J. S. Billings, Randolph Faries, Theodore Wormley, John B. Deaver, John Guiteras and C. B. Penrose of the Medical and allied departments; and Professors Edmund J. James, J. H. Robinson, E. D. Cope, W. P. Wilson, G. H. Horn, Gregory B. Keen, F. N. Thorpe, D. G. Brinton and J. Q. Adams of other de-

M. D. Learned of German Language and Literature. The more important additions since have been the election of Morris Jastrow, Jr., as Librarian; Dr. Caspar Wister Miller, as Director of Physical Education; of Judge J. B. McPherson, R. D. Brown, Esq., and J. W. Patton, Esq., in the Law Department, and Dr. Leonard Pearson and Dr. John W. Adams in Veterinary Medicine. Mr. Stewart Culin has also become Curator of the Museums. A large



HALLWAY FIRST FLOOR, HOUSTON HALL

partments, have died or left the University, as well as a very considerable number of younger men or men in less conspicuous positions. Coincidentally with or soon after Mr. Harrison's accession to office a number of new Professors were elected, to fill vacancies or to complete the organization of certain departments. These were Alexander C. Abbott, Professor of Hygiene; Hampton L. Carson and Wm. Draper Lewis, of Law; E. G. Conklin of Zoölogy, C. L. Doolittle of Astronomy, Henry Gibbons of Latin, E. C. Kirk of Dentistry and

number of new appointments have necessarily been made in the minor positions, and several promotions should perhaps be mentioned, especially that of Dr. John Marshall to the Professorship of Chemistry in the Medical Department, in addition to his Deanship; of Assistant Professors Seager, Rowe, Lindsay, E. R. Johnson, Newbold, Gudeman, Munro, Penniman and T. H. Montgomery in the College; and of Dr. Matthew H. Cryer, Dr. G. G. Milliken and Dr. G. G. Davis in the Medical Department. Dr. Edwin S. Crawley

and E. P. Cheyney have been made respectively Professor of Mathematics and of European History during the same period. A series of changes were made necessary by some measures of reorganization in the Medical Department during the last year and they have resulted in promotions or new elections, as follows: Dr. James Tyson has become Professor of Medicine; John H. Musser and Alfred Stengel, Professors of Clinical Medi-

future is but ill measured by their actual title or position.

Many of the administrative positions in the University were renewed during the first year or two of Mr. Harrison's administration. The resignation of Dr. Jayne as Dean of the College and of the Department of Philosophy followed close upon that of Dr. Pepper, and Dr. Kendall resigned as Vice-Provost shortly afterwards. As part of the new Provost's plan



HALLWAY SECOND FLOOR, HOUSTON HALL

cine; Simon Flexner of Pathology and John G. Clark of Gynæcology.

The constant division of subjects of teaching in the progress of specialization has made it necessary frequently that men with minor titles should really be giving instruction of quite as high a nature as are some of those holding full professorial positions. Therefore in the long ranks of men of comparatively obscure position in a great University, many may be found whose usefulness in the present as well as their probable eminence in the

of reorganization, Professor George S. Fullerton became Vice-Provost, enlarged powers and duties having been attached to that office, and was also appointed Dean of the College. Professor Lamberton became Dean of the Department of Philosophy; and Dr. James Truman, Dean of the Dental Department. After one or two intervening changes, the Deanships were placed in the hands of those who have since held them, as follows; College, Josiah H. Penniman; Medicine, Dr. John Marshall; Law, William Draper Lewis; Philosophy, William R.

Newbold; Dentistry, E. C. Kirk; and Veterinary Medicine, Dr. Leonard Pearson. The comparative youthfulness of these incumbents is a noticeable fact not without significance in the development which this, like other large Universities, is taking. The administrative, as distinguished from the scholastic, the pedagogic, or even from the disciplinary features of such a position, are becoming the predominant requirement. Separately, or organized as the Board

the eve of accomplishment, so much is planned and needs but the passage of a little more time and the exercise of a little more effort to give to it reality and existence, that the line between the present and the future becomes almost as invisible as it is shifting. It might seem desirable to sum up the present attainments, conditions, and prospects of the University whose external growth we have been tracing; to state with exactitude the nature of the work which



READING ROOM, HOUSTON HALL

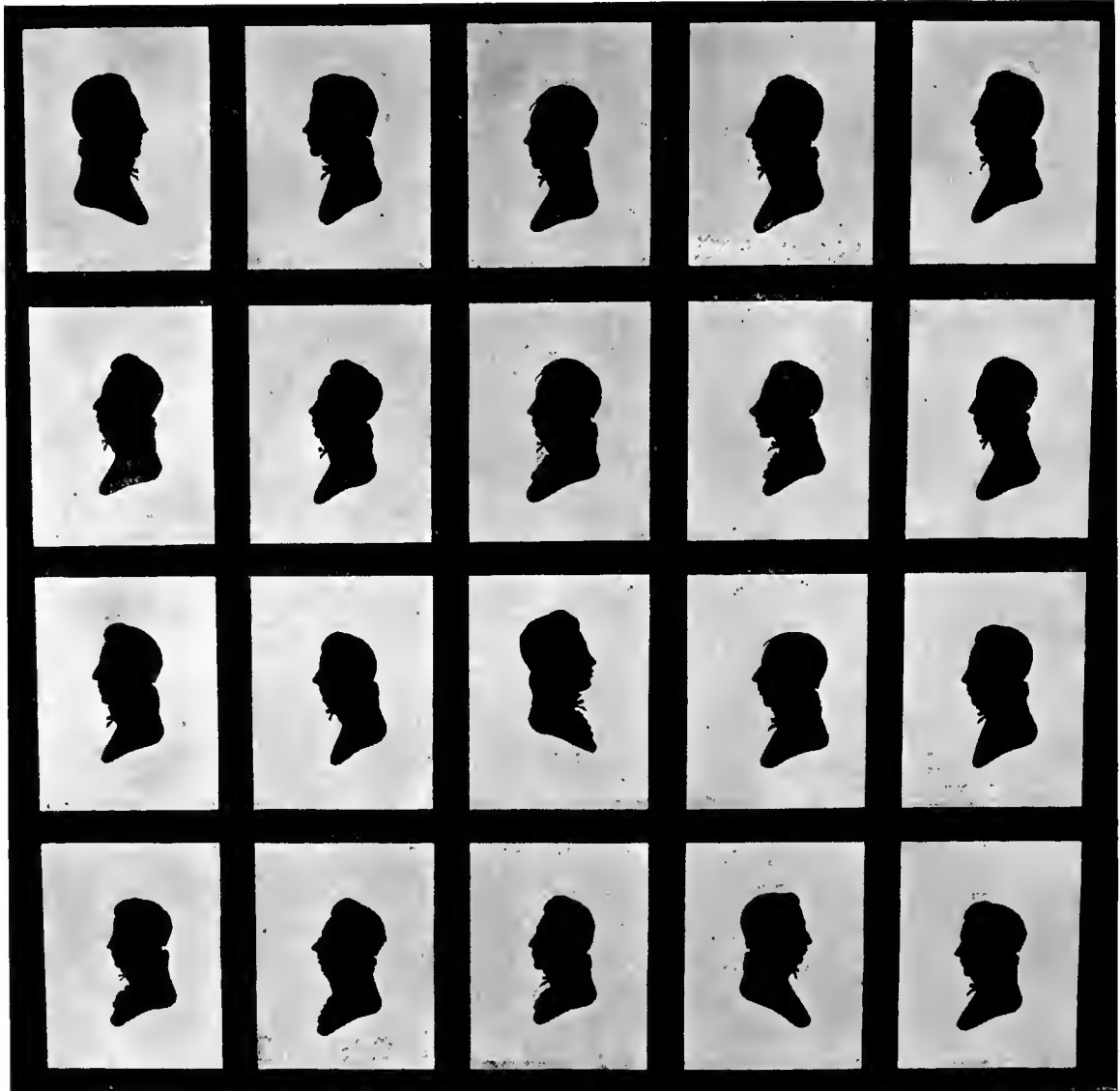
of Deans, in their capacities of advisers of the Provost, or in their relations with the public as representing their respective departments, their position, like that of the men in charge of other departments of the University not so largely of a teaching nature, demands and exercises gifts and abilities of an entirely different type from those of the typical College Professor.

It is difficult to bring the latest chapter in the history of an institution so full of life as a great modern University to a close. So much has but just been completed, so much is just on

each department is doing and the equipment which it possesses for doing that work. But there are no such stationary conditions and fixed plans. The work which the University has to do is being done by methods and with facilities that are being developed and improved from hour to hour. In some part or other of the institution change is going on all the time. Further possibilities and opportunities open out as each stage of attainment is reached. It is only the direction of advancement, the general character of its development, the dominant

ideals of those who are guiding its progress that are definite and determinable and these can best be discovered from the descriptions already given and from the study of the educational and social movements which will be given later. The narrative however must

be brought to a close, though the progress of the University is not; and a return to the foundations must be made, to study in brief the educational, that is to say the internal, history of the Academy, the College, and the University, as we have followed its more external life.



SILHOUETTES OF CLASS OF 1811

Robert B. Belville
Thomas K. Carroll
Joseph P. Engles
Rider H. Ratcliffe

Richard Biddle
Alfred H. Dashiell (?)
Charles P. Fox
Isaac C. Snowden

Joseph Barr
Richard de Butts
Benjamin Gratz
James Tilghman

Thos. P. Bennett
George Duffield
Samuel B. How
E. H. C. Wilson (1812)

Clement A. Buckley
Samuel Duffield
Lynford Lardner
Richard C. Wood

BOOK II

THE INTERNAL OR EDUCATIONAL HISTORY OF THE UNIVERSITY

CHAPTER I

THE COLONIAL ACADEMY AND COLLEGE

THE University began, curiously enough, with an elective system. According to the original plan a Latin and Greek School, an English School and a Mathematical School were established. The Latin and Greek Master was to teach those languages and History, Geography, Chronology and Rhetoric to the scholars who should be entered in his "school"; the English Master was to teach "the English Tongue grammatically and as a language," and History, Geography, Chronology and Rhetoric, in a separate "school" to those who were not inclined to learn Latin and Greek; while the Mathematical Master was to teach "mathematics and the sciences usually taught with them." Students might enter one or other of the three schools, as they or their guardians wished. The Academy was looked upon as simply a combination of such detached courses as were then being offered in Philadelphia by various teachers. Dr. Peters in his sermon at the opening expressed this ideal, "Though it has been thought proper to give this seminary of learning the name and title of an Academy, yet it is more properly a collection of schools under one roof and the inspection of the Trustees." He refers to it in another place as "this Academical Collection of Schools." It was really made up of two Grammar Schools and one Mathematical and Scientific School. Of the two Grammar Schools one was for the Classical Languages and English branches, the other for English branches alone but with greater emphasis on the study of the English language for its own sake. A "school" at

that time seems to have meant a certain room presided over by a certain teacher. We therefore hear later of a "writing school," a "French school" and the two "Charity schools," and even of stoves being put in "each of the schools." As each of these schools became more numerous attended, ushers or tutors were added who took charge of a part of the boys previously taught by the Professor in charge of that school.

In May 1754 Mr. Smith was engaged to teach "Logic, Rhetoric and Ethics, and Natural Philosophy," thus establishing what he called a "Philosophical School." It was this addition to the educational equipment of the institution, along with the new charter giving the right to grant degrees, that transformed the Academy into the College, or rather superposed the College upon the Academy. The students were still entered as in one or other of the schools. A list drawn up in 1757 gives fifteen students in the Senior Class and eighteen in the Junior Class of the Philosophy School, twenty-one in the Latin School, forty-six in the Mathematical School, and twenty-two in the English School. There were besides about one hundred and twenty in the boys' and the girls' Charity Schools.

This somewhat chaotic plan, in which each student was entered for one specific subject or small group of subjects, receiving all his instruction from one teacher and either not being taught other subjects at all, or only after he had completed the work of his own school, was too uneconomical and crude to subsist along with the evident possibilities of greater coö-

dination. At the very outset of the scheme, when the Trustees discussed the question of whether to charge a fee for each branch or one inclusive fee for everything, they settled on the latter alternative. Shortly afterward we find a committee appointed "to visit the mathematical and writing schools and consider what regulations may be necessary respecting the numbers to be sent up to those schools at one time, and the hours most proper to be appointed

and in Mathematics being introduced in the Philosophical School, which then became the College proper.

The most important step in this early process of organization was the "scheme of liberal education" laid by the Faculty before the Board of Trustees for their approval, April 13, 1756. It was ordered at that time to be tried for three years from that date, and the Provost was ordered to publish it "in order to obtain



AUDITORIUM, HOUSTON HALL

for the Latin boys and likewise for the English boys to be there, so as not to incommode one another." Apparently the boys were now all sent to the same teachers for their Mathematics and for their writing, being distinguished only into the Latin and the English schools. When the Philosophical subjects were added and the College organized, it was done by combining these with the Latin School, leaving the English School to represent the old Academy. Long afterward the work of the Latin and Greek schools also was relegated to the Academic stage, further study in these languages

the sentiments of persons of learning and experience concerning it." As a matter of fact it seems to have remained practically unchanged through the whole period of existence of the Colonial College. It was a carefully worked out system, planned apparently by Dr. Smith himself, although presented in the name of the Faculty, which at that time included five men, apart from the Tutors. These men were: Dr. Smith, Provost and Professor of Natural Philosophy; Francis Alison, D.D., Vice-Provost and Professor of Moral Philosophy; Ebenezer Kinnersley, M.D., Professor of Oratory;

John Beveridge, M.A., Professor of Languages; and Hugh Williamson, M.A., Professor of Mathematics. The "scheme" did not take cognizance of the Charity School and the English Academy, as they with their instruction in the English branches, in writing, and practical Mathematics were not participants in "liberal education," the providing of which was the object of the classical and collegiate parts of the institution. Latin and Greek were provided

ing, writing and speaking of English, some teaching of Geography and Chronology, and in the last stage to begin the study of Arithmetic. This course would take three, four or five years, according to the age and ability of the boy, and was expected to be taken somewhere between a boy's ninth and fourteenth years. A successful completion of this elementary work passed a boy on to be a Freshman; that is, to enter the first of three years in the "Phi-



BILLIARD ROOM, HOUSTON HALL

for in four successive stages. The first comprised Latin grammar and exercises, and the translation of Aesop's Fables and Erasmus' Colloquies; the second, Eutropius, Nepos and Ovid, with selections from other writers and written exercises; the third, Virgil, Cæsar and Sallust, and a beginning of Greek grammar and translation; the fourth, Horace, Terence, Virgil and Livy, Lucian, Xenophon or Homer, with exercises and orations in Latin. While the great bulk of the boy's time was being given to these classical studies, he was to have exercises in the read-

ing, writing and speaking of English, some teaching of Geography and Chronology, and in the last stage to begin the study of Arithmetic. This course would take three, four or five years, according to the age and ability of the boy, and was expected to be taken somewhere between a boy's ninth and fourteenth years. A successful completion of this elementary work passed a boy on to be a Freshman; that is, to enter the first of three years in the "Phi-

losophy Schools." The work of this period was laid down for each separate term as tabulated on page 202.

A list was given of "books recommended for improving the youth in the various branches," which might be read privately. They were grouped by years as follows:
Freshman Year—Spectator, Rambler, etc, for the improvement of style, and knowledge of life; Barrow's Lectures, Pardie's Geometry, Maclaurin's Algebra, Ward's Mathematics, Keil's Trigonometry; Watt's Logic and Supplement, Locke on Human Understanding,

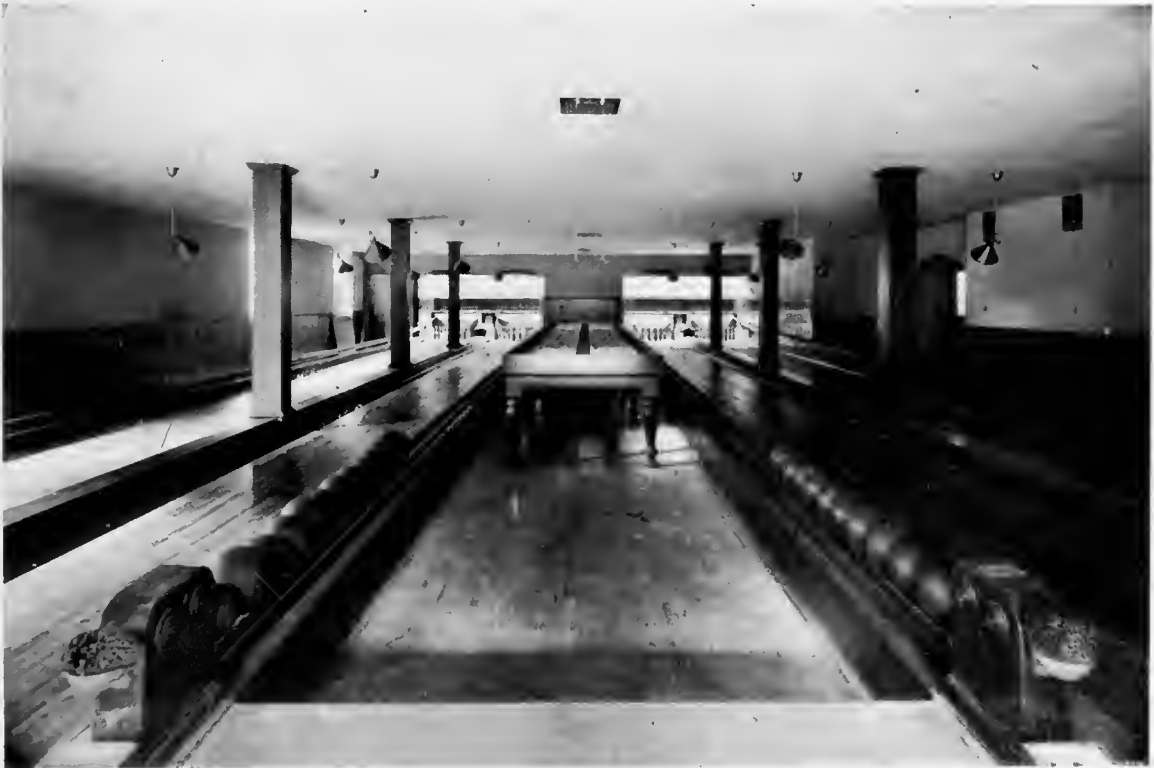
	INSTRUMENTAL PHILOSOPHY		CLASSICAL AND RHETORIC STUDIES
	Lecture I.	Lecture II.	Lecture III.
FIRST YEAR (Freshman)			
FIRST TERM	Latin and English Exercises - continued.	Common Arithmetic, re- viewed. Decimal Arithmetic. Algebra.	Homer's Iliad. Juvenal.
SECOND TERM	The Same.	Fractions and extracting roots. Equations, simple and quad- ratic. Euclid, first 6 books.	Pindar. Cicero, Select parts. Livy resumed.
THIRD TERM	Logic with Metaphysics (at leisure hours disputation begun).	Euclid, a second time. Logarithmical Arithmetic.	Thucydides or Euripides. Well's Dionysius. Some afternoons to be spared for declamation this year.
SECOND YEAR (Juniors)			
FIRST TERM	Logic etc., reviewed. Surveying and Dialling. Navigation.	Plain and spherical Trigo- nometry.	Introduction to Rhetoric. Longinus, critically.
SECOND TERM	Conic sections. Fluxions.	Euclid 11th and 12th books. Architecture, with Fortifica- tion.	Horace's Ars Poetica, crit- ically. Aristot. Poet. etc., critically. Quintilian, select parts.
	MORAL PHILOSOPHY BEGUN	NAT. PHILOSOPHY BEGUN	COMPOSITION BEGUN
THIRD TERM	Compend. of Ethics (Dispu- tation continued).	General properties of bodies. Mechanic powers. Hydro- statics. Pneumatics. (Declamation and public speaking continued.)	Cicero pro Milone. Demos- thenes pro Ctesiphon. During the application of the rules of these famous ora- tions, imitations of them are to be attempted on the model of perfect eloquence.
THIRD YEAR (Seniors)			
FIRST TERM	Ethics, continued. Natural and Civil Law.	Light and colors. Optics, etc. Perspective.	Epicteti Enchiridion. Cicero de Officiis. Tusculan Quæst. Memorabilia Xenoph. Greek.
SECOND TERM	Introduction to Civil History. Introduction to Laws and Government. Introduction to Trade and Commerce.	Astronomy. Natural History of Veg- etables. Natural History of Animals.	Patavii Rationar. Tempo- rum. Plato de Legibus. Grotius de Jure B. and P.
THIRD TERM	Review of the whole. Examination for Degree of Bachelor of Arts.	Chemistry. Of Fossils. Of Agriculture.	Afternoons of this third term for composition and declamation on moral and physical subjects. Philosophy acts held.
Through all the years the French language may be studied at leisure hours.			

Hutcheson's *Metaphysics*, Varenius's *Geography*; Watt's *Ontology and Essays*, King de Orig. Mali, with Law's Notes; Johnson's *Elem. Philosophy*.

Junior Year — Vossius, Bossu, Père Bohours, Dryden's *Essays and Prefaces*, Spence on Pope's *Odyssey*, Trapp's *Praelect. Poet.*, Dionysius Halicarn., Demetrius Phalerus, Stradae *Prolusiones*; Patoun's *Navigation*, Gregory's *Geometry*, on *Fortification*, Simson's *Conic*

My Lord Bacon's Works, Locke on *Coin*, Davenant, Gee's *Compend*, Ray *Derham*, *Spectacle de la Nature*, Religious *Philosopher*, Holy Bible, to be read daily from the beginning, and now to supply the deficiencies of the whole.

The plan thus contemplated a three-years course. Each College year consisted of one term of four months and two terms of three



BOWLING ALLEY, HOUSTON HALL

Sections, Maclaurin's and Emerson's *Fluxions*, Palladio by Ware; Helsham's *Lectures*, Gravesande, Cote's *Hydrostatics*, Desaguliers, Muschenbroek, Keil's *Introduction*, Martin's *Philosophy*, Sir Isaac Newton's *Philosophy*, Maclaurin's *View of do.*, Rohault per Clarke.

Senior Year — Puffendorf by Barbeyrac, Cumberland de Leg., Sidney, Harrington, Seneca, Hutcheson's Works, Locke on *Government*, Hooker's *Polity*; Scaliger de *Eminentatione Temporum*, Preceptor, Le Clerc's *Compend of History*; Gregory's *Astronomy*, Fortescue on *Laws*, N. Bacon's *Discourses*,

months each. On each day there were to be three lectures or hours of instruction, several additional hours no doubt being spent in study under the direction of the Professors. There were, besides, the recommended readings to be done outside of regular hours. The course led to the degree of Bachelor of Arts.

Perhaps the most striking characteristics of this plan are its unity and its inclusiveness. There is a clearly defined and logical order of arrangement, and provision for all subjects which its authors considered conducive to a liberal education. In fact it included much

that was not given in later times and probably not given elsewhere at that time. The study of many of the subjects must have been extremely superficial, if not perfunctory, judging not only from the inadequacy of the time allowed, but from the youthfulness of the students, who averaged something above fourteen at the beginning and about eighteen at the close of the course. A thorough and detailed study of the various subjects was however no part of the scheme. Dr. Smith and the other Professors probably were under no illusions as to the completeness of mastery of Mathematics, Physics, "Natural and Civil Law," and "Architecture with Fortification" obtained by the students. Mastery was hardly expected in anything, unless perhaps in logical and rhetorical expression. For with all its attention to apparently unpractical branches of study, the scheme was to a considerable extent a utilitarian one. This comes out especially in the attitude toward the classics, the study of which fills up such a large part of the time and attention of the students, especially during the early years. The Greek and Roman authors were read not so much for their philological or their literary interest, as they are now, as they were to furnish models of style, forms of statement or argumentation, or matter of knowledge. The object of the scheme was rather to give the students a conspectus of all fields of human knowledge, to train them in proper forms of expression, to develop clearness of thought; and thus pave the way for future interested and successful study or reading, especially in their chosen professions.

The unity of the plan is seen in the arrangement of the subjects by which the morning hours for the first five terms were given to "Instrumental Philosophy," that is, to logical and mathematical studies which should serve as instruments for the study of the various branches of "Moral Philosophy" and "Natural Philosophy," to which the mornings for the remaining four terms of the course were given. Similarly the classical studies of the afternoon hours during the first five terms were preparatory to the discussions and exercises in argumentative and rhetorical composition of the remaining four terms. This was certainly the

extreme of a "required course," — a logical, closely-jointed, consecutive arrangement of all the studies of each student during the whole of his College course.

The curriculum of the upper part of the institution therefore passed, by the adoption of Dr. Smith's ideas, from a loose collection of separate courses to a closely-knit system of training and acquisition to which every student was subjected without variation.

The objects sought for in this inclusive and unified plan of studies can be gathered from the expressions used by Dr. Smith in his own accompanying explanation: "Concerning the foregoing plan, it is to be remarked that life itself being too short to attain a perfect acquaintance with the whole circle of the sciences, nothing can be proposed by any scheme of collegiate education but to lay such a general foundation in all the branches of literature as may enable the youth to perfect themselves in those particular parts to which their business or genius may afterwards lead them. In the disposition of the parts of this scheme a principal regard has been paid to the connection and subserviency of the sciences, as well as to the gradual opening of young minds. Those parts are placed first which are suited to strengthen the inventive faculties, and are instrumental to what follows. Those are placed last which require riper judgment and are more immediately connected with the main business of life. Thus it is hoped that the student may be led through a scale of easy ascent till finally rendered capable of thinking, writing and acting well, which are the grand objects of a liberal education."

There was still but little unity of plan in the lower portions of the institution. We still hear of "grammar schools," "the Latin," "the English," "the Mathematical," "the Writing" schools, and students below the College were still all entered in one or other of these. Dr. Smith frequently speaks of the Latin School as if it were part of the College, but it was really only a College Preparatory-School coördinate with the English School, though more prosperous than the latter and obtaining more attention from the Provost and from the Trustees. One of Franklin's last pieces of

VIRIS PRÆCELLENTISSIMIS, THOMÆ PENN ac RICHARDO PENN, Armigeris, Provinciæ Pennsylvaniae, nec non Comitatum Novi Castellii, Comitiæ & Suffragiæ ad fluvium Delaware, veris atque solis Proprietariis. VIRO DIGNISSIMO, Libris humanioribus ornâtissimo, **JACOBO HAMILTON, Armigeri,** Pœdite Provincie & Comitatum, Vice-Gubernatori præclarissimo, nec non hujus Collegii & Academiae Philadelphiae Curatori;

Carmineque VIEN-NATIUM

Richard Petrus, Præfidi, Gabrielis Albi, Johannis Angli, Samuelis McCall, Johannis Turner, Benjaminis Franklin, Gulielmi Shippen, Philippus Smy, Thomas Baid, Abrahamus Tait, Thomas Shad, Gulielmus Planchet, Thomas Wood, Gulielmus Coleman, Thomas Covelander, Johannes Schuman, Benjaminus Chew, Edwardus Shippen, jun. Gadelmo Cox, Thomas H. Morgan, & Jacobus Dashi, officium Collegii & Academiae Curatores amplissimi, Antiquaque legumum PATRONI humanissimi.

Totius denique SENATUS ACADEMICO dignissimo, nempe Reverendo GULIELMO SMITH, S.T.P. Collegii & Academiae Præfidi, Reverendo FRANCISCO ALBION, S.T.P. Collegii Vice-Præsidi & Academiae Rectori; Reverendo JOHANNI EWING, A.M. Philosophiæ naturalis Professori; Reverendo EBENEZERO KINNESELEY, A.M. Linguae Anglicanae & Orationis Professori; JOHANNI BEVERIDGE, A.M. Linguarum Præfidi, & HUOONI WILLIAMSON, A.M. Mathematicæ Professori;

Hæc Philosophemata sub Vice-Præsidi Mediorum (DEO opt. max. favente) discutenda,

Juvenes in artibus initiati,

1 SAMUEL CAMPBELL,
JOHANNES COOK,
GULIELMUS HAMILTON,
SAMUEL JONES,
JORANNES POSTER,
STEPHANUS WATTS,
Summi cum obsequio, M. D. D. C. C.

THESES GRAMMATICÆ.

1. GRAMMATICA rectè loqui & scribere docet.

2. Apud Latinos K, Y, Z, tantum in vocibus grecis vel et grecis derivatis, reperiri possunt.

3. Participia cum respectum ad tempus amittunt, nomina sunt.

4. Apud Grecos genitivus sine positæ percellitur, definitio sua.

5. Quo plures particulae in lingua aliqua, eo difficilior acquiritur.

6. Apud Latinos, verborum modi sunt tres, infinitivus eorum modus vis dicitur, ut qui nullas ad personarum & numerorum differentias, terminations habet.

THESES RHETORICÆ.

1. Rhetorica, in suadendo, inducendo, et detestando versatur.

2. In exordio, orator ostendit, veracunde, & breviter loqui debet, in audientis placiditate, avertens et cavendos ridet.

3. Ethos in oratione libidine appellatur, quod indignatur per causas emittit et excutit.

4. Multa videntur in versibus esse emphaata, quoniam in ipsa sonibus nullam emphaatam habent, & vice versa.

5. In stylo philosophico, vel maxima est ratio habenda perspicuitatis.

6. Omnis emphaata in rebus, verba & artificia polita est.

7. Plus mali facere videtur, qui homines orationis, quam qui prædicationis, quod prudentem corumpere precant, nisi per dicit, illud non potest.

8. Jurisconsulti raris forentibus solent operum nervata, nonquam causas, magis quam veritas, & justitiam ferendum putare debent.

THESES LOGICÆ.

1. Logica facultatem percipiendi nullo modo datam, sed tactum monstrat, qui ratione facillime ac nullifimè et utitur.

2. A certione imprimis utendum est, ad hanc diffinitio: acquirenda.

3. Experimenta pro matre omnia philosophia & peritissimum quod recte habetur.

4. Dubitare, ad errores evitandos, adimpleri est utile, de multis acumen dubitare est nefas.

5. Si non vel etiam timor præmissura, à divino testimonio pendere, concessio nihilominus tantum humana erit.

6. Argumentum ab analysi ductum in refutando nunquam est adhibendum.

7. Methodus analytica veritatem investigando, & synthetica in communicando cum aliis maxime versatur.

8. Termini requiritur, & fractus inflexus, & philosophorum scholis sunt proficiendum.

THESES METAPHYSICÆ.
DE ENTE.

1. Quicquid non habet causam, nec efficiam habet. Ergo.

2. Omnes efficiam rerum in mente DEI ab æterno existere non possunt.

3. Rerum efficientia error motum humanum, per causas & effectus tantum demonstratur.

4. Origo mali solvi potest, falva DEI attributa.

5. Indivisa feris contradietionem præter lapsum.

6. Actionibus factorum nullis comparatur qualitates, virtutes, non adjuncta indivisa.

DE MENTE HUMANA.

1. Divinam spirituum liber & humanam analogia certo est.

2. Dependens sunt non potest non fieri consilio est causa.

3. Idcirco nimis rapida succedit insensum sine se causa.

4. Drum saltem passivum corpus suum movendi deorsum: materiam probabile est.

DE DEO.

1. A causâ ad effectum ratiocinando ostenditur DEI vis æterni quædam.

2. DEI præfinitio voluntatis humanæ libertatem minime tollit.

3. Omnes divini idem archetypa carerunt.

THESES PHYSICÆ.

1. Physica natura leges invariabiles, & secundum illas phenomenâ solida.

2. Corpus gravitas apud terram superficiem materiam est.

3. Gravitas corporis evisitæ in terram major est ætate quam hyeme, noctu quam in diebus.

4. Aca nautica levior est, accepti magnetici virtutis.

5. Dialecticorum magnetis ad 1500 gradum laesit horum, & à gravitate & vi magnetici pendere, probabile videtur. Ergo.

6. Aca nautica variatio non fit magis generalis oritur.

7. Corpora electrica non sicut mutuo repellunt.

8. Ex mora vehementissima fluidum electricum corpora calidissima, & metalla adu igne liquefacit.

9. Tenuis re corporum inaequaliter electricitatem & sibi appropinquatum attractionem oritur.

10. Effluvia corporum movendum, primo temporis articulo, sunt in ratione quantitatis materiam, in velocitatem ducta.

11. Effectus veri, aliquo temporis spatio producti, sunt in ratione quantitatis materiam in velocitatem ducta.

12. Resistencia fluidorum ad in ratione velocitatis quadrata; eadem quoque rationem habet fluidi movendi impetus.

13. Fluida, dista basi, pro ratione altitudinis perpendicularis, non autem pro ratione materiam quantitates, premunt.

14. Duo homines eundem arcum coelestem tempore eodem videre non possunt.

15. Planetarum satellites aliquos quidem qui via revolutione destruant in spatio relativo, sed variâ illa, & perpetuo mutabiles, nullis verò in spatio absoluto.

THESES MORALES.
DE ETHICA.

1. Si homo ad felicitatem veram aspirat, actiones suas DEI legibus conformes habere, necesse est.

1. Nemo DEI legibus obtemperat, qui vel inlicitis agit, quod legibus præfinitur, vel sine illa DEI, quicquid legitur in scripturis non agit.

2. Nemo fit conscientiam suam errorem inliciti, donec errorem illum percipiat, & tum errore alium. Ergo.

3. Studiosè inquirere, non contentus veritas à legibus, sed non est plene expertum præter, & de re plures multum habentium. Ergo.

4. DEI voluntas, hominis, illi natura, legibus scripturarum voluntas, est adempta conscientiam penita & ignota.

5. Bonitas aut malitia actualis interior, partem aliquamque partem sine, non potest à rebus exterioribus ostenduntur.

6. Actus prope velle, et omnia bona sunt continentia, et homines pro intentione innotescit bona, nisi DEI legibus, & virtutibus. Ergo.

7. Homo DEI legibus obtemperat omnino equum locat.

8. Quicquid est hostium, est utile, nec utile quicquid quod non hostium.

DE JURISPRUDENTIA NATURALI.

1. In omni lege duo sunt partes, præcepta, & sanctiones.

2. Leges sine canibus, præcipue naturales, vel rationis naturam humanam respicientibus, et omnia in eis sunt.

3. Satisfactio quædam bella sunt, ut sine injuria in pace vivatur.

4. Necessitas, & que nobis vel laesit, vel solentibus eventibus, non impediuntur.

5. Omnes homines naturæ æquales sunt. Ergo.

6. Jus imperii non habet superiorem naturæ legibus, nisi in eo sit.

7. Jus imperii non habet superiorem naturæ legibus, nisi in eo sit.

8. Quocumque communi penam utilitatis, hoc item legibus non respiciunt.

9. Veritas & vici leges sunt inter se & immutabiles.

10. Jurisconsulti & leges in se velle tantum non velle.

11. In sua natura omnesque jus non recipiunt in ratione.

12. Si qui caritate omnia privata faceret, foretque non minus propensum cum mercede eadem offerat, si non velle habet laudatorem & laudatorem.

THESES POLITICÆ.

1. Cullibet homini, quantum in se est, colenda & servanda sunt.

2. Unica pensum mensura non est ipsa delecti, turpitudine, sed communi potius omnium utilitas est pensum mensura.

3. In bello publicis eadem sunt jura totius & idem sunt fines, qui in bello privati.

4. Civem innocentem non licet hosti tradere, ut evitetur amicitia reipublicæ ruina.

5. Milicibus dubitantibus, an bellum sit justum, nec ne, militandum sit.

6. Neque in singulis, neque in integris populos videt, bello ad qui potest impetum arbitrarium.

7. Nullus hominum adveniens alium hominem jus est infinitum, ut.

8. Unus jus definit, his incipit impire & jus restituit.

9. Omnes summi imperii partes ad legislativam, judicantem & executivam, haud intonantur resistentur.

Ante Theſes indice notatas venientibus Oratione habere est salutatoria; ad xv Junii Cal. Saluta Anno M DCC LXXII.

cæteris autem Exercitiis pro tempore ad finem perductis, Oratione succederit validiora. Comitatus Academia Philadelphiae habetur.

CATALOGUS eorum qui ad aliquem Gradum in Collegio PHILADELPHIENSI admitti fuerunt.

<p>1757.</p> <p>Paulus Johnson, Arm. & quond. Ling. Pr.</p> <p>Jacob Duché, Curator.</p> <p>Hugo Williamson, Math. Prof.</p> <p>Josiah Martin.</p> <p>Franciscus Hopkins, } Armig. } A.M.</p> <p>Jacobus Latta, Tut.</p> <p>Johannes Morgan,</p> <p>Samuel Magaw.</p> <p>Ebenezer Kinnersley, Ling. Anglic. & Orat. Prof. } A.M.</p> <p>Theophilus Grew, Math. Prof.</p> <p>Salomon Southwick, A. B.</p> <p>1759.</p> <p>Johannes Morris, A. M.</p> <p>Andreas Allen, A. B.</p>	<p>Jacobus Allen,</p> <p>Nathaniel Chapman,</p> <p>Gulielmus Edmiston,</p> <p>Johannes Hill,</p> <p>Samuel Kern,</p> <p>Alexander Lawton,</p> <p>Gulielmus Vanc,</p> <p>Samuel Powell.</p> <p>Johannes Ewing, Coll. Nov. Cæs. Tut. & Phil. nat. Prof. Coll. Philad. } A.M.</p> <p>Hector Alifon,</p> <p>1760.</p> <p>Patricius Alifon, Tut.</p> <p>Thomas Wood,</p> <p>Lindsay Coats,</p> <p>Robertus Goldborough, } A.</p>	<p>Whitwell Hill,</p> <p>Johannes Johnston,</p> <p>Thomas Wiffin,</p> <p>Robertus York,</p> <p>Josiphus Montgomery, Coll. Nov. Cæs. & Yale, A. M.</p> <p>Samuel Davis, Coll. Nov. Cæs. Prof.</p> <p>Philippus Reading, Univ. Coll. Oxon.</p> <p>Samuel Cook, Coll. Coll. Cæs.</p> <p>Thomas Barton, Tut.</p> <p>Sampson Smith,</p> <p>Matthæus Wilson,</p> <p>Robertus McKean,</p> <p>1761.</p> <p>Gulielmus Fleming,</p> <p>Marcus Grime, } A. B.</p>	<p>Matthæus Milkeny,</p> <p>Jacobus Hooper,</p> <p>Johannes Hulion,</p> <p>Gulielmus Kinnersley,</p> <p>Abrahamus Cagira,</p> <p>Richardus Petrus, jun. } A. B.</p> <p>Josiphus Shippen,</p> <p>Tench Tighman,</p> <p>Henricus Wardell,</p> <p>Alexandrus Whiteley,</p> <p>Josifus Keates,</p> <p>Franciscus Eaton, Coll. Nov. Cæs. } A. M.</p> <p>Samuel Stillman, Coll. Cæs. } A. M.</p> <p style="text-align: center;">A. M. D. C. C. C. C.</p>
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Nominis ordines alphabetico dispositos.

[Typo HENRICI MILLER], in fine velle habet esse.

writing was a protest to his colleagues on the Board, made in June 1789, against what he considered the unfair neglect of the English School. The plan of having a separate high-class Grammar School for non-classical studies had been one of the essentials in Franklin's original "Proposals," and at the beginning, when under David James Dove, this part of the Academy and College flourished greatly. Subsequently, because of neglect, or the com-

letter giving his approval to the plan of selling the "New Building" to the Trustees of the Academy he makes a plea for the appointment of a Professor of Oratory, and recommends the constant personal supervision of the habits of reading and speech of the boys. The same thing is urged in Franklin's "Proposals" and provided for in the "Constitutions." Abundant opportunity for such training was, as will be seen above, afforded



SMALL GYMNASIUM, HOUSTON HALL

petition of the other city schools, or the infeasibility of the plan, its numbers dwindled and more than once it seemed likely that it would be abandoned entirely. From this English School however was probably derived the strong predilection of the Colonial College for declamation, oratory, reading aloud in public, and dramatic exhibitions. The desirability of correct pronunciation, "polite speaking," effective declamation, a clear style, and "eloquent manners" is referred to again and again in every document connected with the early history of the College. In Whitefield's

by Dr. Smith's plan for the College course; and in his descriptions of the methods of teaching promulgated when he was in England as well as elsewhere, he lays stress on the habit of declamation. "This attention to public speaking, which is begun here with the very rudiments of the mother tongue is continued down to the end, and especially in the Philosophy Schools, where the youth frequently deliver exercises of their own composition, at commencements, examinations and other public occasions."

The formal dialogues given as part of the

Commencement exercises each year were therefore an outcome of this interest rather than of any dramatic or literary feeling. The large amount of attention given to practise in speaking, reading aloud, declamation and oratory, was habitually explained at the time and no doubt was really suggested mainly by the confusion of tongues then prevalent in Pennsylvania, made up as its population was so largely of foreigners, and by the evident dan-

branches of Mathematics, such as Surveying, Gauging and Navigation. The Latin School and the English School each had a writing teacher of its own, and what Mathematics was taught in them, as in the College classes, was given by other Professors.

Summing up the arrangement of the Academy and College during the Colonial period; it consisted of a carefully and minutely co-ordinated group of studies taken during three



SWIMMING POOL, HOUSTON HALL

ger of losing a standard of correctly spoken language. But it arose also largely from the high valuation then placed on public oratory, and perhaps also from the influence of the study of the classics. Dr. Smith it will be noticed prescribes orations in imitation of Cicero and Demosthenes, "on the model of perfect eloquence."

The Mathematical School and the Writing School were really classes for special students who wished instruction only in writing and some elementary English teaching which they obtained with it, or in certain practical

years by the highest students, under the teaching of three Professors, those of Moral Science, of Natural Science and of the Classics; then of two schools, Latin and English, the former being a preparatory school to the portion just described, the other a somewhat perfunctory effort to give a complete non-classical academic education; thirdly, two groups of classes for students of practical Mathematics and Writing, fourthly, the Medical courses, given in almost entire independence of the other schools, and by the Medical Professors in almost complete independence of one

another, and lastly, the boys' and girls' charity schools in which the rudiments of an English education were given, gratis, to poor children. But the whole character of the institution was conditioned by the interest, the ability, the

energy, and the success with which the Provost, Dr. Smith, carried on the first part described, the Philosophical Schools or the College proper.

CHAPTER II

THE REORGANIZATION AFTER THE REVOLUTION

WHEN in 1789 the group of Trustees and Professors who had been ousted from their control of the College in 1779 entered upon the task of reorganization, their principal object was the restoration of old conditions. Dr. Smith was still at the head, and it was only natural that they should speak of "opening the College immediately upon the former plan of education." During the two years that elapsed before the union with the University, the only changes actually introduced were not on the academic side but in the Medical School and in the embryo Law Department. In fact, in the course for the degree of Bachelor of Arts, and in the Latin School, subjects given before the Revolution were allowed to drop out and easier methods of instruction to creep in, though doubtless without deliberate intention. The report of a Committee of the Board of Trustees made in 1791 says that neither Geography, History, Chronology nor English Composition are taught any longer in those schools, that "most of the books made use of in the schools have English translations annexed to the text of the author. The assistance of translations may be useful to youth at their first outset in the study of Latin, but ought not in our opinion to be allowed after they have gone through Erasmus." The efforts of Franklin, Dr. Smith and their coadjutors at this time reached no further than an only partial success in re-establishing earlier conditions!

In the meantime however the new Trustees of the University who had been placed in control in 1779, exhilarated by the higher title, representing the vigorous spirit of the Revolution, and moved by the ambitions of a new administration, had immediately set about a

general reorganization of the old institution. A committee was appointed to go over and propose amendments or alterations in the general plan of education formerly framed, and to recommend improvements in education. Another was directed to look into the state of the late Medical School and to propose a plan for its re-establishment "on the most respectable footing." Still a third was appointed to bring in a plan for the constitution of a general Faculty of the University, with provision as to salaries, fees, hours and other requirements. In addition to the reports of these committees, two members of the Board, — Mr. White, afterwards Bishop of Pennsylvania, and Dr. Kunze, afterwards a Professor in the University, — and Dr. Ewing the Provost-elect, submitted various plans "for a University Education." With these proposals began a long series of discussions and projects and re-arrangements of Professorships and courses, which was only given a fresh impetus by the reunion with the College in 1791, and which did not reach anything like a permanent result until the last year of the century.

Numberless reports were presented and tentative plans introduced, but no logical system was hit upon nor any practicable scheme worked out. As a matter of fact the Trustees were entirely without experience or knowledge of the actual conditions of the problem, and yet were unwilling to leave the arrangement of the courses to the Faculty. They were hampered by lack of funds to carry out any large plan and yet the institution was not of sufficient dignity and value to demand and receive further gifts or public grants or the attendance of any considerable number of students. Its greatest need was of some one man who had

the knowledge, the force, the influence to take the initiative in bringing order out of chaos, and to establish a school which should conform to the requirements of the time and show itself worthy of popular support. But no such man appeared, and the Trustees made no efforts to find a man able to supersede themselves. Almost the only semblance of system in its organization was that which had been retained from the Colonial period, especially the required curriculum for the degree of Bachelor of Arts established by Dr. Smith. The University as a whole tended to revert to the old form of detached schools in which each Professor, though having a title drawn from his special subject, gave instruction in almost all branches to the special group of students who came under his charge.

Occasionally something was agreed upon of a more orderly character, as for instance the resolution of December 28, 1791 which divided the whole institution into "an Academical Department and a Collegiate Department," placing the old Latin, English and Mathematical schools in the former, and the Department of Arts, the Medical Department and the Law Department in the latter. In June 1799 also a University Faculty was constructed, consisting of the Provost and all the Professors with quite extensive powers over the arrangement of studies, hours, and discipline but it does not seem to have really taken control even over these matters, which were still ordered from time to time by the Board of Trustees. The Medical Department was reconstituted in 1791 by the appointment of seven Professors, in Anatomy, Surgery and Midwifery, in *Materia Medica*, in Chemistry, in Natural History and Botany, in the Practice of Physic, and in the Institutes of Medicine and Clinical Medicine, respectively. The degree of Bachelor of Medicine was given up and that of Doctor of Medicine alone offered; some general rules were adopted, and then, fortunately for that Department, it was allowed largely to work out its own salvation, which it did with a success that contrasted strongly with the condition of the other Departments. The Department of Law at the other extreme dropped entirely into desuetude. The earliest and principal division

of the "Collegiate Department" — the Department of Arts, as it now came to be called — was inextricably connected with the lower schools and cursed by as bad an organization as it is possible to conceive of. The resolution of March 4, 1800, which came the nearest to being a permanent and settled arrangement, provided for five Professors with duties as follows: I. a Professor of Natural and Experimental Philosophy, who should also teach Mathematics to the higher classes; II. a Professor of Moral Philosophy, who should teach Logic, Metaphysics, History, Geography and Rhetoric, and also all the required Latin and Greek authors who should not have been already read in the Latin School; III., a Professor of the Greek and Latin Languages, who should have charge of the Latin School; IV., a Professor of Mathematics, who should have charge of the Mathematical School and when necessary give instruction in "Arithmetic, Algebra, Practical Geometry, Plane and Spherical Trigonometry, Conic Sections, Fluxions, Surveying, Gauging, Navigation, Mensuration, the use of the globes, and Modern Geography," to the higher students; V., a Professor of English and Oratory, who should have the care of the English school. Before this degree of equilibrium had been reached there had been some interesting experiments, temporary arrangements and personal changes. In 1779 a "German Professorship of Phylology" had been established to teach Greek and Latin to boys who used only German as their mother-tongue, and to teach German to such English-speaking boys as should wish to study it. Rev. Dr. Kunze was appointed to the position, and for a while there was some attendance of students, but the plan reached no permanent success. In 1792 it was reorganized as the Chair of German and Oriental Languages, but in 1800 it disappeared altogether. The Professor of Greek and Latin was at one period, by a pleasant and suggestive variation, designated by the old title, "Professor of Humanity," and the title "Professor of English and Oratory" alternates with that of "English and of Belles-Lettres." The famous David Rittenhouse was elected Professor of Astronomy and Vice-Provost in 1779, and divided duties with the Professor of Nat-

ural Philosophy, giving for a time a curious preponderance to the physical sciences. Dr. Joseph Priestly was elected Professor of Chemistry, November 11, 1794, but after holding the offer under advisement for some time decided that he could not undergo the separation from his family which seemed to be involved and sent in his declination March 1795.

Notwithstanding the high aspirations with which the Trustees had taken hold of the reestablishment of the institution in 1779 and again at the reunion in 1791, "whereby," as they expressed it, "the foundation of one great seminary, worthy the capital of the commonwealth, is laid, calculated to defuse the rays of knowledge throughout this western world," at the opening of the century they seem to have been thoroughly discouraged and were speculating as to whether the declining state of the University was due to their failure to fix a definite course of instruction, or to their "not having invested the Provost and Vice-Provost with a superintending power over the whole," or to some other cause.

Whatever the cause, the arrangement of 1800, although the nearest to a workable plan reached since the Revolution, was far from satisfactory either to the Trustees, to the Professors, or so far as can be judged, even to the students, — certainly not to their parents. Some of the latter send word to the Board that they are informed by their sons that on a certain day the students of the Senior Class had been sent from the Professor of Natural Philosophy to the Professor of Mathematics to receive instruction, that the latter had sent them back to the former, who refused to give them any instruction on the subject. Such internal quarrels were frequent, as were conflicts of jurisdiction between the Faculty and the Board. Some of the dissipation of energy by the prevailing arrangements can be guessed from a chance example of one of the periodical reports of the Faculty to the Board, in 1807. There were in the Philosophical School twelve students in two classes; in the Latin School fifty students in seven classes; in the Mathematical School forty-one students in seven classes, and in the English School one hun-

dred and one students in six classes. That is, there were twenty-two classes, each of them having daily lessons, and distributed among five Professors. The hours were at this time from 8 to 12 and 2 to 5 in summer, and from 8.45 to 12 and 2 to 4.30 in winter, with a long vacation of six weeks in late July and August and short holidays at three other periods of the year.

This was probably the lowest ebb of the tide of success in the history of the institution, and the rise from it was very slow, interrupted, and obscure in its progress. In 1810 a distinct step forward was made by separating the lower "schools" clearly from the collegiate "schools." There were to be three distinct portions of the institution; its lowest function, the Charity schools; its secondary function, the Academy, consisting of the Grammar and the English schools; and its highest element, the College, consisting of the Departments of Arts, Medicine and Law. This had been already formulated after 1791 but only now became a reality. From this time forward the old confusing term of "school" goes out of use, except as applied to the charity schools and as revived much later to describe entire departments such as the Medical, Law, Dental or Scientific schools. In other respects the plans of 1810 show little if any advance. The separation off of the lower schools had depleted the Faculty. There are now only three Professorships provided for in the Department of Arts, and the duties of these are still poorly differentiated. The course in the Department of Arts is still only three years long. The entrance requirements are ability to translate Cæsar and Virgil from Latin into English, and certain exercises from English into Latin; the Gospels from Greek into English, and to show familiarity with Greek Grammar; and to be "sufficiently grounded in Common Arithmetic and Vulgar and Decimal Fractions."

In 1825, however, after a long investigation and full report by a committee of the Board of Trustees, a series of considerable reforms was introduced. The term was raised from three years to four, on the ground that it had been found practicable by the New England Colleges and must be so here, and that the shorter

period was quite inadequate and had only been introduced originally because of the infancy of the country. The entrance requirements were made more rigorous, and admission to advanced standing prohibited except under very unusual circumstances. A fourth Professorship was created, that of Mathematics, and provision was made for one or two additional tutors. The Academy was removed from the Ninth Street building which it had occupied along with the College, and was placed in the old building at Fourth and Arch streets, on the ground that its "location in the College Building has the effect of bringing down the College almost to the level of the school, and to destroy that gratifying distinction which makes the school-boy anxious for College." At the same time a second preparatory school, situated in the western part of the city, was taken under the patronage of the University, with the hope that it would become an additional feeder for the College and that the rivalry would react favorably on the old Academy. Finally a determined effort was made to improve the quality, to awaken the interest, and to insist on the mutual cooperation of the members of the Faculty. This last effort was prolonged until it culminated in the general series of resignations, removals, and appointments, which was completed in 1829, and which has already been described in Part I.

The condition of equilibrium that was now reached was destined to continue for many years. It is described in the first issue of the annual catalogue which was published in the year 1829. The Academy having been gotten rid of, except as a distant and obscure dependency, the term "College" or "Collegiate Department" ceased to be an inclusive term referring to both the Department of Arts and the Department of Medicine, distinguishing them from the "Academic Department." It was now used as equivalent to the Department of Arts, the University consisting of the Collegiate Department, the Medical Department, and the attached lower schools. There were in 1829 five members of the College Faculty: a Professor and an Assistant Professor of Moral Philosophy, a Professor of Natural Philosophy and Chemistry, a Professor of Mathematics,

and a Professor of Languages. There were besides, teachers of each of the four principal modern languages, but these did not make an integral part of the course. The entrance requirements were the reading of Virgil, Sallust, and Horace's Odes in Latin, of Lucian, and a Reader in Greek, adequate knowledge of Arithmetic, including Fractions and the Extraction of Roots, and of English Grammar and Modern Geography. Entering students must be at least fourteen years of age. The course was four years long, the work consisting largely of the Classics, of Mathematics, of a rather large amount of Natural Philosophy, and a modicum of English Grammar, Composition and Rhetoric, Logic, and Mental and Moral Philosophy. The work of the various Professors was much more clearly differentiated than of old, though Cicero was still taught by the Professor of Moral Philosophy instead of by the Professor of Languages, that writer being evidently valued more for his philosophy than his philology.

The higher study of English, as literature and as a language, detached itself gradually from the teaching of a number of minor branches by the Assistant Professor of Philosophy, or rather, became the principal subject of that group. This was partly no doubt from the personal gifts and interests of the holder of that position, Professor Henry Reed. In 1832 he appears as "Assistant Professor of Moral Philosophy" and having charge of the Department of English Literature, and in the next year he is "Professor of Rhetoric and English Literature." He had still however to teach a variety of subjects, including Geography and History. Yet no one can read his delightful lectures on English Literature without feeling that his heart and his efforts must really have been devoted to that subject above all.

The first actual addition to the number of Professorships came only after the middle of the century, when in 1855 Professor F. A. Jackson became Adjunct Professor of Greek and Latin, to assist Professor Allen, making the Faculty six in number. In 1864 Greek and Latin were separated, Professor Allen taking charge of the former, Professor Jackson of the latter. Soon after this, in 1866 and 1867, a

distinct increase in the size of the Faculty was made; the number being raised to eight by the introduction of a full Professorship of German and an Assistant Professorship of Rhetoric and History. Two regular Instructorships in Mathematics were also added, and one in English. Two years later two more Professorships were created by the division of the old Professorship of Natural Philosophy and Chemistry into a Chair of Physics and a Chair of Chemistry, and by making a new Adjunct Professorship of Greek and History. Others were now added rapidly; the Faculty was increased by the addition of teachers of subjects not before included in the curriculum, by the sub-division of old subjects, by the engagement of Instructors and Assistant Professors to take charge of the increased numbers of students or of the larger number of elective or divided classes. In 1887 the teaching force in the College was eighty-eight; in 1900 it is two hundred and fifty-eight. The immediate cause which led to the increase

in numbers about 1878 was the introduction of the elective system; it was followed almost immediately by the addition of a second influence, the foundation of the Department of Science, and shortly afterward by the establishment of various new departments in the College; thirdly a profound change was in progress in the methods of teaching which involved a much larger equipment of instructors with much more specialized knowledge for its successful application. The second of these causes, the foundation of new Departments, has already been described; the first and the third will make the subjects of the next two chapters.

During these same later decades the curriculum has been modified, the entrance requirements advanced and changed in character, some of the courses lengthened and others shortened, and personal and subject changes introduced so frequently and extensively as to defy treatment in the brief form requisite in this historical sketch.

CHAPTER III

THE ENTRANCE OF THE ELECTIVE SYSTEM INTO THE DEPARTMENT OF ARTS

IN a certain sense election of studies had been practicable from the earliest days of the institution, as has been already pointed out. The system of schools had been a method by which students could enter for just those subjects which they wanted; and one of the schools, that of Medicine, had long been superior in its number of students and in its prominence to all the remaining parts of the University together. In the Department of Arts however, the course which was alone intended to give "a liberal education," that school in the University which corresponded to other American Colleges, there was and had always been since 1756 a fixed course of required studies which all students alike must pursue. The first breach in this regularity came in that period of changes beginning about the middle of this century. In 1850 the Law School and a "Department of Chemistry as applied to the Arts" had been added to the two older departments, and in 1852 an addi-

tional "School of Mines, Arts and Manufactures." At the same time with this latter, a new course was established in the Department of Arts by which students who had substituted certain Mathematical, Scientific, and Modern Language courses for the Classical and Literary studies might receive the degree of Bachelor of Science. But even this was not true election, as no student could receive the degree of Bachelor of Arts without taking all the old regularly required studies.

This last change was closely connected with the entrance of Professor Stillé into the Faculty, and with the example set by some other Colleges. Dr. Stillé was elected Professor of Belles-Lettres and English Language and Literature, May 1, 1866, and in December of that year he sent a letter to the Board suggesting the reorganization of the Faculty of Arts in such a way as to admit of elective studies. A special committee took up the matter, held repeated conferences with Professor Stillé, Pro-

fessor Allen and Provost Goodwin, went over the plans of elective studies which had been adopted by Harvard, Yale and some other Colleges, and after communicating with the Faculty, reported to the Board that such a change would probably be approved of by the public, would lead to a larger number of students being entered in the Department of Arts, and would moreover be desirable from a general educational point of view. To carry into effect a plan of elective studies would necessitate an addition to the Faculty of three additional Professors and probably several more instructors, and therefore considerable additional expense would be incurred. There was therefore some delay and hesitation in deciding to adopt the plan. On August 4, 1867, however, resolutions to open elective courses during the succeeding winter and to engage the necessary additional instructors were adopted, and the Faculty of Arts were requested to draw up the detailed plans. The principles laid down were as follows: that everything should be retained that was already in existence, for the sake of those who preferred the course as it stood, but that "for those whose future career in life may not require such a critical knowledge of the ancient languages and the higher mathematics," instruction in the Modern Languages, general literature and History and a fuller course of Scientific studies should be provided, which should lead equally with the older course to the degree of Bachelor of Arts, but that such election of studies should not begin till the end of Sophomore year. Finally, there should concurrently be some enrichment of the old course with added instruction in English Literature and Modern History.

In September 1867, therefore, the Faculty of Arts drew up and announced the first form of elective studies for the degree of Bachelor of Arts as follows:

Freshman Year — Greek, Latin, Mathematics, Ancient and Modern History, French, all required.

Sophomore Year — Greek, Latin, Mathematics, Rhetoric and Logic, English Language, German, all required.

Junior Year — required studies for all stu-

dents, Intellectual and Moral Philosophy, Natural Philosophy and Chemistry; elective studies, Greek or advanced German or French, Latin or Italian or Spanish, Pure Mathematics or Advanced Studies in History and English Literature, Applied Mathematics or Applications of Chemistry to the Arts.

Senior Year — required studies for all students, Evidences of Christianity, Constitution of the United States, Political Economy, International Law, History of Modern Civilization and Outlines of English Literature, Physics, Astronomy, and Geography; elective studies, continuation of same alternatives as in Junior Year; certain exercises in composition in Greek, Latin, or English and in Elocution were required through the whole four years.

The effort in this change to conform to the public ideals of the time is quite evident. It is equally evident that that course once entered upon was likely to lead to further changes in the same direction. New subjects were being developed, reduced to sufficiently definite form for teaching purposes, and being advocated as of importance educationally and as matters of acquisition by enthusiastic students in the community at large and in the Faculty. Moreover many subjects long familiar to the college world in their outlines were being so much more closely studied and taught that they must be divided into their constituent parts and treated as separate branches of study. Therefore room must be made for many more studies either as electives in the old Arts course, or as the subjects of study of new departments in the University.

Both lines of development were followed. Many new lines of interest found a home in the Department of Science, others took shape in the work of the Biological School, the Wharton School of Finance and Economy, the School of American History, and other departments which were destined later either to lose their identity or to be merged, as already described, into "the College," in the reaction toward simplicity of organization which set in about 1890. Others made their way into the Department of Arts.

With some minor changes the form of elective studies adopted in 1867 continued till

1887. Then instead of making the election in each case between some two definite subjects, two groups of elective studies were created for the Junior and Senior years one linguistic or literary in character, the other largely scientific. From the first of these groups each student was required to choose two studies and from the second one. These were in addition to the subjects which were still required. With the first entrance of electives had come additional Professors and instructors and as the number of these increased, as subjects were subdivided and as new departments grew up housed under the same roof and closely connected with the Department of Arts, the list of possible electives in these two groups constantly grew in length. Partly as an extension of the elective tendency, partly as a reaction against some of its unregulated results came a third change in 1893, by which the system now in vogue was introduced. According to this plan election is carried into the first two years so far as the languages are concerned, a student being allowed to take Latin and either Greek, German or French, or French and German; all students alike taking English, History, Mathematics, Physics and Chemistry, with a further election in their Sophomore Year, between Mathematics and History. In the Junior and Senior years, in addition to the required courses in English, Logic and Ethics, the bulk of the student's time is given to work on some group of closely-allied subjects, although he has still some time at his disposal which he can give to any one of a long list of free elective subjects. Of

these elective groups there are sixteen, made up of Languages, Mathematics, History, Philosophy, Economics, Politics, Pure Science, or some combination of these.

The actual list of courses which exist either as constituents of these groups or as free electives, or, as is most frequently the case, as both, amounts to about two hundred courses. In its wide variety of languages, of different aspects of pure science and mathematics, of various fields of literature, of history, of philosophy, of economics, it forms a striking contrast to the set group of general studies which formed the "system of education" of 1756. Nevertheless, with all the latitude of choice that confronts a student on entering College, the limitations of time and of the group system restrict him to a comparatively few studies, and it is doubtful whether any one student under the present system comes in contact with more fields of human interest than did the College student a hundred and fifty years ago. The greatest difference is to be found not in his College course as a whole, but in the individual courses of which the whole is made up. One of the most marked effects of the elective system is that each course offered by any instructor is a completed whole in itself. Any one course as given in the University now will in all probability be vastly better and more valuable than a corresponding course given in the Colonial College. Whether a student's whole course is better constructed or not, whether he really gets more out of his College years, will depend on the circumstances of each individual case.

CHAPTER IV

CHANGES IN METHODS OF INSTRUCTION

THERE is discoverable in the history of educational methods in the University a distinct progress in nearly if not quite all branches from an almost purely didactic method to one in which the student participates to a greater or less extent in the constructive work of the course.

This might be proved by a mere study of the history of the Library. On the day the Academy was opened in 1751 it was stated that "the Grammar Schools are also provided with a collection of the best classics, for the use of the Masters." This was the earliest ideal of the Library. Its books were to be

used primarily by the teachers. Students had their textbooks, and they had notebooks into which they were to copy what the teachers dictated, but they had comparatively little occasion to use the College Library. This remained moreover for generation after generation measurably the same. It is only within the last few decades that the students have used the Library to any great extent. Within this period however the Library has come to be used by the students of one department after another, not only as providing material for their general reading, but practically as a Laboratory. Subjects within the general lines of the courses they may be pursuing are assigned for special investigation, which can of course only be done in the Library. Some courses are entirely made up of reports made by students of the results of their research, with criticism and comment by the teacher. In other courses illustrative material is needed beyond what can be furnished or used in the classroom, and this again can only be obtained by the use of books, often several copies of the same book, specially reserved in the Library. Still other courses exist which are purely bibliographical, intended to give students guidance in access to sources of information in certain fields. Students are constantly sent to the periodical literature on the various subjects of their courses; and they are taught to find out what has already been written on any subject in the investigation of which they are engaged, which again is a question of books in the Library. At present about one hundred and twenty-five students use the reading-room of the University Library daily, some two hundred books are daily given out at the desk for use in the building, and an average of about sixty-five taken away from it for home use. In the Law Building the Library is the general working place of all the students, each having his private desk and having constant occasion to send for books from the shelves. The use of the books in the various department libraries is not recorded, but is naturally extensive. There are a dozen or more such divisions, with fifteen or twenty thousand books in frequent use. This constant use of books by the students themselves indicates the existence of a kind of

teaching in the institution which is far from consisting exclusively of formal instruction by the Professors, and its rapid growth in later years would alone testify to a change in methods of instruction, if there was no direct evidence.

But this change from merely didactic to more practical courses can be better tested in some of its actual forms. The teaching of Chemistry, for instance, seems to have gone through three quite clearly marked stages. In the first stage it was given, in the Department of Arts certainly, and apparently to the Medical students, through the reading by the Professor of Chemistry of lectures descriptive of chemical substances and phenomena, but without showing to the students the substances themselves or any of their reactions. In the second stage, reached by the close of last century, the Professor lectured and performed characteristic experiments before the class, but the students themselves did not come into immediate contact with the substances and combinations they were engaged in studying. A line of eminent chemists occupied the Chair of Chemistry in the University, and for some periods there were two Professors of the subject, but the students received such knowledge as they obtained only by listening to formal lectures by these men, illustrated with the more brilliant type of experiments, but not made real to them nor reinforced by any actual handling of substances or apparatus. The last stage is that in which the students perform many of the experiments, although of course under the direction of instructors. The students themselves combine the substances, adjust the apparatus, and test the results. This method was introduced for the first time probably in the "Department of Chemistry applied to the Arts," in 1850; afterwards all scientific students took a course in the Chemical Laboratory. For some years certain Medical students had been enabled by paying a special fee to obtain a special laboratory course in Chemistry, but in 1877 further laboratory facilities were created in the Medical and Dental buildings and after that they were given practical teaching without special fees. Now every student who studies Chemistry at all in the

University does the greater part of the work himself in the Laboratory, though under more or less supervision by teachers and with more or less supplement of lectures.

The same change has taken place in the field of Physics, though there was probably no time at which lectures in this subject were given without any illustrations. Even before the College was founded courses of lectures in "Experimental Philosophy" were given in Philadelphia, illustrated by apparatus, and the astronomical portion explained by an "orrery." The very first appropriation of money by the Trustees included a sum for the purchase of "Instruments for the use of the Academy." The strong predilection of some of the early Professors and Trustees for Natural Philosophy insured attention to that field, and the "philosophical apparatus" is frequently spoken of. But this was for illustrative purposes only, it was not until the last half of the present century that the students themselves touched the instruments, although now the same statement is true of Physics that has been made of Chemistry, that every student who takes the subject at all does more or less work personally with the instruments.

A description of the similar change in the study of Astronomy, so far as it has gone, has been given in another connection.

In the Medical courses this tendency has been probably more highly developed than in any other department of the University. The changes in the teaching of Chemistry which have already been described apply to that department as well as to the College. In Anatomy the instruction was at first entirely didactic, although illustrated by dissection of a body by the lecturer in the presence of the students. Still more close observation could be secured by those who would pay an extra fee and attend before the regular lecture to see the body prepared for dissection. Required dissection by all students was introduced very early, certainly by the early years of this century. In other branches of medical teaching, however, there was very little that was not purely didactic. Illustration by pictures or models shown to the class by the lecturer was as far as the equipment or plans of the courses

extended. The desirability of this much that was tangible was clearly recognized. In a catalogue issued in 1845 appears the following. "It may be proper to inform the medical community that the aim of the Faculty is to render their courses as demonstrative as possible, so as to bring the senses of the pupil to the aid of his memory and intelligence. For this purpose ample means of illustration are at the command of the Professors." Certain clinical opportunities were given to the students by taking them to the hospitals, but the material difficulties were so great that very little was accomplished. The Medical Professors were generally eminent practitioners and their courses of lectures were in many cases brilliant, impressive, and illustrated by reference to cases in the actual previous experience of the lecturer. But it was all very far off from the average student. His opportunities were in the main, with the exception of dissection and seeing pictures, restricted to listening to lectures, reading medical text-books, and to the prospect of familiarizing himself with concrete medical and surgical matters after his graduation.

In recent decades however all this has been changed. In 1874 a group of Clinical Professors was added to the Faculty who began the development of a much more detailed clinical training. Laboratories have been created, in addition to that of Chemistry and the dissecting rooms, for Physiology, Pharmacy, Osteology, Pathology, and Bacteriology and Hygiene. The various wards and dispensaries connected with the Hospital give similar opportunities for clinical instruction. In these Laboratories and in the Hospital the students are given practical work, and make actual examinations of substances and conditions, normal and pathological, deal themselves with chemical and histological substances, themselves combining drugs and as far as possible participating in or assisting at and reporting on the surgical and medical treatment of actual cases in the Hospital and Dispensaries. The work in Anatomy, Physiology, Chemistry, Hygiene, Bacteriology, Pathology, Applied Anatomy, Materia Medica, Gynecology, Obstetrics, Surgery, Clinical Medicine, Ophthalmology and Dermatology

has gone almost entirely over from didactic to a practical or laboratory basis, although of course in almost all of these there is still an element of formal or merely illustrated lectures, and the teaching of the Practice of Medicine is necessarily almost entirely didactic.

In the Law School, the lectures which were given in 1790 and 1791 were made up of general philosophic reflections and judgments in the domain of jurisprudence and government;—eloquent, learned and suggestive, it is true, but not of much significance to the immature law student who knew none of the details on which these generalizations were based. The same seems to have been true in the main of the courses given in 1817 by Mr. Willing. The methods of teaching which were initiated by Judge Sharswood in 1850 and carried on subsequently in the Law School were of a different character. They included detailed didactic teaching in the various fields of law, illustrated by actual examples and with more or less of text-book recitation and even moot-courts. But even yet the matter was given to the students in elaborated form, not gathered in any degree by them; their attitude was expected to be a purely passive and receptive one. The next step was taken, analogous to the adoption of laboratory work in other fields, by the introduction of the study of "case law" in several branches of legal instruction, during the decade between 1880 and 1890. According to this plan a large number of adjudicated cases which throw light on the development of some field of law are brought together and published in their main outlines in one or more volumes. The students analyze these cases and subsequently discuss them with the preceptor, thus forming in their own minds a constructive, inductive knowledge of the subject in question. This method has been applied to one branch of law after another until only two or three subjects are still treated in the older more formal didactic method.

The test that has been applied to the Library, to scientific teaching and to the Medical School shows therefore the same result in the field of law. In even the least utilitarian lines there has been something like the same

development. Probably one of the reasons why the classics obtained and long retained such a predominating position as a means of mental discipline was because in the very nature of things their study brought the student into immediate contact with the materials he was dealing with. He studied the things themselves, not certain doctrines about the things. One other field of study may be taken as typical. The study of History seems to have begun at the University as Chronology. Certain dates were dictated to the student which he committed to memory. Then History entered into the lecture stage; students were told about events of the past. The use of a text-book was a variation from or an accompaniment of this. The student was still entirely separated from the materials of his science by the intervention of the lecturer or text-book writer. Such lectures were often brilliant and interesting, and those of Professor Reed and Professor Thompson have left a strong impress on the minds of students who listened to them. But the same change that we have met so frequently began to influence this subject also. Students were more frequently sent to other books to follow up or complete the subjects of the lecture or the text-book, and these references were frequently to the original sources of history. By about 1890 it had become the regular custom to make historical courses consist largely of required reading or investigation done in the Library. Another stage of this tendency came in 1893 when the publication by the instructors of a series of translations and reprints from the original sources of history was begun so that students might have in easily accessible form materials from which they could to some extent construct their historical knowledge, or which would at least serve as typical illustrations of actual history. In the undergraduate courses this development has gone no further and corresponds in the main to fully illustrated lectures. In the Department of Philosophy however, historical study has become almost completely a matter of research, of the analysis and synthesis of the original materials of history. Its methods are therefore almost purely those of the laboratory.

In many subjects of University teaching there has been a development characteristic of that special subject; as in the ancient languages from their teaching merely for rhetorical or philosophical uses, to their greater valuation from a philological and literary point

studies; as in the rediscovery of the history, the language, the literature, the religions of the Orient; as in the progressive subdivision and culture of new fields of Medical, Legal, Biological and Physical teaching. There is however no other generalization so wide in its



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of view; as in the greater dignity of position given to the Modern European languages; as in the preeminence so readily granted in our time to the various aspects of the study of the English language and literature; as in the creation of the whole group of economic

application, true of so many branches of study, and inclusive of so many forms of development as that which has been described above, the change from didactic teaching to practical working by the student with the concrete materials of his science.

BOOK III

THE STUDENTS' SIDE OF THE UNIVERSITY

CHAPTER I

STUDENTS AND THEIR CUSTOMS

THE early youth of the University was reflected in the youth of its students. The first Provost deprecates boys entering the Latin School before they are nine or ten years old. The form of prayer drawn up by Dr. Peters, a member of the Board of Trustees in 1753, after a suggestive series of quotations from the Bible, beginning with "Out of the mouths of babes and sucklings hast thou ordained strength," proceeds, in an exhortation, to address them as follows: "Dear children, the care your masters take to apprise you of and to guard you against the many snares and temptations with which the world abounds, etc." He speaks of lessons "suitable to your tender age," and urges them to "avoid telling tales of your companions." On the other hand, of the first group of graduates of the College, the Class of 1757, the youngest was nineteen years old and three were each twenty-two. The fact seems to be that the students were as various in their ages as the curriculum was indefinite in its sequence, and that students of all ages came to study all kinds of subjects, from the small boys beginning in the English or Latin or Mathematical or Writing "schools," to the grown men in the Philosophical schools. Later, after the curriculum had become better established, we find the age was about thirteen or fourteen when students entered the College proper, and sixteen or seventeen was the average when they graduated. This remained true down to the time of the Revolution. In the early years of this century the average age was not greater, indeed it was often less; although at some time, just when does not appear, a rule was adopted prohibiting the admission of boys under fourteen. Nevertheless, out of thirty-six students admitted to the various College classes in 1828,

three years after the course was prolonged from three to four years, eight were under fourteen years of age and were only admitted under a suspension of the rules. In 1829 three Freshmen are entered as being thirteen years and seven months old, one as being thirteen years ten months and five as being fourteen years. At about that time, however, the age began to rise. In 1830 it is considered a matter for rejoicing that out of thirteen applicants for the Freshman Class all except four were over fifteen years. The averages at entrance of those who remained to graduation at ten years periods after that time were as follows:

1840,	14 yrs. 10 mos.	1870,	16 yrs. 5 mos.
1850,	15 yrs. 2 mos.	1880,	16 yrs. 8 mos.
1860,	15 yrs. 5 mos.	1890,	17 yrs. 1 mo.
		1899,	18 yrs. 3½ mos.

These figures only apply to the Department of Arts, or since the foundation of the Department of Science and other constituents of the present College, to those departments. In other departments of the University the age is apt to be greater, and an average made up of the ages of all students in all departments of the University at the present time would probably be somewhere near twenty-two years.

The "average student" is of course a mythical personage. One cannot describe him. One can but make an observation, or lay down a statement, or hazard a guess here and there, and give to it as wide a generalization as seems justifiable in its own time and place. It is to be hoped and believed that there has been a growth of maturity and self-control since the beginning corresponding to the increase in the average age. The students in early days apparently threw stones and balls and thus

broke windows as a regular form of recreation. The code of rules adopted in 1755 declares that "no student shall climb over the fences of the College yard, or come in or go out through the windows, or play ball or use any kind of diversion within the walls of the building." It is further provided that "none shall play ball against the glass windows or any part of the building where the window-shutters are open," and the cost of broken windows is to be assessed upon the scholars twice a year. Notwithstanding this care, one of the earliest entries on the minute book of the Trustees is, "Agreed that a small ladder be bought to be always at hand for the convenience of mending windows."

The punishments provided for in this code were very generally fines of fourpence, sixpence or one shilling. "Chastisement," however, is frequently prescribed as a form of punishment midway between money-fines and degradation or expulsion. This condition of things remained down to the beginning of this century. January 18, 1791, it was ordered "that it be recommended to the Board to consider at their next meeting of the proper instrument of correction in the schools." Corporal punishment was however deliberately abolished in the University just at the beginning of this century, and a statement of the fact published in the newspapers. Punishments "calculated to appeal to the sense of honor of the students," or suspension, or ultimate expulsion, were substituted. Nevertheless one does not by any means need to be "the oldest living alumnus" to remember much misbehavior and corresponding punishment. Even yet there is an occasional recrudescence of some form of disorder or frivolity, although on the whole it has been one of the most marked characteristics of recent College life that there has been so very little need for the exercise of disciplinary powers by the authorities.

Of some forms of College disorder, such as hazing, there has scarcely ever been a trace at the University. Certain actions on the part of Freshmen have nevertheless been traditionally disallowed by the Sophomores. In the days when all the older class men carried cloth bags for their books and other paraphernalia, Fresh-

men were prohibited from doing so, being required to carry theirs loosely or in a strap. Any Freshman violating this rule was apt to be swooped down on by one or more Sophomores and to have the fragments of his bag distributed among the latter class to serve as badges. The same rule exists about carrying a cane, and there are traditions that the wearing of a high hat comes under the same condemnation, though as members of neither class ever wear high hats at College this is purely theoretical, or is only attempted as a challenge. Indeed the principal value of these rules is an excuse for good natured "rushes" between the younger classes during the early part of the College year; the Freshmen coming prepared to support some classmate who deliberately carries a substantial walking-stick or displays an aggressive green bag; the Sophomores recognizing the challenge, and the result being a "corner fight," or a rush through the halls, or even out on the campus. In the Medical Department a similar unwritten law prohibits Freshmen from occupying the front seats in lecture rooms where members of more than one class attend together. The most formal of such contests, and one it is believed peculiar to Pennsylvania, is the annual "bowl-fight." From time immemorial it has been customary in the College for the Sophomores to prepare a huge wooden bowl, and at the end of the first term, in the old days, when the recipients of honors were named in order of merit, the last Freshman to be named was chosen by the Sophomores as "bowl man," and they proceeded to confer upon him the doubtful honor of being carried aloft in the bowl. The Freshmen tried to protect their classmate from this ceremony, and to break the wooden bowl. The result was a contest of an hour, or sometimes two or three hours, swaying through the buildings, grounds and adjacent streets. As the bowl was originally of mere ordinary turned wood, it was eventually broken unless the Sophomores had been successful in giving the bowl-man his ride in it and thus securing for it immunity from injury. In the course of time however, each succeeding class had its bowl more strongly made, using specially prepared, joined, dove-tailed and strengthened wood,

until it has become practically unbreakable. Most of the bowls manufactured for the last twenty years now garnish the halls of various fraternities or other societies to which they have been presented. The discontinuance of the ranking of students in class and of reading the results of examinations in chapel has made it necessary to choose a bowl-man deliberately. Recently the high development of competitive contests has led to the adoption of formal rules for the contests, with an umpire and regular "halves." All these changes have lessened the spontaneity and naturalness of the bowl-fight to such a degree that it bids fair soon to be a custom more honored in the breach than the observance.

A similar fate threatens to overtake "Sophomore cremation." Again from time immemorial, it has been customary for the Sophomore class at the end of the first term of the year to burn on a funeral-pyre with appropriate ceremonies of speech, song and mummery, a book or figure typical of that subject which has been most distasteful or burdensome among the studies of the term just passed. In early times the book was invariably Professor Jackson's "Syllabus," but the disuse of that text-book and the omission of Latin from many courses after the elective system had been introduced broke the tradition and made necessary the choice of a new victim each year. In the old days this ceremony was frequently made an occasion for the display in concrete form of that latent antagonism between the different departments of the University, especially between the Arts men and the Medical students, which was then in existence. This opposition reached its height in the year 1880, when College students attended the Medical Commencement (which was then held on a separate date) at the Academy of Music and made so much disturbance that the police interfered and a number of arrests followed. At the next cremation on the campus the Medical students retaliated by breaking up the ceremonies and precipitating an actual pitched battle, which again led to police interference and arrests. After this a reaction set in, which was changed to a tacit truce by the election of one of the Professors in the Medical Department, Dr. Pepper, as

Provost, and has been made permanent by that still more recent and vigorous growth of unity of feeling among the students of all Departments due to more numerous common interests and stronger institutional pride, to the Dormitories, Houston Hall, athletics, and the general advancement of the average student in maturity and culture.

Cremation however has become less a matter of general College interest. It is carried on by a comparatively small number; it also is less spontaneous and more theatrical; it has been held in enclosed grounds to which admission is charged, and will, like the bowl-fight, in all probability cease before long to be celebrated.

The student customs which continue in their full strength are either those of a more social nature, such as the "Sophomore Promenade," the "Junior Ball," the "Ivy Ball," and various department dances; or those which gather around Commencement Week. Besides the official ceremonies of this period, — Commencement itself, the various Alumni gatherings, those of the Society of the Alumni (College), "Alumni Day" under the supervision of the General Alumni Society, and of various Department and Class gatherings, the Phi Beta Kappa exercises, and the commencements of the College Literary Societies, — the special occasion is "Class Day." This is the festive farewell of the graduating class in the College to their undergraduate course. A class history is read, and the history of the future, so far as it affects the members of the class, duly disclosed; a poem is read; emblematical gifts, ranging in size and character from a monkey on a stick to a live pony, are conferred upon members of the class of sufficient individuality to suggest such remembrances; more serious gifts are presented to the men who have been already chosen for such coveted honors, in the form of a beautifully carved wooden- spoon to the most popular man in the class, the bowl, if it has been preserved, to a second, and the spade with which the class ivy has just been planted against College or Houston Hall with ceremonies consisting of a poem and address, to a third. The President's gown is transferred to that official of the Junior Class, and a valedictory which hovers between the prevailing

joyiality and the deeper significance of the occasion closes the celebration.

There are many customs more or less time-honored, more or less widely spread among the students, more or less characteristic of College or University life. Many of them have lasted for a while and then died; many seem almost too trivial to put into print,

though they contribute their own share to the flavor of College days; others defy classification and could only be given as items in a catalogue. Still others however are clothed in more permanent, more serious, or more conventional form, and will make the subjects of the following chapters.

CHAPTER II

LITERARY AND TECHNICAL SOCIETIES AND COLLEGE JOURNALISM

LITERARY societies of one kind or another meet us everywhere among the records of the University's past. On the minute-book of the Trustees, permission to use rooms or hold meetings is given from time to time to some society of which only this single mention has survived, such as "The Literary and Commercial Society" in 1790, or the "Union Society" in 1797. The first literary organization to survive to the present time is the Philomather Society, or "Philo," founded in 1813. It had official sanction from the Trustees, granted November 23 of that year, and a suitable room was appropriated at that time and has always since been provided for it. The society has had on its rolls a good proportion of the students who have subsequently won prominence. Eminence during College life so far as that can be obtained by merely intellectual victories is supposed to be provided for by the prizes which the society offers yearly to its members for success in competitive debates, orations and essays, and by annual competitive debates with other societies in the University and outside; in addition to the drill which is obtained by its regular literary exercises. At one particular time in the early fifties a committee of the society took up a work so ambitious as to have astounded all later generations of members. This was no less than the decipherment of 'the Rosetta Stone, a model of which still hangs upon the walls of the society's rooms while sumptuous lithographed copies of the committees' report still exist in the Society and the University Libraries. Biennial addresses by graduate

members, commencement celebrations and lectures have at successive periods been the favorite public function of the society, and one of its committees for a long time issued the only University periodical.

In 1829 a rival literary society, the Zelo-sophic, or "Zelo," was founded, mainly by the efforts of Alexander Dallas Bache, at that time Professor in the University. This society probably contained an even larger number of those who have become influential in the later history of the University than did "Philo." In the early seventies, however, it went out of existence, and so remained in desuetude until 1892, when it was revived and has since led a tolerably vigorous and self-assertive life.

The development of the Scientific courses led to the formation in 1882 of the Franklin Scientific Society. After some years of existence this particular organization disappeared, but by that time there had grown up a number of organizations of combined intellectual and social character, in connection with a number of the different courses or departments. These have continued to increase in strength and numbers until it seems almost hopeless even to make a list of them. In the Medical Department there are the Alfred Stillé, Horatio C. Wood, William Pepper, Tyson, Hirst, Guiteras, Deaver, Daland and possibly other medical societies; the D. Hayes Agnew, Ashhurst and J. William White Surgical societies, and the C. B. Penrose Gynæcological Society. The Medical Institute, which goes back probably to the later years of the last century, has long existed as an adjunct to the Medical

School. Similarly in the Dental Department there are the E. C. Kirk, E. T. Darby, James Truman and probably other societies; and in the Law Department the Sharswood, Miller, E. Coppée Mitchell, J. I. Clark Hare, George Wharton Pepper, James Wilson and others. The Biological School with its Botanical Club and Naturalists' Field Club, the Civil Engineering Club, the Veterinary Medical Society, the Architectural Society, the Mathematical Club, and numbers of others exist, extending by insensible gradations through the outside Quiz clubs into the seminars or other organizations which are simply an adjunct to the formal teaching work of the institution. Indeed the tendency to form organizations of all kinds has been exceedingly strongly marked in recent years. The number of societies and the extent of their membership in the University is so great that it seems almost impossible that there should be any student not a member of one or more such organizations. They are of all sorts and kinds, some of them absolutely general like the Houston Club; others like the Franklin or later the Pennsylvania Debating Union, a distinct product of the recent extension of intercollegiate debates; others like the New York Society or the associations of graduates of certain schools, mainly propagandist bodies intended to draw other students to the University. Others like the Women's Club furnish social opportunities to those who are not included in any other distinct University group; others, like the Young Men's Christian Association, the Newman Club, or the Church Club, are mainly religious organizations; while still others are of such distinctive characters, — Greek letter fraternities, dramatic, musical and athletic organizations — that they seem to demand separate treatment in later chapters. But from the literary societies described above has arisen another form of undergraduate activity that seems to call for description before taking up these other organizations; that is College journalism.

The College newspaper or magazine, like outside journals, has sprung from three quite different desires; to report the news, to discuss current matters of interest, and to furnish an opportunity for literary expression. These have

been mingled in varying proportions. The element of news was comparatively insignificant in the earlier periods, first because there was in those unsophisticated days but little news to report, and secondly because only infrequent publication could be afforded and news a month old seemed scarcely worth publishing. There might however be much and vigorous discussion of matters of general College interest, and purely literary ideals were perhaps relatively more prominent in earlier times than they are now. As in the case of other organizations there are vague traditions of earlier and unrecorded or unsubstantiated periodical publications, and some actual, tangible though sporadic journals, as of the "Zelosophic Magazine," published every two months from April 1834 to August 1835, or the "Pons Asinorum," published by the Philomathean Society in 1854, or the "University Society Record," of March 1863. "The University Magazine" of March and April 1869 was rather an official journal with an undergraduate department than a veritable students' magazine.

The first continued undergraduate publication however was a journal of the same name, "The University Magazine," edited and published monthly by a committee of Philo from November 1875 to September 1881. It then became semi-monthly and continued so till November 1885. By this time however, College spirit, even University spirit, was becoming stronger and there was a desire to establish a journal which should appear more frequently, which should be under the control of the students at large, and which should include and interest if possible students of other departments as well as the College. The result of this agitation was the merger of the University Magazine into the "Pennsylvanian," established on the lines indicated above and published weekly from December 15, 1885, to June 4, 1891; semi-weekly from October 1, 1891, to June 8, 1894, and daily from September 26, 1894, to the present time. These successive changes have made it more and more completely a newspaper pure and simple, with no literary aspirations. This field has been filled principally by the "Red and Blue." This patriotically named journal ap-

peared for the first time on March 1, 1889, and continued as a semi-monthly to June 1, 1894. When it reappeared after the holidays, in September of that year, it was as a monthly only, but increased in size, improved in form, and made still more entirely literary in character. It has up to the present time been continued on the same general lines; its characteristic features being its generally artistic appearance, due largely to the interest of the students in Architecture, one of the ablest of whom and Editor of the magazine for one term, was the brilliant young Arthur S. Brooke, whose sad death has so recently occurred.

Another journal for College news alone was the ephemeral "University News," published daily November 6, 1892, to February 2, 1893. Equally evanescent, though devoted rather to the object which was placed second in the list above, the discussion of questions of University interest, has been the "Examiner" a small broadside sheet, at first published anonymously, but afterward under adverse criticism disclosing the names of the Editors, appearing weekly from 1899 till it has recently made its farewell with the issue of April 12, 1900, the twelfth from its inception. The "University Courier" began weekly publication in 1892 and gradually faded out of existence three years afterward. From time to time a fourth type of journal has appeared, the humorous periodical. None such has up to the present time survived very long, whether from lack of pecuniary support, or from exhaustion of the supply of sufficiently witty Editors. "Chaff" was published monthly from October 1882 to July 1884. "Ben Franklin" began as a semi-monthly March 8, 1895, but was short-lived. Recently the "Punch Bowl" has received authorization and started a humorous course as a semi-monthly, which it is to be hoped may be longer than that of its predecessors on similar lines.

Such are or have been the regular undergraduate publications. Just at the close of

their course however, the Seniors of the College have published annually since 1867 the "Class Record," reproducing most of the ceremonies of Class Day, containing certain more or less humorous reminiscences of the history of the class during its College years, and rather extensive statistical information concerning College and University organizations.

The only alumni periodical, apart from the little semi-annual Bulletin sent by the officers of the Society of the Alumni (College) to its members, is the "Alumni Register." This has been published as a monthly by the officers of the General Alumni Society since January 15, 1896. It has grown almost steadily in size and variety and completeness of contents, and with the number of Mid-March 1900 is changed into a semi-monthly. The "Penn Monthly" was a literary journal most of the writers of which were officers or graduates of the University, and it was subsidized by the Alumni Society, but its University connection was given up and it suspended publication some years ago.

Besides these undergraduate and alumni periodicals there are certain publications of a semi-official character. Not to speak of the University Catalogue and the numerous departmental circulars, the annual Provost's and Treasurer's Report, and the "Bulletin," devoted largely to official matters and republication of addresses; the "American Law Review" and the "University Medical Magazine," are closely affiliated with the departments indicated in the titles of those journals. There are also various series of scientific or literary publications issued under the name of the University, but not at any stated periods. Beginning with this year all theses presented for the degree of Doctor of Philosophy will be printed. In various lines purely University publications shade off into those which are merely general publications in which University Professors, Officers or students take part.

CHAPTER III

FRATERNITIES, DRAMATIC CLUBS AND MUSICAL SOCIETIES

IT has been just a half-century since the first Greek-letter Societies were established in the University. In the years 1849 and 1850 chapters of four fraternities, Phi Kappa Sigma, Delta Phi, Zeta Psi and Delta Psi were established. Of these the first named was founded at Pennsylvania, and has had among its membership an unusually large number of men influential in the management of the University. After 1850 more than twenty years elapsed before any other fraternity chapters were organized. In 1875 a chapter of Sigma Chi was instituted here, which subsequently went out of existence, to be revived only twenty years afterward, in 1896. In the meantime however, beginning with 1878, there was a rapid foundation of chapters at Pennsylvania. In the

succeeding ten years chapters of Phi Kappa Phi, Alpha Tau Omega, Beta Theta Pi, Phi Gamma Delta, Phi Delta Theta and Delta Upsilon were established. Since then, of the older type of fraternities, there have been seven new foundations: Psi Upsilon, Kappa Sigma, Alpha Chi Rho, Delta Tau Delta, Phi Delta Phi, Kappa Kappa Gamma (notable as be-

ing the only feminine fraternity), and Delta Kappa Epsilon just formed during the past year.

During this last period a variation has appeared from the older form. These are fraternities whose members are all drawn from some one department of the University instead of

being drawn irrespectively from all departments, or only from the College. Such are Phi Alpha Sigma, Nu Sigma Nu, and Alpha Mu Pi Omega, in the Medical Department, Delta Sigma Delta in the Dental Department, and the Mu Phi Alpha Engineering Fraternity.

On the border line between these secret fraternities and merely literary societies, stand two organizations similarly named but not secret and having their fraternal characteristics but slightly

developed. The first of these is the local chapter of Phi Beta Kappa, Delta of Pennsylvania, which was established here in 1893. This fraternity elects to membership every year, purely on the basis of scholarship, a number not exceeding five from the Senior Class and three from the Junior class, who must be students in the more purely literary



DELTA PHI

or classical courses of the College. It holds a social meeting in the middle of the winter and a literary meeting with oration and poem in



PHI DELTA THETA

Commencement week. Sigma Xi is a society of similar aims existing for the benefit of scientific students, a chapter of which has been established here during the present year.

Until the last decade there were no fraternity-houses at Pennsylvania at which members lived. About ten years ago however the custom began of renting such commodious and conveniently situated dwelling-houses as could be found near the University. Psi Upsilon, Delta Upsilon, Zeta Psi, Phi Delta Theta, Beta Theta Pi, Delta Phi, Kappa Sigma, Phi Kappa Sigma and others secured such houses, at which groups of members took up their residence. Still later, within the last year or two, a number of fraternity-houses of original and attractive architectural design have been built on the streets immediately facing the University grounds.

The Mask and Wig Club, the oldest and most successful existing dramatic society at the University, also has a clubhouse and a continuous social life quite as distinct as that of the Greek-letter societies.

It was organized in 1889 and has produced annually since that time in Easter week a farce or light play composed generally by one of its own members. It has usually given five or six performances in Philadelphia and has occasionally repeated them in some other cities, as well as giving additional less formal productions at other times in its own clubhouse. The Club was incorporated in 1892 and soon afterward established a house on Quince Street below Spruce. Its first play was "Lurline," which was followed by a series of parodies, or similar compositions, this year's production being known as "Mr. Aguinaldo of Manila."

Other dramatic associations preceded and have existed contemporaneously with the "Mask and Wig." In fact there was a distinct dramatic tendency even in the old colonial College. Reference has been made

more than once to the somewhat solemn dramatic pieces that were acted by the students at the early commencements, mostly composed by the Provost, and afterwards published. The



PSI UPSILON

same tendency must have existed in a more popular form at the time of the Revolution, for a rule is entered on the 'Trustees' minute-

book, February 20, 1781, "that no dramatic performance be exhibited by the students in the University without the approbation of the Trustees previously obtained."

The performance of the Greek play in 1886 has been already described, but it gave rise to no permanent organization. In 1878 the "University Dramatic Association" was formed, and played a humorous "Romeo and Juliet," but it soon ceased to exist. In 1895 the "Garri-ck Club" was formed with the object of producing plays of a more literary, or at least of a less trivial, character than those given by the "Mask and Wig."

In March 1900 the first French play ever given by University students, *Le Médecin malgré lui* of Molière, was produced with great success, called forth much interest, and seems likely to lead to a permanent French dramatic organization.

Closely allied to the dramatic are the musical societies. As early as 1759 we hear of the

Orpheus Club of the College. The University Glee Club is a time-honored organization, going well back to the middle of the century at least, though there have been periods when it was temporarily in a condition of suspension. Orchestral organizations have come into and gone out of existence. In 1887 the University Orchestra came into permanent existence, as well as banjo and mandolin clubs. Soon afterwards the banjo and mandolin clubs were combined with the glee club as the "Associated Musical Clubs" of the University. Notwithstanding some recent adverse experiences, the annual concert by these united clubs is still one of the social occasions of the year, and the clubs make an annual trip more or less extended in time and distance. There is also in existence a University Band, and an organization among the students of the Department of Music for the occasional performance of parlor music.

CHAPTER IV

ATHLETICS

ATHLETICS have formed such a large part of the interests of the students and the alumni during recent years, and the University has won such a prominent intercollegiate position, that it is difficult to realize that their whole growth and development has been within the last two or three decades. Of course certain outdoor sports have always been practised, but athletics in the modern sense, that is, competitive contests under established rules, have been a matter of very recent times. Two branches however had their origin somewhat earlier than the others. These were rowing and cricket. The "University Barge Club" was formed in 1854, but as its membership was not restricted to students it soon lost all real connection with the University. "The College Boat Club of the University of Pennsylvania" was formed in 1872, incorporated in 1875, and obtained a boat-house along with the group of similar structures on the Schuylkill at Fairmount. Cricket was played

from an early time, class teams existed, and in 1866 there were even match games with Haverford College as well as with various non-collegiate teams. Till after 1875 however athletics in these as in other forms were of the nature of unregulated amusements, though class organizations were sporadically formed, and informal contests held.

The University began its regular series of intercollegiate contests in the various branches of athletics at about the same time; baseball in 1875, football in 1876, track athletics and cricket in 1877, and rowing in 1879. Since these dates these branches with one exception have had annual contests. This one exception is cricket, which for some reason has had a somewhat precarious existence here, as in the few other American Colleges where it is played at all. Class matches or races have continued to be held, but they have come to be more and more looked upon as mere training for the inter-collegiate contests. In some branches

also there are contests with non-collegiate amateur clubs, but these also tend to be given up.

The progress of athletics has been guided in the main by the Athletic Association. This was formed in 1873, its first group of officers being elected in 1875. In 1879 graduates were admitted to membership in the association and ultimately obtained control of its policy. The Athletic Association was intended to foster interest especially in track and field athletics; baseball, cricket, football and rowing having each its own association. In 1882 however all these bodies were combined into one organization, which was incorporated, with officers and a Board of Directors. Standing committees were appointed on each of the five principal branches. The ultimate form which this plan of organization has taken has been a Governing Board of fifteen, made up of ten graduates elected by the graduate members of the Association, and five undergraduates elected by the undergraduate members. The five standing committees are appointed by this Board and are each composed of two graduates and three undergraduates. A financial secretary, coaches, trainers and other employees are appointed by the Board. The Board also manages the financial affairs of the various branches, using the surplus derived from the more popular sports, like football, to aid in paying the expenses of the less popular branches, or those to which admission fees cannot be charged, like rowing.

The Athletic Association has been recognized in various ways by the University authorities. It gives information to the Uni-

versity Committee on Athletics on which the latter bases the regulations to govern athletic contests, and has entire charge of that part of the University property set apart for athletic uses. Its most conspicuous work has been in this last direction. In 1885 the Trustees set apart the ground extending south and west from Thirty-sixth and Spruce streets, and by the efforts of the Association this was graded and provided with stands. All important athletic contests during the ten years from 1885 to 1895 took place on this field. In that year this ground came into demand for dormitory

purposes and for the University restaurant, and at the same time a very desirable tract was acquired by the University and given into the charge of the Athletic Association at Thirty-third and South streets. This was named Franklin Field, and has since that time



UNIVERSITY BOATHOUSE ON THE SCHUYLKILL

been going through steady if somewhat slow transformation into model grounds for athletic purposes. The tracks, the football and baseball grounds and stands, have been in full use, and the further structures which appear on the Association's plan are coming within appreciable distance of realization.

During this period the growing interest in athletics was introducing visible changes in the institution, some of which seem to many thoughtful persons a distinct loss, others of which are undoubtedly beneficial. Among the latter are to be counted the growth of an exuberant University patriotism. One form of this appeals to the eye, another to the ear. The red and blue which were first used at Saratoga in the summer of 1875 as the colors of the repre-



ATHLETIC GROUNDS, — FRANKLIN FIELD

sentative of Pennsylvania at the track sports held there, and in the autumn of the same year adopted by the Athletic Association as its colors, gradually came to be recognized as the colors of the University at large, and have since been used not only in innumerable social and festive connections, but on the most dignified and solemn official occasions. In 1877 at the intercollegiate championship track sports the first

In earlier days the athletic teams were constructed largely if not entirely from students of the College. As the different departments grew closer together, however, as the interest in athletics became stronger, as methods of teaching and of social life in the professional schools and those in the College approximated to each other, and after Houston Hall and the Dormitories became unifying factors of the



VARSTY AND FRESHMAN BOAT CREWS, 1900

form of the University cheer, "Hoorah, Hoorah, Hoorah, Penn-syl-va-ni-a!" was adopted. Subsequent modifications have only changed its form. There is always now a recognized University cry, and the habit of combined cheering has made its way into places almost as formal as those in which the red and blue colors have come to figure. Athletics has also done much to bring the various departments of the University into closer relations.

whole student body, the teams came to be more and more largely made up of students drawn from all departments indiscriminately. This was of course a great strengthening to the athletic abilities of the University, several of whose departments are of approximately equal numbers, as the best men could be picked out from a much larger body. Several Universities or Colleges, however, whose collegiate departments were much larger relatively to the other



FOOTBALL GAME, FRANKLIN FIELD, PENNSYLVANIA-CORNELL, 1896

departments than at Pennsylvania resented this extension of the field of choice, and felt moreover that it gave opportunity or temptation for men of abnormally long athletic training to be placed on the teams. The most conspicuous effect of this feeling was the adoption in 1893 by the Inter-collegiate Football Association of the so-called "undergraduate rule," as an amendment to its constitution. This rule read as follows: "No member of a graduate department, nor special student, should be allowed to play, nor any graduate who has registered or attended lectures at any other University or

Yale falling out with one another at about the same time. Notwithstanding these slight instances of inter-collegiate friction, Pennsylvania has gradually come to take her place among the first four or five Universities in the country in athletics as in other respects, and more than once, in one or other branch of sport, she has been easily first.

Some of the main incidents other than those already mentioned, in various branches, have been as follows: In 1895 a series of annual intercollegiate and interscholastic relay races was inaugurated which has been continued



GRAND STAND, FRANKLIN FIELD (AS PROPOSED)

College." Pennsylvania protested against this enactment, and on its being carried by the votes of Yale, Princeton and Wesleyan, withdrew from the Association. She still continued however to play with these Universities under special rules.

In 1894 the Princeton Faculty, giving as its reason the undue prevalence of disputes and recrimination, prohibited its athletic teams for the time from arranging for contests with Pennsylvania, and in the main branches of athletics these have never yet been resumed. Nor since 1895 have contests in rowing, football or baseball been arranged with Yale. At a certain period disagreements among Colleges and Universities were epidemic, Harvard and

since and has awakened much interest. In 1891 the College Alumni athletic prizes were established, and have exerted an encouraging effect on sports which are otherwise somewhat apt to be neglected. After 1892 Pennsylvania regularly obtained a place among the first three contestants in intercollegiate track athletics, and in 1898 and 1899 obtained first place. Dual games have been arranged from time to time with Cornell, California and Harvard, and for some years a Pennsylvania State Intercollegiate League existed.

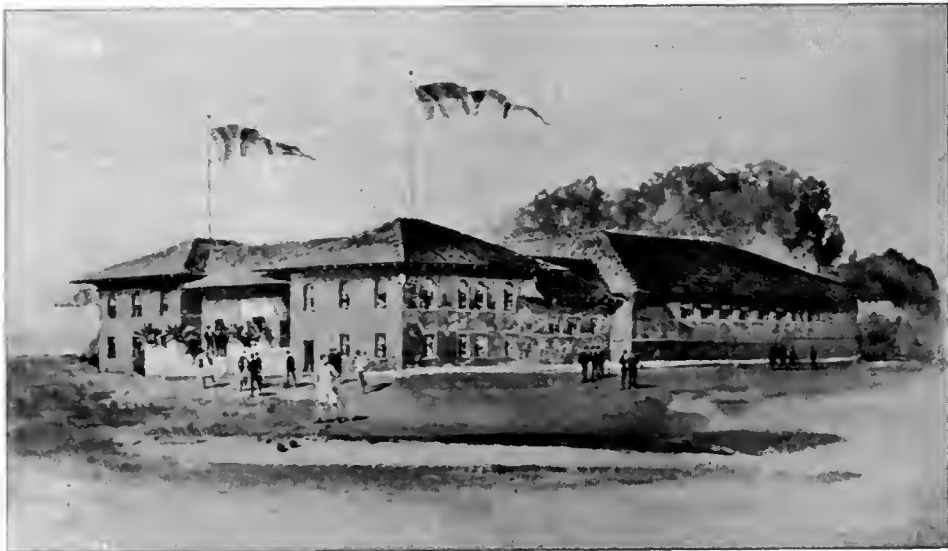
In rowing, the gift of the "Childs Cup" in 1879, to be competed for by Pennsylvania, Columbia and Princeton, a group into which Cornell was admitted in 1887, gave an objec-



ATHLETIC GROUNDS, FRANKLIN FIELD (AS PROPOSED)

tive point for some of the earlier races. The University has however always pursued a catholic policy in rowing, taking part in many forms of intercollegiate racing and also participating in other than College regattas. In 1882 and again in 1898, 1899 and 1900, Pennsylvania came out first in the intercollegiate races, having run the whole gamut of utter and partial defeat and of almost achieved victory between these times. The race of 1895 between Columbia, Cornell and Pennsylvania was made famous by the last-named having continued to row while their boat was steadily filling with water until it had entirely disappeared from sight and

has been played with that University, was a victory for Pennsylvania by a score of 12-0. In this year for the first time Pennsylvania defeated every team with which she played. In fact from that time till 1899 she had continued unbroken success, except for one game with Lafayette in 1896 and one with Harvard in 1898. The football team of 1899 was defeated a number of times, but for the preceding two or three years there seems no reason to doubt that Pennsylvania had on the whole the best team of any American College or University, though no games were actually played with Princeton or Yale.



FIELD HOUSE, FRANKLIN FIELD (AS PROPOSED)

the rowers had to be rescued from the wreck. In 1898 Pennsylvania defeated Cornell, Wisconsin and Columbia; the first named of these in the same year having defeated Yale and Harvard.

Football has for a decade been the most popular of American College sports, and from Pennsylvania have emanated a number of innovations which have exerted a deep influence on the development of the game, although to many persons these changes seem undesirable. In 1892 the University was successful over Princeton for the first time, though the score was almost reversed the next year. In 1894 however the game with Princeton, the last that

Baseball has been less popular than either football or rowing, and is less prevailingly collegiate in its clientage. Cricket has suffered rather from lack of interested or enthusiastic competition with other Colleges, excepting Haverford and intermittently Harvard, than from lack of good players. Interest in the game has not, however, been sufficient to lead to any such careful training as is devoted to the branches previously mentioned.

From time to time other intercollegiate contests have been introduced, such as cross-country running, tennis, bicycle riding, gymnastics, fencing, lacrosse, golf and others, but they have never taken hold on the continued interest of

the students at the University, nor have they awakened any of that enthusiasm which the five main branches of athletics always call out.

Except for the unfortunate recrimination that has existed in certain intercollegiate athletic relations, the constant tendency to

take this form of amusement too seriously, and the partial substitution of physical for intellectual ideals, as complete satisfaction might be felt in this as in any other phase of the University's recent history.

CHAPTER V

THE ALUMNI

THE bond that unites the alumnus to his Alma Mater is a proverbially close one. This feeling has not been so highly developed in the past here as at some other Colleges, due partly to the absence of dormitories and the substitution for it of the social interests which students have kept up at their homes; partly to the long period of decadence when the University offered so little to attract the admiration and love of its students or the pride of its alumni; partly no doubt to other causes. Nevertheless two facts are to be placed alongside of this statement; first that there have always been some men to whom the demands of College loyalty were very real and very strong, and secondly that the last two or three decades have seen an enormous increase of this feeling in extent and intensity. Indeed it is doubtful whether there is in these last years of the nineteenth century a more enthusiastic and loyal body of graduates anywhere than those who yearly leave Pennsylvania for the occupations of later life.

The body which historically represents the first class alluded to above, the comparatively few who were always possessed of a strong sense of loyalty and interest, is the older element in the "Society of the Alumni," which was organized among graduates of the Department of Arts in 1848. There are traditions of a much earlier society, and in 1836 there certainly was an organization of the alumni, before whom a formal address was made by Thomas I. Wharton. This society seems however to have passed out of existence. The present organization was formed June 9, 1848. Most of those who were then officers and members have since passed away, although Dr. John

W. Faires and Mr. John B. Gest are now, as they were then, members of the Board of Managers. Annual meetings have always been held, in early years being made the occasion for a formal annual address, in later years for less formal speeches which largely take the form of reports on the progress and prospects of the University made by the Provost and the Dean of the College. There have always been edible and potable accompaniments to the gatherings of the society. Its membership was at first restricted to graduates in Arts; then as the Department of Science, the Wharton School, and other new courses were constructed, its membership was broadened so as to be inclusive of all graduates of the College. About 1890 it was still further extended to allow of the election of matriculates who had not actually graduated and of students who had only taken special or partial courses. It has however always remained representative distinctly of the College.

Perhaps the most conspicuous work which the Society of the Alumni has done has been the maintenance of a catalogue of all matriculates of the College. This was compiled in its first form by a committee of the Society in 1849. In 1877 a second was produced, a third in 1880, and in 1893 the "Catalogue of Matriculates of the College," a work of five hundred and sixty pages, which in detail, completeness and excellence of arrangement is probably the best catalogue of former students of any College in existence. A second form of activity has been the foundation of prizes. In 1859 a prize was established for the best Latin essay by a member of the Senior Class, and in 1867 for the best original oration by a Junior. In 1895

second prizes were added to each of these. In 1887 an annual sum of fifty dollars was set apart to be expended by the Athletic Association in the purchase of prizes for students making exceptionally high records in various branches of athletics. The Henry Reed Prize for an essay in English Literature was established by a fund collected from the Alumni generally, though not through the Society, and the Allen Greek and Latin prizes were established in 1895 by the President of the Society. Other foundations or memorials created by the society were the three central memorial windows in the College Chapel, portraits of Vice-Provosts Frazer and Krauth, the fund for the purchase of books named after the latter, and the Library of Professor Allen purchased and presented to the University after his death. At present the society is engaged in collecting funds to endow the Professorship of Greek in further remembrance of Professor Allen. The society has also contributed from time to time to various objects of University interest, especially in the field of publication. In 1894 the Society of the Alumni was incorporated. In 1897 was begun the issue of a semi-annual bulletin to members of the society, with the object of keeping them in closer connection with the current interests of the University. For this after all is the great object of the society, to give unity, encouragement, recognition, embodiment, to the sense of continued responsibility on the part of graduates of the College for its welfare and advancement.

Alumni organizations were formed later for the other departments. In 1861 the Society of the Alumni of the Law Department was organized and chartered. In 1875 it established the "Sharswood" and "Meredith" annual prizes for the best two graduating essays in the Law School. This society also published a catalogue of graduates of its department, in 1882.

The Society of the Alumni of the Department of Medicine appears to have been founded only in 1870. In 1877, 1887 and 1897 it prepared printed lists of the graduates of that department, based on the catalogue previously published by the Faculty of the Medical School. Medical graduates residing in Phila-

delphia have also an active organization, which meets three times a year. Alumni Societies of the departments of Dentistry and Veterinary Medicine also exist, holding, like those before described, annual meetings with addresses and a collation. There was also at one time a separate organization of the graduates of the Wharton School.

With the growth of general University spirit irrespective of the bounds of individual departments, which has been so characteristic of recent years, the need or opportunity was recognized for an organization of the Alumni which should reflect this feeling and take up lines of work of common interest to all. The "General Alumni Society" was therefore organized in 1895 and incorporated in 1897. It has obtained a large membership of graduates of all departments, scattered very widely. Its principal functions so far have been the keeping up of a general directory of all those who are or have been connected with the University as students, instructors or officers; the publication of the monthly (and lately the semi-monthly) Alumni Register, an excellent periodical of general Alumni and University interest, and the arrangement of a general gathering and luncheon on Alumni Day in Commencement week. The success of the first two of these objects has been especially great. It has recently begun to collect funds for the foundation of a number of scholarships, and is doing much through the work of one of its special committees to bring the knowledge of the University and its opportunities before the private schools of Pennsylvania and adjacent States.

The General Alumni Society has also taken some part in the formation of the many local organizations of graduates of Pennsylvania which are being so rapidly organized in various parts of the country. Such organizations of "Pennsylvania men," irrespective of the departments from which they graduated, now exist in New England, New York, Chicago, Washington, Baltimore, Wilmington, Cincinnati and various other sections of the country.

The organization of the Central Committee of the Alumni in 1882 has already been described. It differs from the societies just

described in being of a semi-official character, being really a delegation from all holders of University degrees obtained in course, and forming a link between them and the Board of Trustees. Its principal function is to nominate to every third vacancy on the Board. Its nominees have been promptly elected in the five opportunities which it has had to suggest names, and there is little doubt that in this way the Board, which has always otherwise been an entirely "close corporation," has been brought into more living connection with the current interests of the University. Various other supervising and recommendatory functions of the Central Committee have proved to be of very slight practicability.

But after all the organized Alumni are not as important as the Alumni in their unorganized capacity. It is as men taking their share in the common work of life that the University influence upon its graduates must after all be considered as of much or of little importance. If their University undergraduate life and their later position as Alumni only mean certain years of more or less pleasurable incident and then a life-long, respectable, if somewhat tenuous, connection; if their University course represents only certain matters acquired

and largely forgotten; if, worst of all, it only represents a period of time unwisely used, misapplied or wasted, and since regretted; then to be an Alumnus of the University means little or nothing, or worse than nothing, to both the man and the institution. On the other hand if

the period of undergraduate life means invaluable mental discipline, broadened intellectual interests, refinement of feeling and manners, the creation of close and congenial friendships; if the days since graduation include a continuance of interest in the University, of knowledge of her welfare, of pride in her progress, of a sense of responsibility for her success, of solicitude for her needs, and of regret, if there should be occasion for it, for her mistakes,— then to have been a student of the University is an inestimable privilege, to be an Alumnus is a permanent secure possession.



WAR MEMORIAL TOWER
From Architects' Drawing

As clergymen, teachers, physicians, lawyers, men of letters or of other professions, men of business, or even men of leisure, it is to be hoped that the University connection of the past is a valuable constituent in the greater or less success and pleasure which the Alumni are obtaining from their life-work. There is however one class of alumni who by common

consent of an even yet war loving race are looked upon by the community and by their fellow alumni with especial interest and pride. These are the army and navy men.

Alumni of the University who took part in the war of the Revolution are to be numbered by scores. Their part in the field, in medical and in civil service, was by no means an inconspicuous one. Five of the first six students graduated were either signers of the Declaration of Independence or were otherwise prominent in the affairs of the time. Some twenty graduates of the Medical School lost their lives for the cause. The Dickinsons, Cadwaladers, Mifflins, Muhlenbergs, Browns, Reads, Tilghmans, Chews, Baches, whose names are recorded so frequently in Pennsylvania, Maryland and New Jersey Revolutionary affairs, were connected in the closest way with the University. Later, in the war of 1812, in the Mexican war, and even in the war of the Rebellion, their prominence was either not so great or perhaps has not been so successfully rescued from oblivion. Besides those actually in the service during the Rebellion, a company, the "University Light Artillery," was formed and drilled regularly during and for some time after the Civil war; and during the Gettysburg campaign a number of the students went to the front. Moreover, of that army of medical graduates which was provided with recruits year after year when the medical school of the University was far the largest in the United States, great numbers whose special work has been but ill remembered or recorded by biographers of the Sons of the University have certainly taken part in the military service of the nation. A considerable number of graduates have been in the army and the navy during periods when no war has made military men conspicuous. A memorial in the College Chapel still perpetuates the memory of twenty-four graduates, — an incomplete and inadequate list, — "Sons of the University who died to uphold the Laws of their Country in the War of the Great Rebellion."

When the recent war with Spain broke out

it found a considerable number of University men already in the service of the Government. Many more enlisted. Nine lost their lives. General Egbert, of the Class of '56 College, was wounded at El Caney and subsequently killed at Malinta, Luzon. Dr. John B. Gibbs, '81 Medical, was killed in battle at Guantanamo. Major L. S. Smith, '88 College and '91 Medical, was taken with typhoid fever when in charge of the hospital at Puerto Rico and died on shipboard on the way home. Lieutenant J. B. Scott, '99 Medical, was Chaplain on the auxiliary cruiser St. Paul, and died also of disease. John B. Bernadou, in command of the torpedo-boat Winslow at Cardenas, was a graduate of the class of '77, College; and two of the officers of the Olympia at Manila were graduates of the University. Two students were in the "Rough Riders." Altogether it is calculated that there were some four hundred University Alumni, officers and students in the service of the government during the Spanish war. This was about six per cent of all those who were still within the permitted age and condition for military service. It is as a memorial to these four hundred men, and especially to those who lost their lives during the war, that the impressive "War Memorial Tower" is now being put up as a part of the Dormitories.

It is therefore evident that the sons of Pennsylvania have no mean or insignificant position in the military annals of the nation. It will perhaps, however, be permitted to the chronicler whose work is now brought to an end to express his belief, an inheritance probably from that Quaker stock which has also had its part in the life of the University, that it is not in military annals after all that the best deeds are found; that sons of the University of many callings, those who have followed plainer professions, lived quieter lives, pursued more utilitarian or homely ends, have contributed more than equally with her soldiers to that enrichment of the life of the individual and the community which is the special work of this as of all other Universities.

FOUNDERS AND BENEFACTORS
OFFICERS AND ALUMNI

FOUNDERS AND BENEFACTORS OFFICERS AND ALUMNI

WHITEFIELD, George, 1714-1770.

Founder and Benefactor.

Born in Gloucester, England, 1714; studied at home, and at Pembroke College, Oxford, 1732-35; ordained clergyman of Church of England, 1736; followed life of itinerant preacher; traveled through England and Scotland, and made seven preaching tours through the North American Colonies; one of his visits to Philadelphia was the occasion for the erection of the building and planning of the Free School which subsequently became the habitation and one of the earliest trusts of the Univ. of Pa.; died 1770.

GEORGE WHITEFIELD, perhaps the most eloquent and influential preacher of the eighteenth century, was born in Gloucester, England, December 16, 1714, his father being an inn-keeper in that city. His early training was obtained in that place under many difficulties, his father having died and his help being required by his mother in the keeping of the inn. By the time he was eighteen, however, he had entered Pembroke College, Oxford, where he continued till his ordination three years afterwards, when he took his Bachelor's degree, and soon afterward began his career of popular preaching. In Oxford, London and Gloucester he preached so eloquently as to draw thousands to hear him. In 1739 he began the practice of outdoor preaching. In the open commons of London, Bristol and other cities, as well as on the moors of Cornwall, he preached to thousands who were but seldom reached by any other religious ministrations of the time. In the year 1738 he made a missionary trip to Georgia and showed the same power to excite and move the masses of the people. After this time he spent most of his life in preaching tours through the American colonies, passing repeatedly from New England all the way to Georgia, and making in all seven such trips. His journal of these voyages was printed contemporaneously and widely read. In 1739 and 1740 he visited Philadelphia and it was the gathering of vast crowds to hear him speak in the streets and

open grounds here that suggested the erection of the large building on Fourth Street, known as the New Building which was afterwards made the first home of the University of Pennsylvania. He was chosen one of the Trustees of this building, and of the Charity School intended to be opened in it in 1740, preached in it repeatedly between 1741 and 1748, and promised to secure a teacher for the free school. This latter work, however, seems never to have been taken up. When it was proposed to dispose of the building to the Trustees of the new Academy in 1749, Whitefield gave his consent, though insisting on the carrying out of the conditions of the original trust, viz.: the provision of a non-sectarian hall for preachers and the establishment of a free school for poor children. He established an orphan school in Georgia for which he made collections on his preaching tours, and later secured lands near the present city of Easton, Pennsylvania, for the purpose of founding another such establishment. The death of a wealthy merchant of New York who had promised to contribute to this project prevented its being carried out. Mr. Whitefield roused much opposition among the more conservative clergy on account of his appeals to the emotions, and there is reason to believe that in his later life he regretted somewhat the prevailing hortatory strain into which his natural gift of eloquence and his vivid imagination had led him for so much of his life. He died while on a seventh missionary tour to America, September 30, 1770, in Newburyport, Massachusetts. He was married to Mrs. James, a widow, of Abergavenny, Wales.

[Portrait on page 49.]

PENN, Thomas, 1702-1775.

Patron and Benefactor.

Born in England, 1702; second son of William Penn, Founder of the Province; in Pennsylvania representing his brothers, 1732-41; inheriting rights and claims of the

family, had large income from the Province and interest in its affairs; early patron of the College, bestowing several gifts, and introducing Provost Smith to influential persons in England; died 1775.

THOMAS PENN was born in England March 8, 1702, second son of William Penn, Founder and first Proprietor of the Province, by his second wife. He inherited the claims of his older brother, half brother and nephew; and was, therefore, the most extensive possessor of the proprietary estates, and acted for a long time as head of the family. He was in Pennsylvania from 1732 to 1741. When the plans of the Academy and College were announced to him, he deprecated at first their ambitious extent, but afterwards approved them, granted the charter of 1753, accompanied it with a substantial gift in money and expressed a continued interest. When Dr. Smith, the Provost, visited England, Thomas Penn received him hospitably, introduced him to influential persons and helped him to obtain contributions to the College, as well as making further gifts in land and money personally and in the name of the Proprietary family. He paid a regular sum of £150 a year to the Provost as an increment to his salary, till the time of his death. He also aided other Philadelphia philanthropic organizations, especially the Library and the Pennsylvania Hospital. He died in London, March 21, 1775.

[Portrait on page 68.]

FOTHERGILL, John, 1712-1780.

Patron and Benefactor.

Born in Yorkshire, Eng., 1712; educated at Sedburgh and Bradford; took medical degree at Edinburgh, 1736; studied in London and on the Continent; began practice at London, and attained great prominence in his profession; greatly interested in the Pa. Hosp. in Philadelphia, and became patron of the proposed Medical Department of the College; made gifts to the College and the Hospital and gave valuable help to Dr. Smith when he was in England; exerted himself to prevent the breach between the colonies and the mother country; died 1780.

JOHAN FOTHERGILL, M.D., was born at Carr End, Wensleydale, Yorkshire, England, March 1712. He received his early education at Sedburgh, and was afterwards apprenticed to an apothecary at Bradford. At the end of his apprenticeship he went to Edinburgh, where he took his degree as Doctor of Medicine in 1736. He removed soon afterward to London and studied and worked at St. Thomas' Hospital. In 1740 he visited the Continent, travelling through Holland, France and

Germany, and on his return to London began to practice his profession. He seems to have been the first to discover the connection between ulcerated sore throat and scarlet fever, and not only obtained success in treating the latter, but wrote an essay on the subject which was translated into nearly every European language. He was interested in Natural Philosophy and Botany and wrote numerous treatises in Therapeutics and Botany. He was associated with Howard in the reformation of the management of prisons. He was an unwearied friend of the College, and adviser and patron of the early



JOHN FOTHERGILL

medical courses, although he never came to America. He wrote a letter of recommendation to the Trustees for Dr. William Shippen, and sent a present of a series of anatomical plates, casts and models to the Pennsylvania Hospital, which he suggested should be used in the lectures to be given in the College. He gave valuable assistance later to Dr. Smith in his journey to collect funds in England, and to Benjamin Franklin in the efforts which the latter made to obtain the withdrawal of the actions of the Parliament and the Ministry which were so distasteful to the Colonists. He attained a high position and considerable wealth, which he used freely for various charitable purposes. Parliament made use of him to try to arrange with Dr. Franklin some

compromise in the colonial difficulties before the latter left London, but the plan failed. Dr. Fothergill was a member of the Society of Friends. He died in London in the year 1780.

FRANKLIN, Benjamin, 1706-1790.

Founder and Benefactor — Trustee 1749-1790.

Born in Boston, Mass., 1706; ran away to Philadelphia where he gained employment as a printer; after a visit to London, set up for himself in Philadelphia and became the best known, the most active, and the wealthiest printer and publisher in the Colonies; was active as one of the founders of the Philadelphia Library, the Academy and College, the American Philosophical Society, and numerous other local organizations, as well as an indefatigable advocate of reform; held a great variety of municipal and Provincial positions, and shared in all the preliminary stages of the Revolution; was agent of the Province of Pennsylvania in London from 1754 to 1762 and again from 1765 to 1775; was a member of the Albany Congress, the first Continental Congress, of various other public bodies in 1775, and was one of the framers and a signer of the Declaration of Independence in 1776; member of State Constitutional Convention of 1776; Ambassador to France, 1776-1785; President of the State of Pennsylvania, 1785-1788; member of Constitutional Convention of the United States in 1787; his scientific acquirements obtained for him the degree of LL.D. from Oxford and from Edinburgh, membership in the Royal Society and much commendation from Europe; died 1790.

BENJAMIN FRANKLIN was born at Boston, Massachusetts, January 17, 1706, the son of Josiah Franklin and Mary Folger. He was apprenticed to his brother James as a printer. After a few years, owing to a disagreement, he left home and established himself in Philadelphia. In 1725 he worked in London as a journeyman printer. The next year he returned to Pennsylvania and subsequently became the Editor and proprietor of the Pennsylvania Gazette and also publisher of Poor Richard's Almanac, and other publications. In 1731 he assisted in founding the Philadelphia Library; became Clerk to the Assembly in 1736; Postmaster of Philadelphia in 1737; and Deputy Postmaster-General of the British Colonies in 1753. He became a Common Councilman of Philadelphia on October 4, 1748; and an Alderman, October 1, 1751. He was the most active of the founders if not the actual originator of the Academy and the College, was a Trustee during his whole life-time and President of the Board from 1749 to 1756 and again 1789-1790. He was the originator of the association which became the American Philosophi-

cal Society, and its President. He discovered the identity of lightning with the electric fluid in 1752. In 1754 as a Commissioner from Pennsylvania to the Albany Congress, he prepared the plan of Union for the common defence adopted by that body. He was commissioned a Colonel in the Provincial service during the French and Indian War. In 1755 he superintended the furnishing of transportation for the supplies of Braddock's Army. Most of the frontier forts between the Delaware and Susquehanna were erected under his direction. He was a member of the Assembly from 1751 to 1763, the latter year being Speaker; from 1757 to 1762 and again from 1765 to 1775, he was the agent of the Province to Great Britain, spending most of his time in England, and while there aided in securing the repeal of the obnoxious Stamp Act. The Universities of Oxford and Edinburgh conferred the degree of Doctor of Laws on him in 1762, for his scientific discoveries. He had been previously honored with membership in the Royal Society, and by being the recipient of the Copley gold medal. He was again elected to the Assembly of Pennsylvania from 1773 to 1775. Upon his return to Philadelphia in the spring of 1775, he was chosen a member of the Continental Congress. He was a member of the Provincial Conference at Carpenter's Hall, June 18, 1775, and of the committee of Safety from June 30, 1775, to July 22, 1776. He was one of the committee of Congress to prepare, and was also a signer of the Declaration of Independence. He was a member of the State Constitutional Convention of July 15, 1776, and chosen its President. He was the American Ambassador to France from the close of 1776 to September 1785. He secured the treaty of alliance with that country, signed February 6, 1778. He took a prominent part in negotiating the preliminary Treaty of Peace with England which was signed at Paris, November 30, 1782, and with Adams and Jay signed that at Ghent, September 3, 1783. He was President of Pennsylvania from October 17, 1785, to November 5, 1788, declining to continue in office on account of his advanced years. In May 1787 he was a delegate to the Convention which framed the Constitution of the United States. He died in Philadelphia April 17, 1790. He married Deborah Reed, of Philadelphia in 1730. They had one daughter Sarah who married Richard Bache. His son, William Franklin, was the last Royal Governor of New Jersey.

[Portraits on pages 53, 96.]

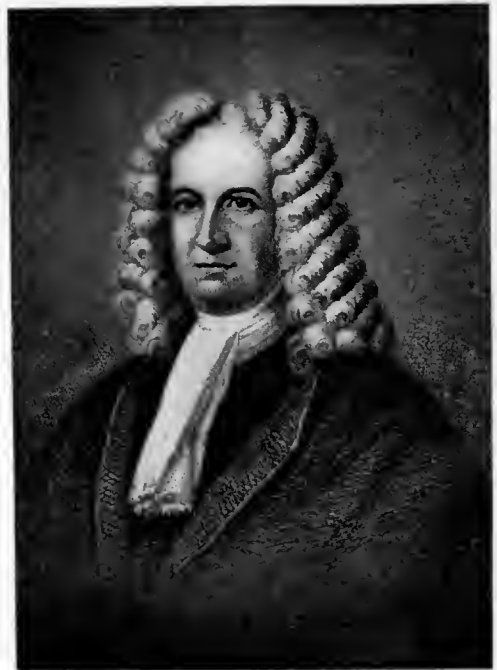
LOGAN, James, 1674-1751.

One of the 24 Founders — Trustee 1749-1751.

Born in Lurgan, Ireland, 1674; Sec. to William Penn on his second voyage to America; occupied positions of trust for the Proprietaries in Pennsylvania; contributed papers to the Transactions of the Philosophical Society; author of various writings; one of the founders of the Academy, and a Trustee until his death; founded the Loganian Library, now a part of the Philadelphia Library; died 1751.

JAMES LOGAN was born at Lurgan, County Armagh, Ireland, October 20, 1674. He acquired a proficiency in Latin, Greek and Hebrew before he was thirteen years of age, and was sent to London to be apprenticed to a linen-draper; but the war which ended in the Battle of the Boyne having commenced, he was recalled to accompany his parents in their flight to Edinburgh. They afterwards settled in Bristol, England, where he resumed his studies. He engaged in mercantile business in 1698, and in the following year sailed from Cowes, in the "Canterbury" as Secretary to William Penn. They arrived in Philadelphia in December 1699. Penn appointed Logan Secretary of the Council and on his own departure after a stay of two years, constituted him one of the Commissioners of Property, and also Receiver-General. From this time he was the business agent of the Penn family and the champion of their interests in the Colony. He was allowed a vote in the Council, April 21, 1702, and was again called and formally qualified February 8, 1703. On February 26, 1706-1707, articles of impeachment were exhibited charging him with illegally inserting in the Governor's commission certain clauses contrary to the Royal Charter, with imposition on the locators of land, with concealing the objections to certain laws specified by the Lords Commissioners of Trade and Plantations, and with illegally holding two incompatible offices, the Surveyor-Generalship and the Secretaryship. The Governor decided that he had no authority to try impeachments. Logan sailed for England in November 1709, but returned to Philadelphia in March 1711. The Province having been mortgaged to Gouldney and others with power to sell land, Logan was appointed one of the attorneys to make sales. He was also appointed by William Penn's will a Trustee of all the latter's property in America, and Hannah Penn constituted him one of her attorneys. He gave up the Secretaryship of the Land Office in 1718. Logan was Mayor of Philadelphia in 1723, at the close of his term going abroad to consult with Hannah Penn, from whom

he obtained instructions to Lieutenant-Governor Keith to reinstate Logan as Secretary of the Council, from which office the latter had been removed, charged with unauthorized entries in the official minutes. The Lieutenant-Governor was to obey the Council in his messages and speeches to the Assembly and in his legislative acts. Keith's refusal to comply with this and other instructions of the Proprietary authority finally caused his removal in 1726. Logan was made one of the Justices of the Peace for Philadelphia county by Gordon, who was Keith's successor, and was also restored to the



JAMES LOGAN

Secretaryship of the Council. He was appointed Chief-Justice in 1731, and retained that office until 1739. From the position of Senior Member, he was advanced to the Presidency of the Provincial Council in August 1736. His Chief Magistracy ended two years later, and he then refused the Lieutenant-Governorship, Thomas's appointment being the result of Logan's urgent letters to be relieved. He contributed papers to the Philosophical Transactions on Lightning, on Davis' Quadrant, on the apparent increased magnitude of the sun and moon near the horizon, and certain Experimenta et Meletemata circa Plantarum Generationem, etc. Of his writings the following were published in Europe: Canonum pro Inveniendis Re-

fractionum, Ludg. Bat. 1739; *Epistola ad Joannem Albertum Fabricium*, Amst. 1740; and *Demonstrationes de Radium Lucis*, Ludg. Bat., 1741. While holding the office of Chief-Justice he made a translation of Cicero's *Essay De Senectute*, and also rendered into English verse Cato's *Distichs*, besides leaving translations in manuscript from Greek authors and many essays on ethics and philosophy. When the project of the Academy was broached in 1749 he became one of the twenty-four founders, and offered to the Trustees the gift of a lot of land in Sixth Street on which to build; this offer was declined when it was decided to utilize Whitefield's Meeting House, in the deed of which Logan was the first named Trustee. He married, October 9, 1714, Sarah, sister to Charles Read, and had seven children. He died at Stenton, his residence in Germantown, Philadelphia, December 31, 1751, and was buried in the Friends' Grounds.

LAWRENCE, Thomas, 1689-1754.

One of the 24 Founders — Trustee 1749-1754.

Born in New York, 1689; came to Philadelphia when about thirty years of age and engaged in mercantile life; occupied various important positions in the city and Provincial governments, among them having been Mayor five times; represented the Province at the treaty with the Indians at Albany in 1745; was a prominent member of Christ Church, and one of the founders and first Trustees of the College; died 1754.

THOMAS LAWRENCE was born in New York, September 4, 1689; son of Thomas Lawrence and Catherine Lewis. He settled in Philadelphia about the beginning of 1720, entered at the same time into mercantile life, being associated with Logan in shipping, and in 1730 a partner of Edward Shippen, the firm being Shippen & Lawrence. Christopher Gadsden of South Carolina, a signer of the Declaration of Independence, was reared in his counting-house. In 1722 he was Junior Warden of Christ Protestant Episcopal Church, and in 1749 was one of the Committee to draft its charter. Thomas Lawrence was elected a Common Councilman of Philadelphia on October 3, 1722; an Alderman October 6, 1724, and Mayor in 1727, 1728, 1734, 1749 and 1753, holding that office at his death. He was invited to a seat in the Provincial Council by Lieutenant-Governor Gordon on April 20, 1727, but did not qualify until May 10, 1728. In January 1736-37 he was dispatched by the Council to Lancaster county in company with Ralph Assheton to take measures

for the expulsion of a party of Marylanders who were endeavoring to dispossess the settlers on the Susquehanna River, and returned, after an absence of two weeks, reporting the organization of a *posse comitatus*. In September 1745 he was deputed one of the Commissioners from Pennsylvania to treat with the Six Indian Nations at Albany. On January 1, 1747-8, Benjamin Franklin, declining the rank of Lieutenant-Colonel of the Associated Regiment of Foot for Philadelphia, recommended Mr. Lawrence, who was accordingly appointed. Lawrence was for some time the presiding Judge



THOMAS LAWRENCE

of the County Court. He was a subscriber to the Dancing Assembly, and a Trustee of the College. Lawrence continued a merchant until his death, which took place at Philadelphia, April 20, 1754. The following obituary notice appeared in *The Pennsylvania Gazette*: "Last Sunday, after a tedious Fit of Sickness, died here, very much lamented, Thos. Lawrence, Esq. He had the honor to be a member of the Council of this Province, was President of the Court of common Pleas, for the Co. of Phila., had been five times elected Mayor of this City, and in the enjoyment of these offices ended his life. Characters are extremely delicate, and few or none drawn with exactness and at length, are free of blemish. Of this gentleman, we think it

may be truly said, he was an affectionate husband, a tender parent, a kind indulgent master, and a faithful friend. The funeral was respectfully attended on Tuesday evening by a great number of the principal inhabitants of the place, who justly regret the death of so able and diligent a Magistrate as a public loss." He married, May 25, 1719, Rachel Longfield, at Raritan, New Jersey; she was the daughter of Cornelius Longfield of New Brunswick, East Jersey. He had eight children.

MADDOX, Joshua, -1759.

One of the 24 Founders — Trustee 1749-1759.

Born in England; emigrated to America before 1739; merchant in Philadelphia, and a member of the Common Council, 1739-41; a Judge of the County Courts, 1741-59; one of the Founders and first Trustees of the Academy and College; died 1759.

JOSHUA MADDOX was born in England, and was there educated. He is said to have come to this country in the early part of the eighteenth century and may have settled first in New Jersey and moved shortly afterward to Pennsylvania. He lived the greater part of his life in Philadelphia where he was a merchant and a much respected and honored citizen. He was elected a Common Councilman of Philadelphia in 1739 and held office until 1741. He was appointed a Judge of the Court of Common Pleas and Orphans Court of Philadelphia county April 4, 1741, and with two reappointments, June 30, 1749, and May 25, 1752, respectively, and as Presiding Judge of the Orphans Court, April 24, 1758, he filled this position until his death, April 18, 1759. He was one of the founders of the Academy and College of Philadelphia, and a Trustee from 1749 until his death. He was a Warden of Christ Church in Philadelphia. He married Mary (maiden name Rudderow) widow of Nicholas Gaulan, a wealthy Frenchman of Philadelphia. His daughter Mary married John Wallace, who was the great-grandfather of Hon. John William Wallace, LL.D., of the Class of 1833.

HOPKINSON, Thomas, 1709-1751.

One of the 24 Founders — Trustee 1749-1751.

Born in London, 1709; appears to have studied at Oxford, studied law, and emigrated to Pennsylvania about 1731; occupied various legal and judicial positions in the Province; was a member of the City and Provincial Councils; was an incorporator of the Phila-

delphia Library, and one of the founders and original Trustees of the College; died 1751.

THOMAS HOPKINSON, was born in London, England, April 6, 1709. He was the son of Thomas and Mary Hopkinson of London, the father being a merchant. Thomas Hopkinson is said to have attended Oxford, but did not graduate. He studied law, and about 1731, emigrated to Pennsylvania. He became deputy to Charles Read, Clerk of the Orphans' Court of Philadelphia county, and, on the death of Read, was commissioned, January 20, 1736-7, as his successor.



THOMAS HOPKINSON

He was also Master of the Rolls from June 20, 1736, until 1741, was Deputy Prothonotary and afterwards Prothonotary of Philadelphia county, and was chosen a Common Councilman of the city October 6, 1741. He practised law, and from 1741 to 1749 was Judge of the Vice-Admiralty. He became a member of the Provincial Council May 13, 1747. Two years later he became also a County Justice. He was one of the corporators of the Philadelphia Library Company, one of the original Trustees of the College, and a subscriber to the first Dancing Assembly. He married Mary Johnson, September 9, 1736. Thomas Hopkinson died at Philadelphia, November 5, 1751. He had eight children.

WILLING, Charles, 1710-1754.

One of the 24 Founders — Trustee 1749-1754.

Born in Bristol, England, 1710; descended from a family of merchants, he came to Philadelphia and established himself in trade there in 1738; he became quite wealthy, was twice Mayor of the city, and was one of the founders and first Trustees of the Academy and College; died 1754.

CHARLES WILLING, was born at Bristol, England, May 18, 1710. He was the son of Thomas Willing, of Bristol, England, merchant, and his wife Anne Harrison, granddaughter on her paternal side, of Major-General Thomas Harrison,



CHARLES WILLING

and, on her maternal side, of Simon Mayne, both members of the Court which condemned Charles I. He was taken to Philadelphia by his father Thomas Willing at the age of eighteen. Charles Willing settled in Philadelphia, as a merchant, took charge of the house that his elder brother, Thomas, had founded in 1726, and greatly enlarged this business; he was much esteemed and respected both as a merchant and as a magistrate. His successful operations and excellent credit aided in early establishing with foreign countries a high reputation for American commerce, and contributed to give to the city of his adoption that reputation for public honor and private wealth which it enjoyed at the opening of the Revolution, and which was of such

importance to the nation in its negotiations with France and Holland, during the struggles of that contest. He was active in establishing the Philadelphia Associates, in 1744, a subscriber to the first Dancing Assembly, one of the founders of the Academy and College and a Trustee, 1749-1754. He was Mayor of the city in 1748, and again in 1754. He married Anne Shippen, daughter of Joseph and Abigail, (née Grosse) Shippen, January 21, 1730-1. He died of ship-fever contracted whilst in the discharge of his official duties, November 30, 1754. He was buried in Christ Church burying ground. He had eleven children. Thomas Willing, a cousin of Charles Willing's father, laid out Willing's town, now Wilmington, Delaware.

ZACHARY, Lloyd, 1701-1756.

One of the 24 Founders — Trustee 1749-1756.

Born in Boston, Mass., 1701; removed to Philadelphia, and studied medicine there under Dr. John Kearsley and in Europe; was Health Officer of the Port of Philadelphia in 1729; was one of the founders and a Trustee of the College from the beginning, bequeathed his library to the Pennsylvania Hospital; died 1756.

LLOYD ZACHARY was born in Boston, Massachusetts, November 15, 1701. He was the son of Daniel and Elizabeth Zachary, the latter being the daughter of Thomas Lloyd, one of the first Commissioners appointed by Penn, also President of the Council and subsequently Deputy Governor of the Province. He became an orphan early in life, and removed to Philadelphia to live with Mr. Hills, an uncle. He studied medicine under Dr. John Kearsley, after he had finished his academical education. In 1723 he went to Europe and remained there three years. On his return to Philadelphia he commenced the practice of medicine and soon became eminent in his profession. In 1729 he was made Health Officer of the Port of Philadelphia in conjunction with Dr. Thomas Graeme, whom he succeeded in September 1741. He resigned the same month. He was one of the founders of the College of Philadelphia and was one of its Trustees from 1749 to the date of his death in 1756. He was also one of the organizers of the Pennsylvania Hospital and a member of the first Medical Staff, which position he resigned owing to a stroke of paralysis in March 1753. His devotion to the Hospital, however, only ceased with his life. By will he left £350 to the

Institution, with forty-three volumes and a number of pamphlets for the library. He died September 26, 1756, aged fifty-five years.

MASTERS, William, -1760.

One of the 24 Founders - Trustee 1749-1760.

Son of Thomas Masters, Mayor of Philadelphia, 1707-09; was a man of wealth, carrying on certain agricultural and milling industry; member of the Colonial Assembly; and one of the founders and original Trustees of the College; died 1760.

WILLIAM MASTERS was the son of Thomas Masters, Mayor of Philadelphia from October 1707 to October 1709, and Provincial Councillor from 1720 to 1723, and Sarah Righton, his wife. He married August 31, 1754, Mary Lawrence, daughter of Thomas Lawrence, the Councillor. William Masters inherited from his father and brother about five hundred acres in the Northern Liberties of Philadelphia, between the present lines of Girard Avenue and Montgomery Avenue, extending from the Delaware River across the line of Broad Street. This he called "Green Spring." Here he resided, operating the Globe Mill on Cohocksink Creek. For many years, he was a representative from Philadelphia county in the Assembly, and was a Commissioner to spend the money appropriated for the defence of the Province. He died November 24, 1760, at Philadelphia. He had three children. His widow built the house on the south side of Market Street below Sixth Street which Richard Penn, Sir William Howe and Benedict Arnold successively occupied, and on the ruins of which Robert Morris erected the house in which Washington resided as President of the United States.

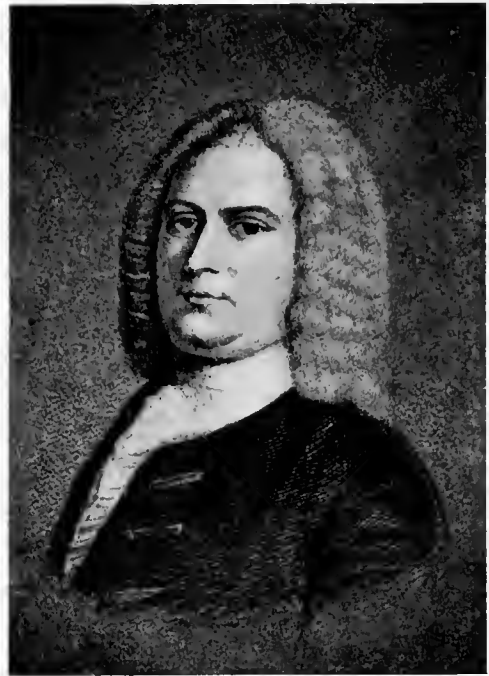
FRANCIS, Tench, -1758.

One of the 24 Founders - Trustee 1749-1758.

Born probably in Ireland; educated in England; studied law; emigrated to Maryland, where he held various offices; removed to Philadelphia, 1735; Attorney-General of the Province and Recorder of the City; one of the founders and most active Trustees of the Academy and College, serving on almost every committee of the Board during the remainder of his life; died 1758.

TENCH FRANCIS, one of the most active and useful of the group of founders of the Academy and College, was born probably in Ireland,

and died in Philadelphia, August 16, 1758. He was the son of Rev. John Francis, D.D., Dean of Lismore, and Rector of St. Mary's Church in Dublin. He was educated in England and prepared for the Bar, after which he emigrated to Talbot county, Maryland, and became attorney for Lord Baltimore in Kent county, Maryland. He was clerk of Talbot county from 1726 to 1734, and represented that county in the Maryland Legislature in 1734. He subsequently went to Philadelphia, where he served as Attorney-General of Pennsylvania from 1741 to 1755, and Recorder of Philadelphia from 1750 to



TENCH FRANCIS

1755. He was an eminent lawyer and according to Franklin served in his several offices "with the highest reputation." When the establishment of the Academy was proposed he took an extremely active part in the labors involved, soliciting private contributions, using his official position to bring its needs before the City Council and taking a principal part in drawing up the Constitutions and the first and second charters of the institution. His brother, Richard Francis, was also a lawyer of eminence and the author of *Maxims in Equity*; another brother, Rev. Philip Francis, was the father of Sir Philip Francis, K. C. B., the reputed author of the *Junius Letters*. Tench Francis married Elizabeth, daughter of Foster Turbutt of Maryland.

LEECH, Thomas, -1762.

One of the 24 Founders — Trustee 1749-1762.

Born probably in Philadelphia from parents who had come from England with Penn; was a representative of the County of Philadelphia in the Provincial Assembly for many years and at one time Speaker; one of the founders of the Academy and College, and a Trustee from 1749 until his death; died 1762.

THOMAS LEECH was the son of Toby and Hester Leech of Cheltenham, Gloucestershire, England, who came to America with William Penn in 1682, and settled in Cheltenham Township, Philadelphia county, Pennsylvania, on a tract of land indicated on Holmes' map of Pennsylvania. He represented Philadelphia county in the General Assembly of Pennsylvania for nearly thirty years, being chosen Speaker in 1758, "in room of Isaac Norris, who fell sick." He was long a vestryman and Warden of Christ Church, Philadelphia, and was a Trustee of the College and Academy of Philadelphia from their foundation until his death in 1762.

McCALL, Samuel, Jr., 1721-1762.

One of the 24 Founders — Trustee 1749-1762.

Born in Philadelphia, 1721; was engaged in mercantile and other industrial pursuits; occupied some civic positions; was an active participant in the organization of St. Peter's Church, the second Protestant Episcopal Church in Philadelphia; one of the founders of the Academy and College and Trustee from 1749 to 1762; died 1762.

SAMUEL McCALL, Jr., was born Philadelphia, October 15, 1721, son of George and Anne (Yeates) McCall. He formed a partnership with his younger brother Archibald and engaged in mercantile pursuits besides carrying on the business of the old forge, grist-mill, and saw-mill on McCall's Manor. He was chosen a Common Councilman of Philadelphia, October 6, 1747. He was appointed by Governor Morris, January 31, 1756, one of the Commissioners to settle the accounts of General Braddock. The Royal Commissary of Provisions afterward stated that these performed their duty so well that the Crown was saved "several thousand pounds." He joined an independent company of Foot, organized in Philadelphia in 1756. He was a subscriber to the First Dancing Assembly in 1748, and a member of the St. Andrew's Society of Philadelphia, in 1751. He was one of the founders of the Academy and College and was a Trustee from 1749 to his death. He was one of a number who presented a petition to the Proprietaries August 1,

1754, praying them to grant the lot on southwest corner of Third and Pine streets for a church and yard for the use of members of the Church of England, and acted on the Committee appointed to receive subscriptions for and direct the building of St. Peter's church. He married Anne, daughter of John Searle, a captain in the merchant service by his first wife Anne, at Philadelphia January 29, 1742-3. By his first wife he had eight children. He afterwards married Mary Cox in Philadelphia on January 31, 1759. She survived him and had no issue. He died in Philadelphia in September 1762 and was buried on the 30th in Christ Church burial ground.

STRETTELL, Robert, 1693-1761.

One of the 24 Founders — Trustee 1749-1762.

Born Dublin, Ireland, 1693; migrated from Ireland to London, and in 1736 to America; became a business man in Philadelphia; was known as a successful merchant, as a liberal member of the Society of Friends, and as a man of culture and literary interests; was a member of the Common Council of the city and of the Governor's Council; was one of the original Trustees of the College, and was Mayor of Philadelphia; died 1761.

ROBERT STRETTELL was born in Dublin Ireland, in 1693. He was the son of Amos Strettell and Experience, the daughter of Robert Cuppiage of Lambstone, County Wexford. He went from Ireland to London, where he remained about twenty years. Having lost a great deal of money in the South Sea Bubble, he came to America by the assistance of his friends in 1736. Robert Strettell belonged to the Society of Friends. He established himself in business in Philadelphia as a merchant, in which occupation he was very successful. He was fond of literature and collected a little library of Greek, Latin and French authors. He became a public character in 1741, as a man of liberal views. Spain was at war with Great Britain, and, it was feared, would attempt the conquest of the American Colonies. In this year, 1741, James Logan, a Quaker, sent a letter to the Yearly Meeting, setting forth the defenceless state of the Province, and the ill consequences that might ensue upon men of their principles, (these not permitting them to take up arms, nor to vote money to carry on war) procuring themselves to be returned to the Assembly. The Yearly Meeting appointed a committee of which Robert Strettell was one, to peruse the letter, and report whether

it contained matters proper to be communicated to the Meeting. Mr. Strettell, alone of the committee approved of having the letter read, and he believed if they refused to read it, such action would disgust not only him, but the large body of Friends in England. On the 6th of October, 1741, he was added to the Common Council of the city. Governor Thomas, in November invited Mr. Strettell to his Council. He qualified December 14, 1741. On November 16, 1748, he qualified as an Alderman, having been elected at the preceding meeting. He was one of the original Trustees of the College of Philadelphia and was Mayor of the city for one term, October 1751—October 1752. He gave £75 towards the erection of a Public Building, instead of the usual collation. In the Council he was an active member, and during the French War aided his more belligerent colleagues. For a few days, in the absence of Governor Morris and James Hamilton, he as eldest Councillor was supreme in the city. He seems to have favored the Declaration of War against the Delaware Indians. He was present when it was decided on and William Logan alone is said to have dissented. Died before June 12, 1761, buried that day in the Friends' burying ground. He married 1716, Philotesia, daughter of Nathaniel Owen, of London; she died before June 28, 1782. He had six children.

TAYLOR, Abram, 1703-1772.

One of the 24 Founders — Trustee 1749-1762.

Born in England, probably in 1703; came to Philadelphia before 1724; was in England in 1750, and from 1762 to his death; was a wealthy and popular merchant and landowner; member of the City and Provincial Council; one of the founders and first Trustees of the Academy and College; died in 1772.

ABRAM TAYLOR was born in England about 1703, and emigrated to Philadelphia via Bristol, entering into partnership in 1724 with John White as "merchant adventurer." They did a large business for those early days. In 1741, White, wishing to return to England, sold his interest to Taylor for £7000 sterling. Taylor was at this time a member of the City Corporation, and on December 29, 1741, qualified as a member of the Governor's Council, but he looked forward to an early departure from Philadelphia, complaining that its climate was ill suited to his constitution, and the place afforded "little of what is either entertaining or amusing." In the latter part of 1744,

the office for the collection of the customs being made vacant by the death of Mr. Alexander, and Taylor having been deputed by Grosvenor Bedford, Esq., who was Titular Collector of the Port, to supply the place in such a case, assumed the duties of the position. Taylor was elected Mayor in 1745, but declined to serve, and was fined £30. He was about the most active Councillor, when, under Palmer's Presidency, the Council acted as Governor of the Province; and he was made Colonel of the Regiment of Associators for Defence formed during the latter part of 1747. When the first of the plans for the establishing of the Academy was carried into execution in 1749, Taylor's name appeared on the original list of twenty-four men who met and approved of the constitutions and as a Board of Trustees undertook the government of the new institution. When the Academy became the chartered College he was still a member of the Trustees. Having bought a claim to about twenty thousand acres of land which the Proprietaries refused to grant, he went to England in 1750, and intending to sell this right, laid before the Proprietaries an elaborate argument to show that the Southern boundary of Pennsylvania should not be South of Latitude 40°, and that Virginia and Maryland had a right to all below that line, and threatened to put the paper into the hands of his vendee. The Proprietaries declared this a dishonorable attempt to force them to allow him the land, and wrote to Lieutenant-Governor Hamilton, ordering him to strike Taylor's name from the list of the Council. Although this letter was received by the City Corporation, Taylor continued as one of its members from his return to Philadelphia until his final departure from the Province in 1762. In that year an elegant entertainment was prepared in the State House by a number of the principal gentlemen of the city as a final farewell to their friend. Upwards of one hundred gentlemen attended. He afterwards resided in Bath, England, where he died in 1772. He married about 1733, Philadelphia, daughter of Patrick Gordon, Lieutenant-Governor of Pennsylvania from 1726 to 1735, and had two children.

PLUMSTED, William, 1708-1765.

One of the 24 Founders — Trustee 1749-1765.

Born in Philadelphia, 1708; went abroad in 1724 and on his return went into mercantile business in Philadelphia in which he remained for the rest of his life; was a member of the City Council, Register of Wills

for the Province, and a County Justice; he was originally a Friend but renounced Quakerism and became one of the founders of St. Peter's Church; was a founder and original Trustee of the Academy and College; was thrice Mayor of Philadelphia and a member of the Provincial Assembly from Northampton Co.; died 1765.

WILLIAM PLUMSTED, was born in Philadelphia, November 7, 1708, and was the only child of Clement Plumsted and Elizabeth Palmer, probably a sister of Anthony Palmer. In 1724 he was taken abroad by his father. He subsequently became his father's partner in business,



WILLIAM PLUMSTED

From original canvas in collection of the Pennsylvania Historical Society.

and continued in trade after his father's death. He became a Common Councilman of the city in 1739. In 1745 the office of Register-General of Wills for the Province was given to William Plumsted. He held the office until his death. He was also many years a County Justice. When about middle-age, he renounced Quakerism. He was a subscriber to the Dancing Assembly of 1748, the first ever held in Philadelphia. Later on he was one of the principal founders of St. Peter's Church. He heads the petition to the Penns for a site in 1754, he contributed to the building fund, and with four others took title to the lot at Third and Pine streets by deed from the Proprietaries in trust for

the congregation. In 1761 when the structure was finished he was elected Vestryman, and became the first accounting Warden. He was one of the original twenty-four founders and Trustees of the College. He was three times Mayor of Philadelphia, in 1750, 1754 and 1755, at the end of the first term donating the city £75, instead of the entertainment expected from a retiring Mayor. He came forward with Chief-Justice Allen and others in 1755, to pay the sum expected to be derived from the tax on the Proprietaries' estates, when the Assembly was refusing to pass any bill for raising money for defence that excused them from contributing, and the Governor dared not pass any law that made them contribute. In 1757 Plumsted was a member of Assembly from Northampton County. He died in Philadelphia, August 10, 1765, and was buried in St. Peter's Protestant Episcopal Churchyard: he married first, April 19, 1733, Rebecca, daughter of Philip Kearney of Philadelphia, by her he had seven children: he married second, September 27, 1753, Mary, daughter of George McCall of Philadelphia; by her he also had seven children.

COLEMAN, William, 1705-1769.

One of the 24 Founders - Trustee 1749-1769.

Born in Philadelphia, 1705; educated and trained to the law in that city; held various municipal offices; Judge of the county, and subsequently of the Province; one of the founders of the College and first Clerk and Treasurer of the Board; died 1769.

WILLIAM COLEMAN, first Clerk and Treasurer of the Board of Trustees, was born in Philadelphia in 1705, and died there January 11, 1769. He was a son of William and Ann (Bradford) Coleman. His early education was received in Philadelphia, and later studying law he was admitted to the Bar in that city. His first appointment was to the office of Town Clerk and Clerk of the City Court in Philadelphia, September 18, 1747. On June 30, 1749, he was commissioned Judge of the Court of Common Pleas, Quarter Sessions, and Orphans' Court of the City and County of Philadelphia, and November 27, 1757 he became Presiding Judge of the same courts and so continued until his promotion to be Associate Justice of the Supreme Court of Pennsylvania, April 8, 1758, a position which he filled until his retirement in the spring of 1768. He was one of the founders of the College of Philadelphia, and served as a Trustee until his

death in 1769. He was the first Clerk and Treasurer to the Trustees, holding the Clerkship from 1749 until 1755 and the Treasurership until 1764.

SYNG, Philip, 1703-1789.

One of the 24 Founders — Trustee 1749-1773.

Born in Ireland, 1703; emigrated with his father to America in 1714; settled in Philadelphia as a silversmith; an incorporator of the Library Company, and of the Academy and College; was a member of the Junto, of the Philosophical Society, and various other influential societies and a holder of minor offices; was a student of electricity with Franklin; died 1789.

PHILIP SYNG was born in Ireland, in November 1703; and was a son of Philip Syng who died at Annapolis, Maryland, May 18, 1739, aged sixty-three years. Philip Syng and his father came to this country, September 29, 1714 (O. S.) arriving at Annapolis, Maryland on that date. He settled and married in Philadelphia, where he acquired an excellent reputation as a silver-smith. An ink-stand made by him in 1752 for the General Assembly of Pennsylvania, is preserved in Independence Hall, Philadelphia. This ink-stand was used by the Continental Congress during its sessions in Philadelphia, and at the signing of the Declaration of Independence. He was one of the grantees of the Charter of the Library Company of Philadelphia, a member of the Junto, an original member (elected January 12, 1768) of the American Philosophical Society, and of the noted Fishing Club styled The Colony in Schuylkill. He made electricity a subject of constant study for many years, and according to James Parton, "imparted to Franklin valuable suggestions and discoveries." He promoted the organization of the Association Battery of Philadelphia. He was appointed Provincial Commissioner of Appeal for Philadelphia in 1764. He signed the Non-Importation Resolutions of 1765. He was a Vestryman of Christ Church from 1747 to 1749, and a Trustee of the College and Academy of Philadelphia from its foundation till 1773 when he retired. He died May 8, 1789, and was buried in Christ Church ground.

WHITE, Thomas, 1704-1779.

One of the 24 Founders — Trustee 1749-1772.

Born in London, 1704; educated at St. Albans, England; emigrated to Maryland, 1720; became Colonel of

militia about 1734; Deputy Surveyor of Baltimore Co.; removed to Philadelphia about 1745; Justice of the Peace, 1752; one of the founders of the Academy and College, and a Trustee 1749-72; died 1779.

THOMAS WHITE was born in London, England in 1704, son of William and Elizabeth (Leigh) White. In 1720 he sailed for Maryland, and there is reason to believe that he was in the retinue of Charles Calvert, the cousin of Lord Baltimore. He had been apprenticed to Mr. Stokes the Clerk of the County of Baltimore. While a boy in England, Mr. White attended a Grammar School at St.



THOMAS WHITE

Albans, eighteen miles from London. Some time after 1734 he was commissioned a Colonel of Maryland troops in Baltimore county. He was made Deputy Surveyor of Baltimore county, and acted as the representative of the Lord Proprietary, both of these appointments being of a date prior to 1734. He was a Vestryman of St. George's at Spesutiae, Maryland from May 29, 1731 to June 3, 1734. He removed to Philadelphia about 1745. He was one of the founders of the Academy and College and a Trustee from 1749 until 1772, when he resigned. He was one of the Commissioners of the Peace for Philadelphia county in 1752. He died at Sophia's Dairy in Maryland, September 29, 1779, and was buried on his farm called Cranberry Hall.

INGLIS, John, -1775.

One of the 24 Founders — Trustee 1749-1775.

Born in Scotland and came to Philadelphia by way of the Island of Nevis, W. I.; was a successful merchant, a member of the Philadelphia Common Council, Deputy Collector of the Port, a member of St. Andrews Society, and a founder and Trustee of the Academy and College; died 1775.

JOHN INGLIS was a native of Scotland, and came to Philadelphia from the West Indian Island of Nevis, where he had followed the business of merchant. He married Catharine McCall daughter of George and Anne (Yeates) McCall, October 16, 1736. He became a merchant in Philadelphia, in partnership with Samuel McCall, Senior, his wife's brother-in-law and cousin. He was elected a Common Councilman, October 1, and qualified November 11, 1745. He was commissioned Captain of the First Company of the Associated Regiment of Foot of Philadelphia on January 1, 1747-8, of which his kinsman Samuel McCall was chosen Major, and was a fellow-private in the Association Battery Company of Philadelphia of 1756, with Mrs. Inglis's brother Archibald McCall and brother-in-law William Plumsted. He served as Deputy Collector of the Port of Philadelphia, from 1751 to 1753, during the absence of Collector Abram Taylor. On March 13, 1756, at the desire of Major-General William Shirley, he was added to a Commission appointed by Lieutenant-Governor Robert Hunter Morris, "to audit, adjust, and settle the accounts" of certain owners of horses and wagons contracted for by Benjamin Franklin and lost in the service under General Braddock, a duty which occupied him for a month. His name appears on an ineffectual remonstrance presented by the merchants of Philadelphia to Lieutenant-Governor James Hamilton against an Act of Assembly passed March 14, 1761, "for laying a duty on negroes and mulattoe slaves imported into this Province." He signed the Non-Importation resolutions of 1765. He became a member of the St. Andrew's Society of Philadelphia, at its organization in 1749, and succeeded Governor Morris as President of the Association. He was one of the four Directors of the First Dancing Assembly of Philadelphia held in 1748, and a constant subscriber to similar balls in later years. He was one of the contributors to the completion of the building of Christ Church, in Philadelphia, in 1739. He died in Philadelphia, August 20, 1775 aged sixty-eight years and was buried in Christ Church ground. Mr. Inglis had eleven children.

BOND, Phineas, 1717-1773.

One of the 24 Founders — Trustee 1749-1773.

Born in Calvert Co., Md., 1717; obtained his common school education at home and then studied medicine in Europe; was one of the founders of the Pennsylvania Hospital, the American Philosophical Society and of the College; died 1773.

PHINEAS BOND was born in Calvert county, Maryland in 1717. He was educated in Maryland and afterwards studied medicine abroad, passing a considerable time at Leyden, Paris, Edinburgh and London. With Thomas Hopkinson,



PHINEAS BOND

Tench Francis, Richard Peters, Benjamin Franklin, his brother Thomas, and others he organized the College of Philadelphia now the University of Pennsylvania, and was a member of the first Board of Trustees, from 1749 to 1773. He was a member of the Common Council of Philadelphia from 1747 until his death. He was one of the founders of the American Philosophical Society, of the Society of St. George and of the Hand in Hand Fire Company. Dr. Phineas Bond, with his brother Dr. Thomas Bond, took an active part in the organization of the Pennsylvania Hospital and was a member of its first Medical Staff, serving from 1751 until his death. He enjoyed a high reputation as a successful practitioner of medicine in Philadelphia and no medical man of his time in this country had

a higher character for professional sagacity. He died in Philadelphia, June 11, 1773, aged fifty-six years.

PETERS, Richard, 1704-1776.

One of the 24 Founders — Trustee 1749-1776.

Born in Liverpool, England, apparently in 1704; educated at Westminster School, at Leyden in Holland, and at Oxford; ordained in the year 1730; became tutor to two young relatives of the Earl of Derby; in 1735 came to Pennsylvania; 1743 became Secretary of the Land Office and held other positions of trust under the Penns and of negotiations with the Indians for many years; was first confidant of Franklin in 1743 in his plans for an Academy and subsequently in 1749 became one of the founders and first Trustees; was President of the Board for many years, an incorporator of the Philadelphia Library, one of the managers of the Hospital, a member of the Governor's Council and Rector of St. Peter's Church; in 1762 he retired to his country seat of Belmont, west of the city; died 1776.

RICHARD PETERS, D.D., was born at Liverpool, England, about the year 1704, his father being Ralph Peters, town clerk of that city. He was sent to Westminster school for his early education. While quite a boy he was inveigled into a clandestine marriage with a servant maid, on account of which, his parents sent him to Leyden in Holland for his further education. After three years he returned to London, where he was put to the study of law in the Inner Temple. After five years devoted to a distasteful profession and a short period of further study at Oxford he became a clergyman of the Church of England in 1730, and was appointed to a parish in Lancashire. He took charge of the education of two boys, relatives of the Earl of Derby. Under the belief that his first wife was dead he married their sister Miss Stanley, in 1734, but on discovery that he was mistaken and his second marriage therefore illegal, a separation was agreed upon, and he emigrated to Pennsylvania where he was distantly related to Andrew Hamilton. He was soon made Secretary of the Land Office for the Proprietary Family. Subsequently Secretary of the Province, Clerk of the Council and principal Agent and Commissioner of Property. For more than twenty-five years he retained these positions, being the most trusted official of the Penns, and having the settlement of many difficult questions of titles, rights of settlers, purchasers, squatters and Indians. According to Franklin's account it was with Mr. Peters that he consulted as to the foundation of the Academy in 1743, and he was certainly

one of the prime movers in the actual organization of 1749, becoming one of the first Trustees, and President of the Board from 1756 to 1764. He was also one of the incorporators of the Philadelphia Library, one of the original managers of the Pennsylvania Hospital, a member of the Philosophical Society, and notwithstanding his clerical character, a subscriber to the Dancing Assembly of 1749. He assisted from time to time in the services at Christ Church and became Rector of Christ Church and St. Peter's in 1762, a position which he retained till the outbreak of the Revolution. He amassed a considerable fortune and in 1762 resigned his position under the Proprietor and took up his dwelling at his country seat of Belmont, which became a rather noted resort for men of prominence. He was given the degree Doctor of Divinity by Oxford in 1770. Like so many other Pennsylvanians of the upper classes, he approved of resistance to the mother country but hesitated long before the idea of independence. He died however in the earliest period of the war, on July 10, 1776, and was buried in front of the Chancel of Christ Church, Philadelphia.

[Portrait on page 50.]

TURNER, Joseph, 1701-1783.

One of the 24 Founders — Trustee 1749-1779.

Born in Hampshire, England, 1701; emigrated to America, Jan. 13, 1814; was Captain of a vessel trading to Philadelphia and entered into successful trading and mining ventures here; was a member of the City and the Provincial Council, and declined the Mayoralty of the city; was one of the founders and original Trustees of the College; died 1783.

JOSEPH TURNER was born at Andover, in Hampshire, England, May 2, 1701, and came to America, January 13, 1713-14. His parents were never in this country. In 1724 he was a sea-captain, as appears by a notice in the American Weekly Mercury in May of that year. In 1726 he signed the circular of the chief business men of Philadelphia agreeing to take the bills of credit of the Lower Counties at their face value. Hazard's Register names him as a member of Franklin's Junto. In 1729 he was elected a Common Councilman of the city, and in 1741, an Alderman. He declined the Mayoralty in 1745, and was thereupon fined £30. For about fifty years Turner was in partnership with William Allen, the Chief-Justice, in commercial business, the house of Allen & Turner, for a long time prior to the Revolutionary

War, being the most important in the Colony. They also engaged in the manufacture of iron, and owned several mines in Pennsylvania and New Jersey. The Union Iron Works in Hunterdon county, New Jersey, were the most celebrated, the property at the date of Turner's will amounting to eleven thousand acres. He was admitted to the Provincial Council, on May 14, 1747. His name is on the list of the Dancing Assembly of 1748, and he was one of the original Trustees of the College. He died in Philadelphia, July 25, 1783. It is interesting to know that Turner's Lane, situated in the northern part of Philadelphia, is named after Peter Turner, a brother of Joseph, who owned many acres on the Ridge Road in the same section of the city.

ALLEN, William, 1704-1780.

Founder and Benefactor — Trustee 1749-1780

Born in Philadelphia, 1704; apparently studied law in London, but returned to Philadelphia in or before 1726; became a merchant in Philadelphia, and was considered to be the wealthiest man in the city; occupied various government offices in the city and the Province; in the early disputes between the Colonies and the Mother Country he sided strongly with the Colonies, but was opposed to the Declaration of Independence, and after its passage retired as much as possible from public life; he appears to have died Sept. 6, 1780 in Philadelphia or its vicinity.

WILLIAM ALLEN was born August 5, 1704, in Philadelphia, he was the son of William Allen of Philadelphia, merchant, and Mary, daughter of Thomas and Susanna Budd. He married Margaret Hamilton, daughter of Andrew Hamilton, the Councillor and of Anne, daughter of Deputy-Governor Thomas Rudyard and widow of John West of New York. He is supposed to have studied law at the Temple in London, and followed his profession at that place for a short time. He returned to America before September 21, 1726, the date of the merchants' and chief citizens' agreement to take the money of the Lower Counties at its face value, to which his signature appears. On October 3, 1727, he was elected a Common Councilman of Philadelphia. In 1731 he became a member of the Assembly, serving until 1739. He joined Andrew Hamilton in the project of making the square on Chestnut Street between Fifth and Sixth the site of the State House, and advanced the money for the purchase of certain of the lots, taking title in his own name until the Province reimbursed him. In October 1735 he was chosen

Mayor of the city; and at the end of his term October 1736, the Hall of Assembly, just finished, was opened with the collation customary from an out-going Mayor. He was the partner of Joseph Turner, the Councillor. The profits from commercial enterprise, with the money which he and his wife inherited, and the advance in value of land in which he had invested, made him at the time of the death of his father-in-law one of the rich men, and in after years, notwithstanding his charities, perhaps the richest man in Pennsylvania. He left the Assembly in 1739. During the war



WILLIAM ALLEN

with Spain he became the head of the Anti-Quaker party, contended with Isaac Norris, the younger, for a seat in the Assembly, bringing on the "bloody election of 1742," and with difficulty cleared himself of responsibility for the riot. Having failed before the people, he held the city corporation, of which he had been chosen Recorder (August 7, 1741) to a policy that might strengthen the Governor in his struggle against Norris's friends in the Assembly. Allen often acted as Judge of the Orphans' Court and Common Pleas, and continued in the office of Recorder of the city until October 2, 1750, when, having been appointed (September 20, 1750) Chief-Justice of the Supreme Court of the Province, he resigned the Recordship, as incompatible with his new duties.

He presided over the Supreme Court for nearly a quarter of a century, until April 9, 1774. At the same time he continued in business; and from 1756 until the Revolution was a Representative from Cumberland county, in the Assembly. In 1765, being the owner of three thousand three hundred and seventy acres in Northampton county, he laid out the town of Northampton, afterwards called Allentown, Pennsylvania, conveying in 1767 the whole estate to his son James. He was a large contributor to the Pennsylvania Hospital, to the College, of which he was one of the original Trustees, and to the expedition in search of the North West Passage. As Chief-Justice he gave his services gratuitously, receiving his salary only to appropriate it to charities. During his visit to England in 1763, he achieved a victory for all the American Colonies by preventing the passage of a bill in Parliament for taxing them. Mr. Allen with his three eldest sons were elected to the American Philosophical Society soon after its resuscitation. He was a great friend of Benjamin West. On the other hand he was a strong opponent of Benjamin Franklin. In the contention preceding the Revolutionary War, he sided with the Colonies and went so far as to donate cannon shot to the Council of Safety; but he was anxious to maintain union with Great Britain and labored as a member of the Assembly for that end. He resigned the Chief-Justiceship August 9, 1774. Mr. Allen did not favor the Declaration of Independence, but after it was signed, seems to have kept quiet. In view of the death of his sons, John and James, and in order to protect his property from the operation of the attainder of his other sons, he executed a codicil to his will, bearing date December 1, 1779, by which he devised John's, James' and Andrew's shares to their respective children and William's share to James Hamilton, absolutely. He moreover freed all his slaves. He probably died in Philadelphia or at Mt. Airy near Philadelphia on September 6, 1780.

SHIPPEN, William, 1712-1801.

One of the 24 Founders — Trustee 1749-1779.

Born in Philadelphia, 1712; studied medicine by himself and obtained a large practice; was a preceptor of his much more famous son; was a member of Franklin's "Junto" and long Vice-President of the American Philosophical Society which grew out of it; first Physician to the Pennsylvania Hospital; one of the founders of First Presbyterian Church; one of the founders and a Trustee of the Academy and College of

Philadelphia and of the College of New Jersey, later Princeton; was elected to the Continental Congress 1778 and 1779; died 1801.

WILLIAM SHIPPEN, the Elder, was born in Philadelphia, October 1, 1712, son of Joseph and Abigail (née Grosse) Shippen. He applied himself early in life to the study of medicine, for which he had a remarkable genius. He speedily obtained a large and lucrative practice, which he maintained through a long and respected life. He was especially liberal towards the poor, and, it is said, not only gave his professional aid and medicines without charge but often assisted them by donations from his purse. Far from thinking that medicine was much advanced towards perfection, it is said, when he was congratulated by some one on the number of cures he effected, and the few patients he lost, his reply was: "My friend! nature does a great deal and the grave covers up our mistakes." He trained his son, Dr. William Shippen, the younger, for the medical profession. He sent him to Europe, where he had every possible opportunity for obtaining a knowledge of the various branches and on his return, May 1762, encouraged him to commence a series of lectures on anatomy, and thus to inaugurate the first Medical School in America. On November 20, 1778, he was elected to the Continental Congress by the Assembly of Pennsylvania. At the end of the year he was re-elected November 13, 1779. An examination of the journals of Congress shows that he was always steadily at his post, and that his votes and conduct were those of an honest, intelligent, high-minded, patriotic gentleman, who thought only of his country's welfare. The Junto, in which Dr. Shippen took an earnest part was more or less the origin of the American Philosophical Society of which he was Vice-President 1768, and for many years after. He was first physician to the Pennsylvania Hospital, 1753-1778. He was one of the founders of the First Presbyterian Church, 1742, and a member of it for nearly sixty years. He was one of the founders and, during the greatest part of his life, from 1765 to 1796, a Trustee of the College of New Jersey, towards the establishment and support of which he contributed largely by liberal donations and by bequeathing it a considerable perpetual annuity. He was one of the founders and a Trustee of the College of Philadelphia. He was so very abstemious that he never tasted wine or any spirituous liquor until during his last illness. He possessed a powerful frame and

vigorous health. He rode on horseback from Germantown to Philadelphia, in the coldest weather without an overcoat and but a short time before his death, took a walk of six miles. At the age of ninety years, he died at Germantown, Philadelphia, November 4, 1801. He married September 19, 1735, Susannah, daughter of Joseph Harrison of Philadelphia and Katherine Noble his wife. He was buried in the graveyard of the church to which he had been so useful. He had four children.

BOND, Thomas, 1712-1784.

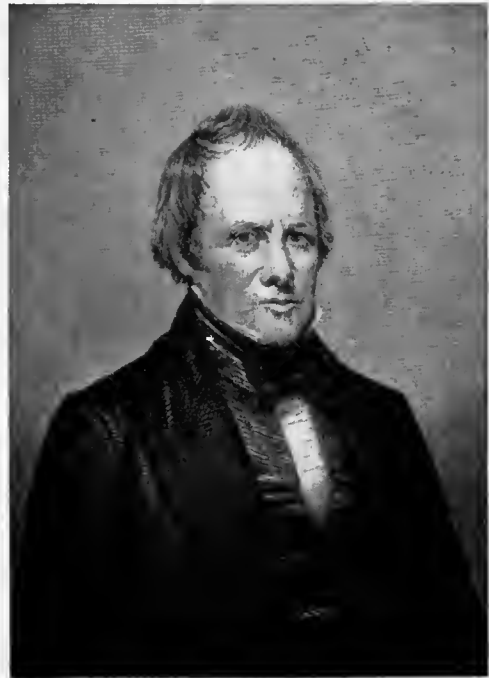
One of the 24 Founders — Trustee 1749-1784.

Born in Calvert Co., Md., 1712; studied medicine at home and in France; practiced for fifty years in Philadelphia; participated in the organization of the medical service of the government during the Revolution; was one of the founders of the Pennsylvania Hospital, of the American Philosophical Society, and of the Academy and College of Philadelphia; wrote various medical memoirs which were published in London; and was a prominent Freemason; died 1784.

THOMAS BOND was born in Calvert county, Maryland, in 1712, and studied under Dr. Hamilton of the same county. He also traveled in Europe and spent much time in the Paris hospitals. He attended the practice of the Hôtel Dieu. He began practising in Philadelphia in 1732. He first suggested to Franklin, about 1751, the idea of establishing a hospital for the sick, injured and lunatics. This resulted in the founding of the Pennsylvania Hospital, and Doctor Bond was one of its most active managers at its commencement. He was a member of its first Medical Staff and remained so from 1751 to 1784. In 1766 he was selected to give clinical lectures in the Hospital, these being the first lectures of the kind given there. About this time he wrote some useful medical memoirs, afterwards published in London. He was a member of a small society instituted for purposes of intellectual discussions in 1743, which in 1768 united with another similar body, thus forming the American Philosophical Society. Of this society he was the first Vice-President and in 1782 delivered the annual address before it on "The Rank of Man in the Scale of Being." Doctor Bond became a Freemason, June 3, 1734, joining St. John's, the first lodge in America. He was appointed Senior Grand Warden of the Grand Lodge in 1755 by Grand Master William Allen. He was one of the founders of the College and Academy which afterward became the University of Pennsylvania, was elected a Trustee in 1749,

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and remained such to the time of his death. A humane society for the recovery of persons supposed to be drowned was formed by some public-spirited men, and shortly after establishing it they elected Dr. Bond their President. At the outbreak of the Revolution, Dr. Bond, then past his sixtieth year, tendered his services to his country by a letter dated December 4, 1776, and addressed to the Committee of Safety. This received a favorable response and both Dr. Bond and his son rendered distinguished services to the American cause by taking part in the organization of the Medical



THOMAS BOND

Department of the Army. For half a century he was in the first practice in Philadelphia. He was an excellent surgeon, and in 1768 performed two operations of lithotomy in the Pennsylvania Hospital with success. Dr. Bond was of a delicate constitution and disposed to pulmonary consumption. He died in Philadelphia, March 26, 1784, aged seventy-two years, and was buried in Christ Church Burial-ground.

SMITH, William, 1727-1803.

First Provost 1755-1791.

Born near Aberdeen, Scotland, 1727; graduated A.B. at the University of Aberdeen, 1747; spent some time in London but in 1751 went as a tutor to a gentleman's

sons to New York and was there interested in public and educational projects; visited Philadelphia in 1753, and after a visit to England to be ordained as a clergyman came to Philadelphia again in 1754; was elected immediately as a Master in, and subsequently became the first Provost of the College of Philadelphia, a position which he held until 1791, except for the period from 1779 to 1789; visited England in 1758 on a personal political mission and in 1762 on a financial mission for the College; was a strong adherent of the Proprietary party in Provincial affairs and in 1757 was subjected to confinement in the Philadelphia prison on a charge of libelling the Assembly; was given the degree of D.D. from the Universities of Oxford, Aberdeen and Dublin; encouraged the opposition of the Colonies to Great Britain in the early stages of revolt, but opposed the Declaration of Independence, and after its passage withdrew from public life; was active in the interests of the Episcopal Church and in 1783 was chosen Bishop of Maryland but was not consecrated; from 1780 to 1789 lived in Maryland and raised the Chestertown School there to the rank of a College; wrote extensively and was active in all the intellectual interests of his period and Province; died 1803.

WILLIAM SMITH, D.D., was born on the banks of the Don within a few miles of Aberdeen, Scotland, September 7, 1727, and on October 19, the same year, he was baptized in the old Aberdeenshire Kirk. His lineage has been traced back to one John Smyth born in the year 1500, a descendant of Sir Roger Clarendon. He took his first degree at the University of Aberdeen, Scotland, March 1747. When quite a young man he was interested in the subject of education and wrote and labored in the cause of its advancement. His efforts in Scotland met with little success and on March 13, 1751, he embarked for New York, accompanying as tutor two young gentlemen who were returning to America. The letters he brought with him secured the acquaintance of persons of influence and he was soon employed in the same pursuit which had engaged his attention in Scotland. He published a pamphlet in 1753, entitled *A General Idea of the College of Mirania*. It was to give his views of the requirements of an institution of learning in a new country. This drew to him the attention of some gentlemen in Philadelphia then interested in establishing the Academy which gave rise to the University of Pennsylvania and on May 25, 1753, he was invited by the Trustees to teach Natural Philosophy, Logic, etc. He returned to England to obtain holy orders in the Episcopal Church. He left America October 13, 1753 and arrived in London December 1 of that year. He was ordained Deacon by the Bishop of London, December 21, 1753, and on the 23d Priest

by the Bishop of Carlisle. He landed in Philadelphia, May 22, 1754. He was elected immediately afterwards as Professor of the Academy to teach Logic, Ethics and Natural Philosophy. In less than a year afterwards the Academy was raised to the rank of a College and he became its first Provost. He not only devoted an abundance of energy to the institution over which he presided, but entered with warmth into church affairs and politics. He collected money for his College, improved the course of studies, was active in the movement to secure a more liberal charter and made its commencements so interesting as to attract attention to the advantages it presented. He edited the best magazine which had appeared in America up to that time. He superintended the publication of the poems of Evans and Godfrey, and of *The History of Bouquet's Expedition against the Indians*. He was elected a member of the American Philosophical Society January 12, 1768, and was for a long time its Secretary. It is doubtful if any one exerted a more beneficial influence than he on the formation of a taste for literary pursuits in Philadelphia about the middle of the last century. He had plans for the education of the Germans in Pennsylvania but they proved futile. In politics he advocated the cause of the Proprietary party, and in 1755, wrote in favor of vigorous military measures. He preached no less than six military sermons during the time of the French and Indian War, and in 1764, wrote in defence of the charter of the Province which Franklin and others wished to have surrendered to the crown. In 1758 he visited England to appeal before the Privy Council from a judgment which the Pennsylvania Assembly had passed upon him on account of his political conduct. He was successful in his suit. While there he received the degree of Doctor of Divinity from his Alma Mater, and the same distinction from the University of Oxford. In 1762 he again visited Great Britain, this time in behalf of the College. £11,873 were collected under a royal brief and by private subscription, for the Colleges of New York and Philadelphia, one-half of which sum was for the latter. In addition to their moiety of the general contribution Dr. Smith obtained £984 by his individual exertions. While in Dublin, the University of that city added his name to the list of those upon whom it had conferred the degree of Doctor of Divinity. In 1770 Dr. Smith visited South Carolina to collect money for his College. It appears in some unpublished letters from Alice

Swift to her father, John Swift, Collector of the Port at Philadelphia, that Dr. Smith while there collected about one thousand guineas for his College, and that a certain Mr. Ferguson who intended to give him £30, when he heard him preach and conversed with him, gave £50 sterling. The Carolinians did not approve the giving of this money, as they intended having a College of their own. Upon the breaking out of the Revolution, Dr. Smith approved of opposition to the oppressive measures which caused it. He did not however approve of the Declaration of Independence. The war brought down upon his beloved College serious troubles which have been fully described in the Historical Sketch of the University. Dr. Smith removed to Chestertown, Maryland, 1780, where he took charge of a parish and of the Kent County School. In two years the latter grew into Washington College, of which Dr. Smith was President, and during his nine years of residence in Maryland he collected a large sum of money for its endowment. He was chosen Bishop of Maryland in 1783, but was never consecrated. In 1789 he returned to Pennsylvania and when the estates of the College were restored to the old Trustees, took charge of its reorganization until it was united with the University in 1791. Dr. Smith took an active part in the organization of the Episcopal Church in the United States; his services in the Colonial Church having been of a particularly valuable character. He married Rebecca, daughter of William Moore of Moore Hall, Chester county, Pennsylvania, on July 3, 1758. The friendship between Dr. Smith and Rebecca Moore began in 1758, when he and William Moore, her father, were imprisoned by the Assembly for an alleged contempt in the publication of a paper which reflected on the conduct of that body. Rebecca Moore's mother was Williamina Wemyss, who it is said was the daughter of David, Fourth Earl of Wemyss. While this is not supported by any document that is known, it is almost certain that some connection existed between her and this noted house. The American Magazine, or Monthly Chronicle for the British Colonies, which was published by William Bradford in the London Coffee House, was edited by Dr. Smith, and it was due to his aspersive comments published in that journal concerning Dr. Franklin's claims to electrical discovery that the long and bitter quarrel between the men was precipitated. Dr. Smith died in Philadelphia May 14, 1803. He had eight children.

[Portraits on pages 63, 95.]

EWING, John, 1732-1802.

Professor Ethics 1758-62, Natural Philosophy 1762-1802 — Provost 1780-1802.

Born in Nottingham, Md., 1732; educated in the School of Dr. Alison; graduated Princeton, 1754; tutor at Princeton for some time, then instructor in Moral and Natural Philosophy in the College of Philadelphia; became Pastor of the 1st Presbyterian Church of Philadelphia, 1759-1802; given the degree of LL.D. by the Univ. of Edinburgh; Provost of the reconstructed Univ. of Pennsylvania, 1779-1802; Commissioner to run several state boundary lines; died 1802.

JOHNSON EWING, LL.D., the second Provost, was born in Nottingham, Maryland, June 22, 1732. He gained his early education in the famous school established by Dr. Francis Alison just across the Pennsylvania line from Ewing's home. He was afterwards a tutor in the school for three years and then went to the College of New Jersey at Princeton and obtained his degree of Bachelor of Arts in 1754; the Master's degree was received in course, and also from the College of Philadelphia in 1759. He was teacher in the grammar school connected with his College while he was studying and remained for some time after graduation as a Tutor in the College. In 1758 he acted as substitute for Dr. Smith at the College of Philadelphia during the absence of the latter in England. In 1759 he became Pastor of the First Presbyterian Church in Philadelphia and remained in that charge for the rest of his life. He had paid special attention to the study of mathematics and was asked to assist in running the boundary line of the state of Delaware, that between Massachusetts and Connecticut and that between Pennsylvania and Virginia. He also acted with Mr. Rittenhouse in laying out the Philadelphia and Lancaster turnpike. From 1773 to 1775 he was in England soliciting subscriptions for the Newark, Delaware, Academy. He was given the degree of Doctor of Laws by the University of Edinburgh and made the acquaintance of many distinguished men. When the old Board of Trustees and Faculty of the College of Philadelphia were dissolved in 1779, Dr. Ewing was elected Professor of Natural Philosophy and Provost, and when the union took place in 1791 he was re-elected Provost and remained so until his death. He was a member and Vice-President of the American Philosophical Society, in whose Transactions he published some papers one of which was an account of the Transit of Venus of 1769. His lectures on Natural Philosophy as given at the University were published in 1809. He died in 1802.

[Portrait on page 90.]

McDOWELL, John, 1750-1820.

Professor Natural Philosophy 1806-1810, Provost 1807-1810.

Born near Chambersburg, Pa., 1750; graduated College of Philadelphia, 1771; Tutor 1769-82; Principal of St. John's College, Maryland, 1790-06; Professor and Provost at University of Pennsylvania, 1806-10; received degree LL.D. from the University, 1807; died 1820.

JOHN McDOWELL, LL.D., third Provost, was born in Peters Township, near Chambersburg, Pennsylvania, in 1750, son of William McDowell, Justice of the county, and Mary (Maxwell) McDowell. He entered the College of Philadelphia in 1768, and was graduated in 1771, having the part of English Orator at the Commencement. He was a Tutor from 1769 to 1782. He was Professor of Mathematics in St. John's College, Maryland, in



JOHN McDOWELL

From canvas in University Chapel

1789, and in 1790 he became Principal of that College. He was called to be Professor of Natural Philosophy in the University of Pennsylvania in 1806, and continued to hold that position until 1810. He was Provost of the University during the same period. In 1807, he was elected a member of the American Philosophical Society, and in the same year received the degree of Doctor of Laws from the University. He died near Mercersburg, Pennsylvania, December 22, 1820.

ANDREWS, John, 1746-1813.

Professor Moral Philosophy 1789-1813, Vice-Provost 1789-1791, Provost 1810-1813.

Born in Cecil Co., Md., 1746; graduated College of Philadelphia, 1765; ordained Clergyman of the Church of England, 1767; Rector of a church in Maryland; teacher in York, Pa.; Prof. of Moral Philosophy and Vice-Provost of the College, and became Provost, 1810-13; D.D. Washington College, Md., 1785; author of Elements of Logic; died 1813.

JOHN ANDREWS, D.D., fourth Provost, was born in Cecil county, Maryland, April 1, 1746, son of Moses and Letitia Andrews. He entered the College of Philadelphia in 1762, graduating Bachelor of Arts in 1765; the Master's degree being conferred upon him in course in 1767. He was ordained an Episcopal clergyman in London, England, in February 1767, and performed the work of a missionary at Lewes, Delaware, for three years. He subsequently became Rector of St. John's Church in Queen county, Maryland, and also taught school at York, Pennsylvania. He received the degree of Doctor of Divinity from the then recently established Washington College in Maryland in 1785. He was Head-Master of the Academy of the Protestant Episcopal Church, of Philadelphia, from 1785 to 1789, and in 1789 was appointed Professor of Moral Philosophy in the restored College of Philadelphia, continuing in that position until 1813. He was Vice-Provost from 1789 to 1810, and Provost from 1810 to 1813, having succeeded Dr. McDowell. He was elected a member of the Philosophical Society in 1786. He was author of Elements of Logic, and also published a sermon on the Parable of the Unjust Steward in 1789. He married Elizabeth, daughter of Robert Callender of Cumberland county, Pennsylvania. He died in Philadelphia, March 29, 1813.

[Portrait on page 106.]

BEASLEY, Frederick, 1777-1845.

Provost 1813-1818.

Born in Edenton, N. C., 1777; graduated College of New Jersey, A.B., 1797; Tutor there the next three years; obtained degree of A.M. in course; ordained to ministry of Protestant Episcopal Church, and occupied various charges in Elizabethtown, N. J., Albany, N. Y. and Baltimore, Md.; Provost of the University, 1813-28; Rector of a church in Trenton, N. J., until 1838; received degree of D.D. from Columbia College and Univ. of Pa., 1815; died 1845.

FREDERICK BEASLEY, D.D., fifth Provost, was born in Edenton, North Carolina, 1777. He was graduated as Bachelor of Arts at the Col-

lege of New Jersey (now Princeton College) in 1797, and succeeded Bishop John Henry Hobart, D.D., as a Tutor there from 1798-1800. He received the Master of Arts degree in course there in 1800. During the period of his tutorship he engaged in the study of theology, and in the year 1801 was ordained Deacon in the Protestant Episcopal Church. His clerical duties began at Elizabethtown, New Jersey. In 1803 he accepted a call to St. Peter's Church in Albany, and afterward removed to Baltimore, where he was the Rector for several years of Christ Church. In July 1813 he was appointed Provost of the University of Pennsylvania, and entered immediately upon his duties. His connection with the University continued for a period of fifteen years. Dr. Beasley, with the other members of the Arts Faculty, was separated from the school upon the occasion of a reorganization which this department of the University underwent in the year 1828. Soon afterward he left Philadelphia, and undertook the charge of a congregation in Trenton, New Jersey, which he held until the year 1836, when he was compelled to relinquish it by failure of his health. He then removed to Elizabethtown where he continued to reside until his death, which occurred November 1, 1845. He received the honorary degree of Doctor of Divinity from both the University of Pennsylvania and Columbia College in the same year, 1815. He was elected a member of the American Philosophical Society January 21, 1814. He was twice married. His first wife was Susan, daughter of Jonathan Dayton of Elizabethtown, New Jersey. His second wife was Maria, daughter of Matthias Williamson of New Jersey. He was a ready and correct writer, and his contributions to the press were numerous, some of them voluminous. Many of them were of a theological and some of a controversial character. The chief production of his pen was a metaphysical work entitled *A Search of Truth*.

[Portrait on page 107.]

De LANCEY, William Heathcote, 1797-1865.

Trustee 1826-1828 — Provost 1828-1834.

Born in Mamaroneck, N. Y., 1797; graduated Yale, 1817; studied theology and ordained to the Episcopal Ministry in 1819; served in various churches in New York, Mamaroneck, and Philadelphia, 1819-39; first Bishop of Western New York, 1839; Trustee of the University, 1826; Provost, 1828-34; one of the founders of Hobart College, Geneva, N. Y., and of other educational institutions in the same state; one of the first American Bishops to come into close relation with the

established church in England; received D.D. from Yale, 1827; LL.D. from Union College, 1849; D.C.L. from Oxford, 1852; died 1865.

WILLIAM HEATHCOTE DE LANCEY, D.D., sixth Provost, was born at Mamaroneck, New York, October 8, 1797, coming from a celebrated New York State family. He was at first educated at several private schools, and entering Yale College graduated, Bachelor of Arts, in 1817, receiving the Master's degree in course. He studied divinity with Bishop Hobart of New York and was



WILLIAM H. DE LANCEY

ordained to the full ministry of the Episcopal Church in 1822. He had served temporarily before this in several positions in New York, and went now to Philadelphia as general assistant to Bishop White. He held various clerical offices in Philadelphia, and in 1826 was chosen a Trustee of the University. This was the period when the fortunes of the University were at their lowest ebb and during the years immediately succeeding that date stringent efforts were being made for its rehabilitation. As part of such an effort in 1828 the resignations of Provost Beasley and one of the other Professors were asked for and Dr. De Lancey was elected Provost, various changes being made at the same time in the duties of that office. The next three years showed a distinct improvement in the number of students and perhaps in other respects:

Dr. De Lancey resigned the Provostship in 1834. In 1839 he was elected first Bishop of the newly created Diocese of Western New York to the duties of which position he devoted the remainder of his life, residing at Geneva. In 1852 he attended the fifteenth anniversary of the British Society for the Propagation of the Gospel in Foreign Parts, as one of the two representatives of the American House of Bishops and on this occasion was the first American Bishop to be recognized officially as one of their own body by the Anglican Bishops. He visited Europe repeatedly and traveled quite extensively. He was extremely active in matters of church organization and legislation, and was instrumental in placing Hobart College and several other educational institutions on a firm basis. He received the following honorary degrees: Doctor of Divinity from Yale in 1827, Doctor of Laws from Union College in 1849 and Doctor of Civil Laws from Oxford, England, in 1852. He died in Geneva, New York, April 5, 1865.

[Portrait on page 108.]

LUDLOW, John, 1793-1857.

Provost 1834-1853.*

Born in Acquackanonk, N. J., 1793; educated at various academies and at Union College, New York, where he graduated, 1814; received the degrees of D.D. and LL.D. from Union; studied for the ministry and was Pastor of Dutch Reformed churches; Prof. of Biblical Literature and Ecclesiastical History in Theological Seminary, New Brunswick, N. J., 1819-23; Provost of the Univ. of Pa., 1834-53; Prof. of Ecclesiastical History and Church Government in New Brunswick Seminary, 1853-57; died 1857.

JOHAN LUDLOW, D.D., LL.D., seventh Provost, was born at Acquackanonk on the Passaic, New Jersey, December 13, 1793, the son of John R. Ludlow, a merchant and farmer, and Elizabeth (Vreeland) Ludlow. He was of English and Dutch origin. At the age of thirteen he was placed in the Columbian Academy, in Bergen, New Jersey, then one of the most celebrated classical academies in that state. He remained there three years and then was removed to the school of the Rev. Samuel Whelpley, in Newark, New Jersey. Owing to the great progress and proficiency made in his studies while with Mr. Whelpley, he was appointed to the superintendence of the English Department of this school. At the age of nineteen he entered the Junior Class in Union College, New York, under the direction of the Rev. Dr. Nott. He was graduated in 1814 with the highest honor and was the Valedictorian of his

class. He studied for a short time with the intention of entering the legal profession, but abandoned that intention and entered the Theological Seminary of the Reformed Dutch Church at New Brunswick, New Jersey. Remaining at the Seminary for one year he then accepted an appointment as Tutor in Union College, at the same time continuing his theological studies under the direction of the Rev. Dr. Andrew Yates, then Professor of Ethics and Theology in Union College. He remained a year as Tutor, and then resigned his position, returned to New Brunswick and completed his theological course in May 1817. Immediately upon being ordained he accepted the Pastorate of the First Reformed Dutch Church in New Brunswick, where he soon became noted as an eloquent and powerful divine. At the close of the first year of his pastoral office, the Professorship of Biblical Literature and Ecclesiastical History at the New Brunswick Seminary having become vacant, he was appointed by the General Synod of his church to fill that position. Having received a pressing call from the First Reformed Dutch church in Albany, New York, he resigned his Professorship in 1823, and took charge of the church in Albany, where he remained for eleven years. He was repeatedly solicited to take charge of other churches and literary institutions, while residing at Albany, but invariably declined these invitations until called to the Provostship of the University of Pennsylvania in 1834. His inaugural address was pronounced by all to be a most judicious and eloquent speech. It was published and extensively circulated by the Board of Trustees. Dr. Ludlow did not confine himself to the duties of his chair alone, but at the opening of the Athenian Institute, he was appointed a Lecturer and delivered several courses of lectures before that institution and the Mercantile Library. He was one of the few distinguished men who have delivered lectures before the Smithsonian Institute at Washington. He received the degree of Doctor of Divinity from Union College in 1827 and subsequently that of Doctor of Laws. He preached on an average once each Sunday during the eighteen years he resided in Philadelphia; frequently at the urgent solicitation of congregations, whose Pastors were compelled to leave on account of ill health, filling the pulpit for a year or more at a time. He resigned as Provost, in 1853, having been elected to the Chair of Ecclesiastical History and Church Government in the Theological Seminary in New Brunswick, New Jersey. He married Catlyntje Van Sylck Ryley. He died Septem-

ber 8, 1857, at the residence of his eldest son, Dr. John Livingston Ludlow, in Philadelphia.

[Portrait on page 109.]

VETHAKE, Henry, 1790-1866.

Prof. Math. 1836-55, Moral Philosophy 1855-60—Provost 1854-59.

Born in Essequibo, Guiana, So. Am., 1790; graduated Columbia, 1808; Instructor in Columbia, and Professor successively in Rutgers, Princeton, Dickinson, Princeton a second time, and the Univ. of N. Y., 1813-35; Pres. Washington College, Va., 1835-36; Prof. Mathematics at the Univ. of Pa., 1836-54; Prof. Moral Philosophy, and Provost, 1854-59; Prof. Mathematics in Philadelphia Polytechnic College, 1859-66; A.M. College of N. J., 1815; LL.D. Columbia, 1836; published a text-book of Political Economy and wrote articles in the *Encyclopedia Americana*; died 1866.

HENRY VETHAKE, LL.D., eighth Provost, was born at Essequibo, Guiana, South America, in the year 1790. He was brought to the United States when he was four years old and received his College training at Columbia College, from which he graduated in 1808, and received the degree of Master of Arts in 1811. He then studied law but returning to Columbia as Instructor in Mathematics and Geography in 1813, served successively as Professor in eight different Colleges. He was Professor of Mathematics and Natural Philosophy in Rutgers College, New Jersey, 1813-1817, in Princeton, 1817-1821, in Dickinson, 1821-1829, Professor of Natural Philosophy for a second time in Princeton, 1830-1832, and in the University of New York, 1832-1835. He became President of Washington College, Virginia, in 1835, and the year after was called as Professor of Mathematics to the University of Pennsylvania. He held this title from 1836 to 1854, being then Provost and Professor of Intellectual and Moral Philosophy until 1859. He resigned and afterwards was Professor of Higher Mathematics in the Philadelphia Polytechnic College from 1859 to 1866. He had been elected a member of the American Philosophical Society in 1831 and was given the honorary degree of Master of Arts by Princeton in 1815 and that of Doctor of Laws by Columbia in 1836. He published a text-book of Political Economy and wrote various articles in the *Encyclopedia Americana*. He died in Philadelphia, December 16, 1866.

[Portrait on page 119.]

GOODWIN, Daniel Rayes, 1811-1890.

Provost 1860-1868.

Born in North Berwick, Me., 1811; graduated Bowdoin College, 1832; studied at Andover Theological

Seminary and in Europe; succeeded Henry W. Longfellow as Professor of Modern Languages in Bowdoin; was ordained to the ministry in the Protestant Episcopal Church, 1848; President of Trinity College, Hartford, Conn., 1853-60; ninth Provost of Univ. of Pa., 1860-68; Dean of the Episcopal Divinity School of Philadelphia, 1868; D.D. Bowdoin, 1855; LL.D. Univ. of Pa., 1868; active in the affairs of the Episcopal Church; published reviews, pamphlets, treatises and other works; died 1890.

DANIEL RAYNES GOODWIN, D.D., LL.D., ninth Provost, was born in North Brunswick, Maine, April 12, 1811. He graduated from Bowdoin College in the Class of 1832, and became Master of an academy at Hallowell, Maine, but left this position to study at the Andover, Massachusetts, Theological Seminary. Afterwards he studied for two years in Europe and then became the successor of Henry W. Longfellow as Professor of Modern Languages at Bowdoin. From 1853 to 1860 he was President of Trinity College, in Hartford, Connecticut, and from there was called to become Provost of the University of Pennsylvania in 1860. In 1848 he had been ordained to the ministry in the Episcopal church and his interest in its affairs was always intense though he occupied no position of actual church service. He represented the diocese of Maine in the General Convention of 1853 and that of Pennsylvania in every Convention from 1862 to the time of his death. These interests became predominant over those in the University in 1868, and he resigned from the Provostship to become Dean of the Episcopal Divinity School in Philadelphia. He was a member of the American Philosophical Society, the American Academy of Arts and Sciences, the American Oriental Society and the Society of Biblical Literature and Exegesis, having been the first President of the last named society. He was given the degree of Doctor of Divinity by Bowdoin in 1855 and that of Doctor of Laws by the University of Pennsylvania in 1868. His many subjects of interest had led him to the publication of some ninety-six pamphlets, reviews and essays on various topics. He died in Philadelphia, March 15, 1890.

[Portrait on page 119.]

STILLÉ, Charles Janeway, 1819-1899.

Professor Belles-Lettres and English 1866-1867—Provost 1868-1880.

Born in Philadelphia, 1819; educated in Philadelphia and Princeton, N. J.; graduated Yale, 1839; studied law in Philadelphia; traveled abroad, and returning was occupied with private business and study; elected Prof. of Belles-Lettres, English Language and Literature in the University, 1866, and Provost, 1868; resigned, 1880; wrote literary and historical works, and

pamphlets on current questions; Pres. of the Pa. Historical Society for many years; LL.D. Yale, 1868, and Univ. of Pa., 1894; died 1899.

CHARLES JANEWAY STILLÉ, LL.D., tenth Provost, was born in Philadelphia, September 23, 1819. He was descended on the father's side in the sixth generation from Olof Stillé, an immigrant and settler from Sweden in 1641. On the mother's side similarly he was descended from ancestors who were German settlers in Pennsylvania. He was educated first in the Academic Department of the University of Pennsylvania, then at the Edge Hill School, Princeton, New Jersey, and graduated at Yale College in the Class of 1839. He studied law in Philadelphia under Jared R. Ingersoll, and was admitted to the Bar in 1842. He then spent two years abroad and after his return was occupied in private business and study. On the outbreak of the Civil War he was appointed a member of the Philadelphia Associates of the United States Sanitary Commission and for the next few years was prominent in the various activities of this body, including the famous Sanitary Fair, held in Logan Square, Philadelphia, in 1864. He subsequently published a history of this whole movement. He also wrote at this time a pamphlet entitled *How a Free People Conduct a Long War* of which it is said that more than half a million copies were distributed throughout the country, and still another called *Northern Interest and Southern Independence*. Dr. Stillé's connection with the University began in May 1866, when he was made Professor of Belles-Lettres, English Language and Literature. In 1868 he became Provost. From that time until his resignation in 1880 his career was almost indistinguishable from that of the University and will be found, therefore, more fully described in the Historical Sketch in this volume. There were mainly due to his initiative the introduction of the elective system, the establishment of the Towne Scientific School, a broadening of the work of the Department of Arts, the virtual creation of the Provostship as an administrative office, and a general elevation of the institution from the character of the small College to that of a veritable University. During the period of his Provostship, but not so directly the outcome of his own efforts, were the foundation of various new departments, the removal from Ninth Street to West Philadelphia, and the erection of four or more buildings on the new site. His innovations were almost all enlightened and valuable, and although he was somewhat irascible and unconciliatory and

so lessened his influence with the students, the Trustees, and the community, the modern progress of the University undoubtedly dates from his administration. In 1875 he was for a short time Chief of the Bureau of Awards of the United States Centennial Commission. In 1878 he became the first incumbent of the John Welsh Centennial Chair of History and English Literature which had been established in honor of the President of the Centennial Board of Finance. After his resignation as Provost he continued for a short time to hold this chair and became Professor Emeritus in the fall of 1880. During the remainder of his life he devoted himself to study and writing history. He published one of his lecture courses at the University as *Studies in Mediæval History* in 1882. Soon after this time he became President of the Pennsylvania Historical Society and retained that position until his death. During this period he published *The Life and Times of John Dickinson*, *Major-General Anthony Wayne and the Pennsylvania Line in the Continental Army*, and *Beaumarchais and the Lost Million*. He received the honorary degree of Doctor of Laws from Yale in 1868, and the same from the University of Pennsylvania in 1894. He died in Atlantic City, New Jersey, August 11, 1899.

[Portrait on page 120.]

PEPPER, William, 1843-1898.

Lecturer and Professor 1868-98, Provost 1881-94.

Born in Philadelphia, 1843; graduated Univ. of Pa., 1862; M.D. 1864; Lecturer, 1868-73; Professor, 1874-98; Provost, 1881-94; founder and Editor of *Philadelphia Medical Times*; Medical Director of Centennial Exposition; Pres. of Pan-American Medical Congress, 1893; LL.D. Lafayette and Princeton; died 1898.

WILLIAM PEPPER, M.D., LL.D., eleventh Provost of the University of Pennsylvania, was born in Philadelphia, August 21, 1843, the son of Dr. William Pepper (Princeton 1829), who was a distinguished physician of Philadelphia, and for some years Professor in the University of Pennsylvania. The son William graduated at the University of Pennsylvania in 1862 as the valedictorian of his class after a brilliant undergraduate course. He carried off the Senior English prize and divided the Senior Philosophical prize, was the Class President and a member of the Phi Beta Kappa. Pursuing his studies in the Medical Department of the University, he took the degree of Doctor of Medicine in 1864, and established his practice in Philadelphia, where his services were in great requisition by the hospitals. His connection with these institutions

included that of Curator and Physician of the Pennsylvania and the Philadelphia Hospitals, Physician to the Lincoln Institute and the Children's Hospital, and Consulting Physician to St. Christopher's Hospital, extending over a period of years from 1866 to 1871. He was called to the University of Pennsylvania as Lecturer in 1868, on the subject of Morbid Anatomy, following this with lectures on Clinical Medicine, 1870-1874, and Physical Diagnosis, 1871-1873, and was made Professor of Clinical Medicine in 1874. This Chair he filled for ten years, when he was appointed to succeed Dr. Alfred Stillé, in 1884, as Professor of the Theory and Practice of Medicine, a position which he held to the time of his death. He made some original contributions to medical science, having published with Dr. Forsythe Meigs in 1866 a treatise on the Condition of the Blood in Malarial Fever, which was one of the earliest studies in the Modern field of Bacteriology. Most of his medical work, however, was as an editor, writer, author of textbooks and as a practitioner. He founded the Philadelphia Medical Times and was its editor in 1870-1871. He edited the "System of Medicine by American Authors," which has passed through numerous editions and is recognized as the chief American authority on medical questions, as well as being highly spoken of in foreign medical magazines. He also wrote a "Text-book of Medicine," in two volumes, which has been used in a great number of schools and also made a strong impression abroad. He made many notable medical addresses, those at the opening of the medical courses at the University in higher medical education, in 1877 and in 1894 representing the beginning and the completion of a campaign of almost twenty years in favor of a longer and better course of Medical instruction, and more adequate equipment for the work. His foundation of the Pepper Clinical Laboratory, named in honor of his father, was a further step in the same plan. In 1889 he gave a striking address before the National Medical Association on Dr. Benjamin Rush, and his address as President of the Pan-American Medical Congress in 1893 also attracted much attention. He was Medical Director of the Centennial Exposition, and in recognition of his distinguished services in that capacity he received in 1877, from the King of Sweden, the decoration of Knight Commander of the Order of St. Olaf. He was engaged for many years in an effort, unsuccessful up to the present time, to have the insane patients in the Blockley

City Hospital removed to a more suitable locality, and the pauper inmates placed in a more satisfactory condition. But he was perhaps best known as a practitioner, patients coming to consult him from many parts of the world and his services being in constant demand nearer home. In January 1881, on the resignation of Dr. Charles J. Stillé, Dr. Pepper was elected Provost of the University by the unanimous vote of the Trustees, and held that office for thirteen years, a period in which the interests of the University were notably advanced through his wise and energetic efforts. The Pro-



WILLIAM PEPPER

vostship became under him, by the very conditions on which he accepted it, a purely administrative office. It was therefore chiefly through his instrumentality or with his full concurrence and encouragement that those forms of extension of the educational work of the University have been made, and the boundaries settled in which it seems destined to work for a considerable time. He did a large part of the collection of funds for the erection of the University Hospital, and was chiefly instrumental in securing as a gift from the city, the site on which the Hospital was erected as well as most of the other land which now forms the University tract and on which the other buildings have since been placed. Although the work of securing the funds

for building these has been largely done by another, yet Dr. Pepper's influence, readiness of appreciation of the needs and possibilities of the institution, his devotion to its interests for almost twenty-five years, his capacity for infusing enthusiasm and energy into others, was a condition precedent to the successful completion of the great work done in his own period and that of his successor. When he took office on February 22, 1881, the University site covered fifteen acres of land; when he retired in 1894, it had extended to fifty-two acres; the number of instructors of all grades increased from eighty-eight to two hundred and sixty-eight, and of students from nine hundred and eighty-one to two thousand one hundred and eighty. Under Dr. Pepper, also the prize scholarships for pupils of the public schools were established, the University Extension system was developed, the dormitory principle adopted, and the University was brought closely in touch with the public. On his resignation in 1894, the Trustees accepted from his University associates a statue of Dr. Pepper in bronze by Karl Bitter, which has been placed on the grounds of the Archæological Museum. He was one of the founders of the Pennsylvania Museum and School of Industrial Art, and for several years held a seat on its Board of Managers. Closely allied to Dr. Pepper's University activity was his interest in the University Extension movement, in the foundation of the Philadelphia Free Library System on the basis of the bequest by his uncle George S. Pepper, in the establishment of the Philadelphia Commercial Museums, and of the Archæological Museums or "Free Museums of Science and Art" in connection with the University. Of all those bodies he was President, and to the last of them he devoted himself more especially after his resignation of the Provostship. He gave \$50,000 to the building fund, and his widow has subsequently given an equal sum towards its sustentation. In his lifetime some \$500,000 was obtained for Museum purposes. He was also deeply interested in other civic projects in Philadelphia, especially those for water filtration, for the laying out of a great boulevard, and for the reform of the school system of the City and the State. During the last ten years of his life he was also in constant communication with Senator Edmunds and others who were working for the establishment of a National University for post graduate study at Washington. The remarkable administrative capacity of Dr. Pepper was availed of in many other directions. He was President of the Foulke and Long Institute

for Orphan Girls, of the Pan-American Medical Congress at Washington in 1893, of the Pathological Society of Philadelphia in 1873-1876, Manager of the University Hospital in 1874, and in a large number of scientific and learned associations he held positions of active responsibility. To the literature of his profession and of educational movements generally he was an extensive contributor, his writings adding up to some two hundred titles. He received the degree of Doctor of Laws from Lafayette College in 1881 and from Princeton in 1888. Dr. Pepper was a man of the most intense energy and capacity for work. His numerous interests and constant activity entailed labor that but few men could perform, and his almost irresistible persuasiveness was brought frequently into contact with prominent politicians and others in long and exhausting interviews. He worked constantly for nineteen hours a day, and many instances are known when he was engaged continuously for as long as thirty-six hours without sleep. His life was full and intense to a degree that is but seldom reached. He died suddenly at Oakland, California, July 28, 1898.

HARRISON, Charles Custis, 1844-

Trustee - Provost 1894-

Born in Philadelphia, Pa., 1844; graduated Univ. of Pa., Class of 1862; entered business as a sugar refiner; became a Trustee of the University in 1876; elected Provost pro tem. in 1894, on the retirement of Dr. William Pepper, and the next year accepted the Provostship, which he has held to date.

CHARLES CUSTIS HARRISON, LL.D., twelfth Provost of the University of Pennsylvania, was born in Philadelphia, May 3, 1844, being the eldest son of George Leib and Sarah Ann Custis (Waples) Harrison. Mr. Harrison's paternal great-grandfather, Thomas Harrison, who was a landed proprietor in the neighborhood of Carlisle, England, visited the Colonies during the stirring times prior to the Revolution, and espoused the cause of Liberty, allowing his English estates to revert to the crown. His father, George Leib Harrison, was noted not only as an eminently successful business man, but for a broad and patriotic spirit, and especially for his effective labors in the reform of the penal systems and the public charities of Pennsylvania. He received from the University in recognition of his public services, the honorary degree of Doctor of Laws. Through his mother Mr. Harrison inherited the sterling qualities exhibited by General John Custis, of Virginia, who, in the early colonial days made a reputation from a

high sense of honor, integrity of purpose, and love of truth in word and in fact. Charles Custis Harrison was a pupil in the Episcopal Academy, under the Mastership of the venerable Dr. George Emlen Hare, from 1853 until 1858, and had the honor there of always standing at the head of his class. He entered the Freshman class of the Department of Arts of the University of Pennsylvania in September 1858, and had a distinguished career, taking honors in each successive class. He was graduated Bachelor of Arts in July 1862, at the head of his class; delivering the Greek Salutatory at



CHARLES C. HARRISON

Commencement, and receiving, among other honors, the Henry Reed Prize for the best English Essay. It was his intention to read Law, but circumstances caused him, a few months after graduation, to enter a business career, and he continued in active and successful business until 1892, developing the administrative abilities which have been so conspicuous in the service of the University. He was elected a Trustee of the University in 1876, giving to the duties of the office a fair and conscientious share of his time and attention. In 1885, upon the death of the Hon. John Welsh, he was made Chairman of the important Committee on Ways and Means, and with the assumption of this responsible position, began that absorbing interest in the Uni-

versity which has become the characteristic of his life. He held the Chairmanship of the Committee until 1893, and the Chairmanship of the Committee on the College during the succeeding year. The great expansion of the University during those nine years was largely due to the energy and unwearied labors in these important positions, resulting in his raising not less than \$475,000. After the resignation of Dr. William Pepper, Mr. Harrison was requested by the Board of Trustees to assume the duties of the Provostship. His innate modesty and the underestimate of his own abilities led him to decline the invitation; but he was persuaded at last to serve as Acting Provost pending the selection of a suitable person for the office. His administration for one year easily refuted his opinion that a more suitable person could be found, and in June 1895, at the unanimous request of the Board of Trustees he accepted, and was formally inducted into the office of Provost of the University. During his early manhood Mr. Harrison was a member of many charitable, literary and financial organizations. He has always taken an interest in the affairs of state, and on more than one occasion has been offered prominent missions, all of which he has declined. In 1865 he took the degree of Master of Arts, in course, from the University. In 1895 he received from Columbia University the honorary degree of Doctor of Laws, Princeton University repeating the compliment in 1896. During his administration the University has taken on new life in every department; its progress, thorough and sure, being the purpose of his guidance. The Dormitory system, long needed and discussed, but never undertaken until his time, has been developed, and, with Houston Hall, has given to the University the close College spirit that was lacking in the past. The new Law building brings the students of that school into touch with the daily University life. The Harrison Laboratory of Chemistry, Dental Hall, the Astronomical Observatory, enlargements to the Hospital, Nurses' Home, and the Laboratory of Hygiene; the completion of the beautiful Hamilton's Walk, and the transformation of the whole University domain into a series of classic parks and footways, guarded by the memorial gateways erected by the Classes of 1872 and 1873,—all these are the visible marks of what Provost Harrison has done and inspired. An equal transformation has been wrought under his leadership in the internal organization of nearly every department, and of the University as a whole, so that symmetry of plan, and

unity of purpose have at last become characteristics of the institutions. Apart from labors of brain and pen, and the mastering of an immense amount of details, often technical and professional, Mr. Harrison has been most generous of his means, and has influenced very large contributions from his friends and fellow citizens for University purposes. In one gift of \$500,000 he founded the George Leib Harrison Memorial Foundation, which richly provides Fellowships and Scholarships for advanced scholars. In all he has given not less than \$850,000 of his own means, and can fairly be credited with inducing others to give at least \$2,500,000 to the improvement and endowment of the University.

MARTIN, David, -1751.

First Rector of the Academy 1749-51—Prof. Greek and Latin, 1749-51.

OF DAVID MARTIN, the first Rector of the Academy, and Latin and Greek Master, nothing is known except that he was spoken of at the time as "a gentleman of a neighboring Province"; that he was asked and consented to accept that position, March 29, 1750; and that he died suddenly about a year and a half afterwards, just before December 11, 1751.

GREW, Theophilus, -1759.

Professor Mathematics 1750-1759.

Time and place of birth unknown; master of a school in Maryland in 1741; opened a school in Philadelphia, 1742; first Mathematical Professor in the Academy and College of Philadelphia, 1750-59; was made A.M. by the College, 1757; died 1759.

THEOPHILUS GREW, A.M., the first Professor of Mathematics in the College of Philadelphia, was master of an Academy in Chestertown, Kent county, Maryland, in 1741, before which date nothing is known about him. In 1742 he opened on Walnut Street, Philadelphia, a school where the ordinary English branches were taught and where especial attention was given to teaching the various branches of Mathematics. In 1744 his school was in Norris Alley, and he also had a night school of Mathematics for gentlemen, as well as the day school for boys. He published a description of the approaching eclipse of the sun in January 1749. When the Academy was in process of organization for teaching purposes Mr. Grew offered himself for the position of Mathematical Master and was so appointed by the Trustees, December 17, 1750.

He was spoken of at the time as being "well known, having for many years had a large school in town." He was formally elected Mathematical Professor after the College charter had been obtained in 1755, and was given the honorary degree of Master of Arts at the first Commencement in 1757. He continued to hold his professorial position until his death in 1759.

DOVE, David James.

Professor English Literature 1750-1753.

Apparently came to Philadelphia from England in December 1750; appointed almost immediately to take charge of the "English School," of the Academy; resigned in 1753 to devote his entire time to a girls' school which he had established; in 1762 became Head-Master of the Germantown Academy but soon resigned from that school; was an extremely successful teacher and keen caricaturist and satirist.

DAVID JAMES DOVE was probably a born Englishman, as he had a school in England before he came to Philadelphia in December 1750. He was appointed on the 17th of that month English Master in the Academy which was just about to open, and proved to be an extremely successful teacher. He insisted on giving less of his time to his teaching than the Trustees demanded and his resignation was therefore asked for in 1753, Ebenezer Kinnersley being elected in his place. At this time he lived in Sassafras Street near the Dutch Calvinist Church, where in 1751 he offered to take the Academy youth to board, and then in 1752 or 1753 opened a girls' school. It was his habit of leaving early to attend to this school which created dissatisfaction among the Trustees. On the opening of the Germantown Academy in 1762, he became Head-Master in that seminary. Another quarrel soon separated him from that institution and he erected a house on an adjoining lot, where he established an opposition school; but this undertaking was unsuccessful, and shortly abandoned. He is said to have been a fine scholar and distinguished for his powers of elocution. He had an ardent and peculiar temper and was whimsical even in his discipline. Among several amusing instances, Alexander Graydon gives the following: "He had another contrivance for boys who were late in their morning attendance. This was to dispatch a committee of five or six scholars for them, with a bell and lighted lantern; and in this odd equipage, in broad daylight, the bell all the while tingling, they were conducted to

school." As Dove affected strict regard to justice in his dispensation of correction, he once submitted with good humor to the same punishment from his pupils, to their no small gratification and the entertainment of the spectators. He was a writer of poetical compositions which were generally political or personal satires. One of the bitterest, entitled *Washing the Black-a-moor White*, was an attack upon Hon. Wm. Moore, of Moore Hall, written on the occasion of that gentleman's arrest by the Assembly. Mr. Dove was also a caricaturist of considerable reputation. These productions, like his satires, were political, personal and moral, and sometimes displayed, it is said, much humor. Nothing is really known of him after the Germantown school venture.

KINNERSLEY, Ebenezer, 1711-1778.

Professor Oratory and English Literature 1753-1773.

Born in Gloucester, England, 1711; came with his parents to Pennsylvania, 1714; appears to have taught school in Philadelphia; became acquainted with Franklin; made some electrical experiments of importance, 1748; gave a course of lectures on electricity in Philadelphia, New York, Boston and Newport, 1751; was the first to suggest the protection of houses by lightning rods; second Prof. of English in the Academy and College of Philadelphia, 1753-73; received honorary degree of A.M. from the College, 1757; died 1778.

EBENEZER KINNERSLEY, A. M., one of the first Professors in the College of Philadelphia, and a sharer with Franklin in the honor of making some of the earliest and most important observations of electrical phenomena, was born in Gloucester, England, November 30, 1711. He was a son of Rev. William Kinnersley, a Baptist minister, and came to this country with his parents in 1714. His early life was spent in Lower Dublin township, Philadelphia, where he was ordained in 1743 a minister of his father's denomination. He moved to Philadelphia, where he is supposed to have kept a school and where he became acquainted with Franklin on the basis of their common interest in electrical and other physical phenomena. Franklin speaks of him as his "ingenious neighbor," and is sometimes suspected of having himself claimed ideas and discoveries which are more properly due to Mr. Kinnersley. In 1748 the latter demonstrated that the electric fluid passes through water. In 1751 he began delivering lectures on "The Newly Discovered Electrical Fire." These lectures proved a success and were attended by persons of all classes. He repeated them in New York, Boston and Newport.

It was at the last named places in March 1752, that he suggested the protection of houses and barns from lightning by rods. This was three months before the time that Franklin drew the electricity from the clouds by means of the kite. His name became somewhat widely known in Europe when Franklin made a report of the experiments performed to Peter Collinson of London, who published an account of these scientific discoveries. In 1753 he was elected Professor of Oratory and English Literature in the College of Philadelphia to succeed David James Dove. He held this position until failing health obliged him to resign it in 1773. In 1757 the College gave him the degree of Master of Arts and he was also elected a member of the American Philosophical Society. He died in Lower Dublin Township, Philadelphia, July 4, 1778. He married Sarah Duffield of Philadelphia. There is a window erected to his memory in College Hall of the University of Pennsylvania.

NORRIS, Isaac, 1701-1766.

Trustee 1751-1755.

Born in Philadelphia, 1701; was in mercantile business until 1743; Common Councilman of the city, 1727-30; Alderman, 1730-34; member of the Assembly, 1734-66; Speaker of the Assembly, 1751-64; Trustee of the College of Philadelphia, 1751-55; died 1766.

ISAAC NORRIS, Merchant and Statesman, was born in Philadelphia, October 3, 1701, the son of Councillor Isaac Norris and Mary Lloyd, daughter of Thomas Lloyd, President of the Provincial Council of Pennsylvania. He entered into mercantile business with his father and continued it after the latter's death in 1735 until 1743, acquiring a large fortune in addition to what he inherited. He entered public life as Councilman of the city in 1727, was made Alderman in 1730 and advanced to the Assembly in 1734, where he remained almost to the time of his death. He was a Quaker of the strictest sort and he always, in office and out, strove to act in accordance with the discipline and belief of his sect. On the threatening of war with France and Spain in 1739 he resolutely combated the movement for the organization of volunteer companies and other preparations for the defence of Pennsylvania. So conspicuous was his opposition to the war that his name was soon given to the party he led. The "Norris party," and especially its leader, met with violent opposition in the Assembly. The struggle between the Quakers and Governor Thomas' party lasted several

years and finally resulted in the overthrow of the Quakers as the dominant influence in Philadelphia politics. In 1745 Isaac Norris was one of the commissioners to treat with the Albany Indians, and in 1755 he and his colleagues effected the purchase of several million acres comprising the southwestern part of Pennsylvania. In 1751 he had become Speaker of the Assembly. It was in that year that the old State House bell was ordered from England, Norris directing the inscription, which turned out to be prophetic, to be placed around it. Less than a quarter of a century later



ISAAC NORRIS

it did "Proclaim liberty throughout the land, unto all the inhabitants thereof." During Norris' Speakership, which lasted until 1764, was waged the great contest between the people and the Proprietaries on the subject of taxation and legislative control of the Penn family estates. Norris, at the head of the Quakers, joined the opposers of privilege, and in a debate in the Assembly declared "No man shall ever stand on my grave and say, 'Curse him, here lies he who betrayed the liberties of his country!'" Norris was appointed with Benjamin Franklin a Commissioner to England in 1757 to solicit the removal of grievances that were occasioned by the proprietary instructions, but he declined on account of the failure of his health.

Although he had for years opposed the encroachments of the Penn family, he refused to support the proposition to convert Pennsylvania into a royal province. When a petition to this effect passed the Assembly in 1764 he resigned the Speakership. He was returned again to the Assembly at the next election and again became its Speaker but a second time resigned. Norris was a man of great culture, and was known as an excellent French, Latin and Hebrew scholar; he left a library of over fifteen hundred books. For four years, 1751 to 1755 he was a Trustee of the College of Philadelphia. He died on July 13, 1766.

CADWALADER, Thomas, 1707-1779.

Trustee 1753-1779.

Born in Philadelphia, 1707; physician; first Burgess of Trenton; member Common Council of Philadelphia, 1751-74; member Provincial Council of Pa., 1755-75; Trustee College of Philadelphia, 1753-1779; died 1779.

THOMAS CADWALADER, M.D., one of the Provincial Councillors of Pennsylvania, was born in Philadelphia in 1707; son of John and Martha (Jones) Cadwalader. He received his early education at the Friends Public School in Philadelphia and afterwards studied Medicine in that city and in London, England. He began practice in 1731 in Philadelphia, and was one of the founders of the Philadelphia Library Company. In 1745 he published an essay upon the West India Dry Gripes, a disease which had been introduced into Philadelphia from the West Indies. This was one of the very earliest Medical Monographs published in America, and had a pronounced effect both in this country and in Europe upon the treatment of colic and allied diseases. In 1746 he became the First Burgess of Trenton, New Jersey, where he had removed after his marriage to Hannah Lambert in 1738. In 1750 he returned to Philadelphia, where in 1751 he was one of the original subscribers and physicians to the Pennsylvania Hospital. In the same year he was elected to the Common Council of Philadelphia, and in 1755 he was called to the Provincial Council of Pennsylvania, where he served until the Revolution. He became a Trustee of the College of Philadelphia in 1753. He was a member of the Philosophical Society and of the Society for Promoting Useful Knowledge, and in 1765 he was elected a Trustee of the Medical College of Philadelphia, in which he gave a course of lectures. He signed the Non-Importation Articles and as far as his age allowed took the

Whig side in the Revolution. He, with Doctors Bond, Rush and Shippen, formed a committee to examine all the candidates for positions as Surgeons in the Navy. In 1778 he became Surgeon of the



THOMAS CADWALADER, M.D.

Pennsylvania Hospital. He was especially noted for his courtesy, the story being told of him that, meeting a man who had been seized with a homicidal mania, he greeted the latter so pleasantly that the would-be murderer allowed him to pass on his way unconscious of his danger. He died at Greenwood, about a mile from the City of Trenton, New Jersey, November 14, 1779.

HAMILTON, James, 1710-1783.

President of Trustees 1764 and 1771-1773.

Born in 1710; member Provincial Assembly of Pa., 1734-39; Alderman of Philadelphia, 1741; Mayor of Philadelphia, 1745; Member Provincial Council of Pa., 1745; Lieut.-Gov. of Pa., 1748-54; Deputy-Gov., 1759-63; twice Pres. of Provincial Council; Pres. of Board of Trustees of the College of Philadelphia, 1764 and 1771-73; Pres. Philosophical Soc.; died 1783.

JAMES HAMILTON, four times Chief Magistrate of Pennsylvania, was born about 1710, some time before his parents, Andrew and Anne (Brown) Hamilton, removed from Maryland to Pennsylvania. His first office was that of Prothonotary, which had been held by his father who had been probably the

most eminent lawyer of his day in Pennsylvania. James Hamilton was sent to the Provincial Assembly in 1734 and five times re-elected, and in 1739 he was made one of the Corporation of Philadelphia. In 1841 he became Alderman of the City but declined the admiralty Judgeship as he had not received the necessary legal education. He was elected Mayor of Philadelphia in 1745 and while in that office started a movement toward the erection of a City Hall. It had been the habit of the retiring Mayor to give a dinner to the members of the Corporation and Hamilton proposed that instead of spending the money in this way, he should subscribe that sum to a fund for the erection of a City Hall. He did so and his example was followed by the retiring Mayors until 1755 when a considerable sum was in the hands of the city for that purpose. He went abroad and returned in 1748 as Lieutenant-Governor, during the administration of which office he became involved in a quarrel with the Assembly over the emission of Bills of Credit and asked to be superseded in 1754. He was active in making preparations for the defence of Philadel-



JAMES HAMILTON

phia during the French and Indian War, and directed the building of a chain of forts from the Delaware River to the Maryland line. In 1759 he was appointed Deputy-Governor and served till 1763, when

John Penn arrived from England. When the latter returned, Hamilton, as President of the Council, administered the government until 1771, and again in 1773. He was President of the Board of Trustees of the College in 1764 and again from 1771 to 1773, and was President of the Philosophical Society until its union with the Society for Promoting Useful Knowledge. When the Revolution broke out Hamilton felt unable to share in it owing to his years and his intimate connection with the Proprietors, but nevertheless seems to have been well treated and respected by the state authorities. He died in New York, August 14, 1783.

ALISON, Francis, 1705-1779.

Second Rector of the Academy, 1752-79 — Professor 1752-79 — Vice-Provost 1755-79.

Born in Donegal, Ireland, 1705; educated in local schools and at the Univ. of Glasgow; came to America in 1735; became Pastor of the Presbyterian church at New London, Pa., 1737; opened classical school for young men at his home; became Rector of Academy of Philadelphia, 1752; Professor of Moral Philosophy and Vice-Provost, 1755-79; received M.A. from Yale and Princeton, 1755; D.D. Univ. of Glasgow, 1758; died 1779.

FRANCIS ALISON, D.D., second Rector of the Academy, and first Vice-Provost of the College of Philadelphia, was born in Donegal, Ireland, in the year 1705. He received his collegiate training at the University of Glasgow which afterward in 1758, gave him the degree of Doctor of Divinity. He emigrated, like many Scotch-Irishmen, to America in 1735, and for a short time was tutor in the family of John Dickinson. He was ordained to the Presbyterian ministry in 1737, and became Pastor of a church at New London, Pennsylvania. Here he gave an invitation to any youth who wished to receive classical instruction to study with him, and thus in what was practically a free academy more than one young man of subsequent eminence obtained his early training. In 1752 when Mr. Martin, the first Rector and classical instructor of the Academy, had died Mr. Alison was asked to take his place. In 1754 William Smith became a teacher and it was due to the joint representations of these two men that the Trustees were induced to apply for the collegiate charter which was obtained in 1755. Dr. Alison became Vice-Provost when Mr. Smith was made Provost, and remained a much loved and valued teacher until his death, which occurred November 28, 1779. He had been given

the degree of Master of Arts in 1755 by both Yale and Princeton. He was the Pastor of the First Presbyterian Church of Philadelphia.

CHEW, Benjamin, 1722-1810.

Trustee 1757-1791.

Born in Maryland, 1722; lawyer; Atty.-Gen. of Pa., 1755-69; Recorder of Philadelphia, 1755-74; member Provincial Council of Pa., 1755-75; Register-General of Pa., 1765; Chief-Justice of Pa., 1774-76; Trustee of the College of Philadelphia, 1757-91; Judge and Pres. High Court of Errors and Appeals of Pa., 1791-1808; died 1810.

BENJAMIN CHEW, Chief-Justice of Pennsylvania, was born at the country-seat of his family on West River, Maryland, November 29, 1722, the son of Dr. Samuel and Mary (Galloway) Chew. He was brought up as a Friend and became a member of the Episcopal Church only after his admission to the Council in 1755. He obtained his early education at home under the tutelage of his father, a man of wide learning, and under the preceptorship of Andrew Hamilton, with whom he began the study of law. After the latter's death, Mr. Chew went abroad and entered the Middle Temple in London. He returned to America in 1743 upon the death of his father and was admitted to practice by the Supreme Court of Pennsylvania in 1746. He resided at this time at Dover but removed to Philadelphia in 1754, building in 1761, his country-seat of "Cliveden" in Germantown. On January 14, 1755, he became Attorney-General of Pennsylvania, holding that office until November 4, 1769, and was chosen Recorder of the City of Philadelphia on August 29, 1755, which position he occupied until June 25, 1774. He was called to the Governor's Council in 1755 during the period of excitement caused by the Indian massacres following Braddock's defeat, and he remained a member until the Revolutionary War. He presided as Speaker of the Lower Counties in 1756, and took an active part in the controversies between the Penns and the Assembly of the Upper Counties, usually as the legal adviser of the Proprietors. In 1757 he was elected a Trustee of the College of Philadelphia in which position he served until the Union of the College with the University of the State of Pennsylvania in 1791. He was made Register-General of the Province in 1765, having charge of the probate business of Philadelphia county. After his resignation of the Attorney-Generalship he began to devote himself more to

private practice, but served also on the Commission for settling the boundary between Pennsylvania and Maryland, under whose superintendence was run the celebrated Mason and Dixon's Line. In 1774 he succeeded William Allen as Chief-Justice of the State of Pennsylvania, and about this time was active in entertaining the members of the Continental Congress which assembled in Philadelphia in September 1774. He seems to have been one of those who, while sharing Whig opinions, fell under suspicion of half-heartedness in the Colonial cause, due probably to his having held a position

stronghold by the British troops and had been injured by the cannonading of the Americans. After the departure of John Penn for England, Judge Chew was Attorney for the Penns and as such received the money voted to them in exchange for the quit rents. In October 1791 he was appointed Judge and President of the High Court of Errors and Appeals of Pennsylvania, which office he discharged until the abolition of the court in 1808. He married in 1747 Mary Galloway, who died in 1755, and in 1757 he married Elizabeth Oswald. He died January 20, 1810, in Philadelphia.



BENJAMIN CHEW

under the Crown. At the outbreak of the Revolution he lost all his official positions but continued to act as Register-General until 1777, and in the following year an Act was passed by the Legislature validating all that he had done. In July 1777 the Continental Congress recommended to the Government of Pennsylvania to make prisoners such of the late Crown and Proprietary officers and such other persons in Philadelphia as might be disaffected, and to send them back into the country, and upon such a warrant Judge Chew was arrested. He refused at first to sign a parole but afterwards assented and retired to the Union Iron Works, the property of his wife's uncle. He was allowed to return to Philadelphia in 1778. At the Battle of Germantown his country house had been occupied as a

JACKSON, Paul, 1729-1767.

Professor Greek and Latin 1756-1758.

Born in Chester Co., Pa., 1729; was the first Tutor chosen in the College of Philadelphia, later Prof. of Greek and Latin; joined the military expedition of Gen. Forbes; subsequently studied medicine, and practised in Chester, Pa.; held various offices in that town; died 1767.

PAUL JACKSON, A.M., was born in Chester county, Pennsylvania, in 1729, the son of Samuel Jackson. He was early distinguished for his classical knowledge and served as a Tutor in the Academy and College of Philadelphia from 1752 to 1756. One of his colleagues here was his brother-in-law Charles Thompson, said to have been one of the best classical scholars of his time, who became conspicuous later as the Secretary of the Continental Congress. In 1756 Paul Jackson was elected Professor of the Greek and Latin Languages in the College and remained so until 1758, when impaired in health by confinement and study he was compelled to resign his Professorship. One year before he resigned his Professorship, in 1757, the College of Philadelphia conferred upon him the honorary degree of Master of Arts. On leaving the College he joined the expedition of General Forbes as Captain in a Pennsylvania Regiment. In this expedition his prudence and bravery commended him to the particular notice of the General. By the active life of a soldier his health was improved; but his fondness for study returning with his renewed health, he resigned his commission in the army and began the study of medicine. He subsequently received a certificate from the Royal Army Hospital that qualified him to practice, and settled in Chester, Pennsylvania, where he soon became a well established and successful physician. He held the office of Chief Burgess of Chester and by virtue of this office was a Justice of the Common Pleas from 1762 until his death, which occurred in 1767. He married

Jane, daughter of John Mather of Chester, Pennsylvania. Paul Jackson's brother David was a member of the first medical Class that was graduated from the College of Philadelphia, that of 1768.

BEVERIDGE, James, -1767.

Professor Greek and Latin 1758-1767.

Born in Scotland and taught school in Edinburgh; Prof. of Classical Languages at College of Philadelphia, 1758-67; published a volume of Latin Poems, 1765; died 1767.

JAMES BEVERIDGE was a native of Scotland, and originally taught a school in Edinburgh. He was appointed Professor of the Greek and Latin Languages in the College of Philadelphia in 1758, a position which he filled until his death in Philadelphia in 1767. Bishop White speaks of him as "a thorough grammarian with little else to recommend him." Alexander Graydon, in his entertaining memoirs of his own life, gives an amusing account of this learned person. He appears to have possessed an accurate and profound acquaintance with the ancient languages, but outside of them his acquirements were limited; and in knowledge of human nature he seems to have been about on a par with Dominie Sampson. The management of a school of seventy or eighty boys was entirely beyond his powers, although he was nominally assisted in the work of instruction by two other teachers. In the year 1765, he published a volume of Latin poems, the first of the kind printed in Philadelphia. This collection, which was published by subscription, was entitled *Epistolae Familiares, et Alia Quaedam Miscellanea*. In an ingenious poetical address to John Penn the Professor of Greek and Latin more than hints that a conveyance to him, in fee simple, of some few of the many thousand acres possessed by the Penn family would not be an unsuitable reward for the immortality gained by this effort of the poet; and suggests that without the aid of Virgil and Homer the fame of Ajax and Mæcenas would have traveled but a little way out of their own doors. Notwithstanding these sagacious suggestions poor Beveridge never attained that independence he so pathetically and poetically coveted.

SHIPPEN, Edward, 1728-1806.

Trustee 1758-1806.

Born in Philadelphia, 1728; lawyer; Judge of the Admiralty Court, 1752; Prothonotary of the Supreme Court of Pa., 1765; member Provincial Council of Pa.,

1770; Pres. Judge of the Common Pleas Court of Philadelphia, 1784; Judge of High Court of Errors and Appeals, 1784; Justice for Dock Ward of Philadelphia, and Pres. of the Quarter Sessions, 1785-86; Associate Judge of Supreme Court, 1791, and Chief-Justice, 1799; Trustee College of Philadelphia, 1758-91, and of Univ. of Pa., 1791-1806; died 1806.

EDWARD SHIPPEN, one of the Provincial Councillors of Pennsylvania, was born in Philadelphia, February 16, 1728, the son of Edward and Sarah (Plumley) Shippen. He studied law in the office of Tench Francis, and later in the Middle Temple, London, where he was admitted in 1750, in which year he returned to Philadelphia. In September 1750, he was admitted to practice in the Supreme Court of Pennsylvania, and in 1752 was appointed Judge of the Admiralty Court, which position brought him considerable revenue. In 1756 he was deputed by the Governor to quell a tumult at Lancaster and seems to have been successful. In 1765 he was appointed Prothonotary of the Supreme Court, and in 1770 he became a member of the Provincial Council of Pennsylvania. Judge Shippen remained neutral during the Revolutionary War, being opposed to the idea of total separation from England. He withdrew with his family to their country-seat, near the Falls of Schuylkill, until the British occupation of Philadelphia, when he returned to the city. He seems, however, never to have taken any active part against the colonies. Notwithstanding his loyalist sentiments, his qualities as a jurist were rated so highly that he was appointed May 1, 1784, President Judge of the Common Pleas of Philadelphia county, and in September of the same year he became one of the Judges of the High Court of Errors and Appeals. In 1785 he was elected Justice for the Dock Ward in the city, and the very next day received news of his appointment as President of the Quarter Sessions and General Jail Delivery. These last two positions proving uncongenial, however, he asked to be relieved of them. In 1791 he was appointed an Associate Judge of the Supreme Court, which office he held until 1799 when, Chief-Justice McKean being elected Governor, he became Chief-Justice. He was elected a Trustee of the College of Philadelphia in 1758 and re-elected at its union with the University of the State of Pennsylvania in 1791 to serve as Trustee of the University of Pennsylvania, which office he held until his death. He married in 1753 Margaret, daughter of his law preceptor, Tench Francis. He died April 6, 1806.

DUCHE, Jacob, 1737-1798.

Professor Oratory 1759-1778, Trustee 1761-1778.

Born in Philadelphia, 1737; graduated College of Philadelphia, with the first class, 1757; studied at Clare Hall, Cambridge, Eng.; Professor of Oratory at the College, 1759; Trustee, 1761; ordained in England, 1762; became Rector of St. Peter's and Christ churches, Philadelphia, 1775; Chaplain of Congress, 1774-76; subsequently was a Tory, and lived in England, 1777-92; attainted of treason by State of Pennsylvania, but lived quietly in Philadelphia from 1792 until his death in 1798; produced certain writings, and was given degree D.D.

JACOB DUCHÉ, JR., D.D., was born in Philadelphia, January 1737 or 1738, son of Jacob Duché, Mayor of Philadelphia, and Mary (Spence) Duché, his first wife. He entered the College of Philadelphia, May 25, 1754, graduating Valedictorian of the first class in 1757, when he received the degree of Bachelor of Arts. The Master's degree was conferred in course in 1760. He was a tutor during 1753. In 1758 he went abroad, and entered Clare Hall, University of Cambridge, where he remained in study during one year. Prior to his return to America he was admitted to the diaconate. On September 27, 1759, he was received as one of the Assistant Ministers of Christ Church in Philadelphia, continuing in that position until 1775. In 1759, he was made Professor of Oratory in the College of Philadelphia and held that position for nineteen years. Dr. Duché was ordained a Priest in England in 1762, and on his return was put in charge of St. Peter's Protestant Episcopal Church in Philadelphia, which had been finished about a year before. He was elected a Manager of the Pennsylvania Hospital, on August 3, 1756, and resigned in 1758. From 1774 to 1776 he was Chaplain to Congress and at the first meeting of Congress, September 4, 1774, he was invited to make the opening prayer. "For his excellent Prayer, so well adapted to the present occasion" Congress gave him a vote of thanks. Rev. Mr. Duché succeeded the Rev. Richard Peters as Rector of Christ Church and St. Peter's Church in Philadelphia, in 1775, and for two years continued in charge of those churches. He was a Trustee of the College of Philadelphia from 1761 to 1778, and was elected a member of the Philosophical Society in 1768. When the British held Philadelphia he became alarmed at the gloomy aspect of affairs, and in October, 1777, wrote to Washington urging him to discontinue further resistance. The letter was transmitted by Washington to Congress. Duché fled to England where he was appointed

Chaplain and Secretary to the Asylum for Female Orphans in St. George's Fields, London. Although attainted of high treason to the State of Pennsylvania, by Act of Assembly and his estate confiscated, he returned to Philadelphia in 1792. He died there January 3, 1798. He married, June 19, 1759, Elizabeth, daughter of the Hon. Thomas Hopkinson, and a sister of his class-mate, Francis Hopkinson. The degree of Doctor of Divinity was received from an unknown source. He was the author of Letters of Tamoc Caspipina, a translation, and various sermons.

[Portrait on page 78.]

WILLIAMSON, Hugh, 1735-1819.

Professor Mathematics 1761-1763.

Born in Chester Co., Pa., 1735; educated at country schools and at Rev. Francis Alison's Academy; graduated College of Philadelphia in the first class, 1757; studied divinity at home and with private advisers; Prof. of Mathematics in the College, 1761-63; studied medicine abroad and obtained Doctor's degree at Univ. of Utrecht, 1772; practiced for some years in Philadelphia; made astronomical observations and wrote several works; visited England repeatedly; on his visit in 1775 appearing before the Privy Council to be examined concerning conditions in America; settled in Edenton, N. C., and held various public positions; member of the Annapolis and Philadelphia Constitutional Conventions; received LL.D. from the College, 1787; died 1818.

HUGH WILLIAMSON, M.D., LL.D., Physician and Congressman, was born December 5, 1735, in West Nottingham Township, near Octara Creek which divides Chester from Lancaster county in the State of Pennsylvania. His parents were natives of Ireland, but it is believed his earlier ancestors came originally from Scotland. He received the common preparatory instruction of a country school near his father's house, and at an early age was sent to learn the languages at an academy established at New London Cross Roads, under the direction of the Rev. Francis Alison. After retiring from the seminary of Dr. Alison, at his father's house he applied himself to the study of Euclid's Elements, of which he became master in a short time. He then entered the class which was to be the first one graduated in the College of Philadelphia on May 25, 1754, and received the degree of Bachelor of Arts at the first Commencement held at that College on May 17, 1757; he later took the Master's degree in course. He was a Tutor in the College from 1756 to 1758. His father having died in 1757 Hugh Williamson went to Shippens

burg, where he remained about two years attending to the settlement of his father's estate, and during the period of his residence there he devoted all his time not occupied by the business of his father's estate to the study of divinity, frequently visiting Dr. Samuel Finley, an eminent divine. In 1759 he went to Connecticut where he pursued his theological studies and was licensed to preach the Gospel. When he returned from Connecticut he was admitted to the Presbytery of Philadelphia. He preached but a short time, not exceeding two years, was never ordained, or appointed to the charge of a congregation, and owing to the weakness of his lungs he was compelled to abandon the profession that was the first object of his choice and to which he was attached from a sense of duty. Upon leaving the pulpit he began the study of medicine. In 1761 he was appointed Professor of Mathematics in the College, and retained this position from 1761 to 1763. In 1764 he left for Europe to study medicine at the University of Edinburgh, and while there he enjoyed the advantages of instruction afforded by the lectures of the elder Monro, Whyte, Cullen, Home, Alston and others. At the close of the lectures, he left Edinburgh, made a tour through the northern parts of Scotland and then proceeded to London, where he remained twelve months, diligently pursuing his studies. From London he went to Holland, and proceeded to Utrecht, where he completed his medical education. Having passed the examination and submitted to the Professors of that University a thesis in Latin, he received the degree of Doctor of Medicine in 1772. After a tour on the Continent he returned home and practiced medicine in Philadelphia for some years with great success. In 1768 he became a member of the American Philosophical Society and in January 1769, was appointed a member of a committee, consisting of David Rittenhouse, the Rev. Dr. Ewing, Dr. Smith, Provost of the College, Charles Thomson and others, for the observation of the transit of Venus which was to occur June 3, 1769. Soon after this event the same committee was appointed to observe the transit of Mercury which was to take place November 9, 1769. The observations and calculations of Dr. Williamson who was an active member on both these committees, are contained in the first volume of the Transactions of the Philosophical Society of Philadelphia. Upon the appearance of a remarkable comet in September of the same year Dr. Williamson presented to the American Philosophical Society a theory which seems to have been

perfectly new and which he ever claimed as his own. This paper, has been rewritten and again communicated to the public in the first volume of the Transactions of the Literary and Philosophical Society of New York. He was also the author of Observations of the Climate in different parts of America, with some account of the Aborigines, History of North Carolina, Discourse on the Benefits of Civil History, Epitaph on Benjamin Franklin, and many essays and miscellaneous papers on medical, philosophical and social subjects. The Holland Society of Sciences and the Society of Arts and Sciences of Utrecht conferred upon him, in the most honorable manner, membership in those institutions; he received the degree of Doctor of Laws from his Alma Mater in 1787. While awaiting the departure from Boston Harbor of the vessel in which he had engaged passage for Europe the tea of the East India Company was destroyed and when he arrived in England he was the first to report to the British Government that occurrence. After a private interview with Lord Dartmouth he was examined on that subject before the Privy Council in February 1774, and on that occasion he predicted that if the coercive measures of Parliament were persisted in civil war would result. While in England Dr. Williamson frequently instituted electrical experiments and wrote a paper entitled Experiments and Observations on the *Gymnotus Electricus*, or Electrical Eel. This was first published in the Philosophical Transactions of the Royal Society of London for 1775. He had scarcely made his tour through Holland and the Low Countries when he heard of the Declaration of American Independence. He proceeded to France and after a short stay there sailed from Nantes for Philadelphia, where he arrived March 15. The ship was captured off the capes of Delaware but he with another passenger escaped in an open boat with some very important public despatches of which Dr. Williamson was the bearer. In 1777 he engaged in mercantile pursuits with a younger brother in the South. This led to his settling in Edenton, North Carolina, where he also practised medicine. He was Medical Director-General of the North Carolina Militia from 1779 to 1782, and a member of the House of Commons of North Carolina in 1782. He was a member of the Continental Congress from 1782 to 1785 and from 1787 to 1788. In 1786 he was sent to Annapolis to take part in the Convention to amend and revise the Constitution of the United States. In 1787 he was one of

the delegates from North Carolina in the general convention at Philadelphia which formed the present Constitution of the United States. He was a member of the North Carolina Ratification Convention of 1788, and represented North Carolina in the first and second Congresses, but declined being a candidate a third time. When yellow fever appeared in New York in 1805, Dr. Williamson was appointed by the corporation of that city one of a medical committee to investigate the particular character and origin of the cases that occurred at the commencement of the pestilence. He was among the first who entertained correct views as to the practicability of forming a canal to connect Lake Erie with the Hudson River. In 1810 he was appointed by the New York Historical Society to deliver the Anniversary Discourse, and selected for his subject *The Benefits of Civil History*. In 1814 with the Governor of New York and other gentlemen, he took an active part in establishing the Literary and Philosophical Society of New York City. He was a Trustee of the College of Physicians and Surgeons of the University of the State of New York. He also aided the Orphan Asylum and the Society for the Relief of Poor Widows and Small Children, both of the City of New York. He gave a large portion of his time and attention during the remaining years of his life to the Humane Society, the City Dispensary and New York Hospital. Dr. Williamson in January 1789, married Maria daughter of the Hon. Charles Ward Apthorpe; she died when the youngest of their two sons was but a few days old. He died in New York City, May 22, 1819.

REDMAN, John, 1722-1808.

Trustee 1762-1791

Born in Philadelphia, 1722; graduated Univ. of Leyden, 1748; Trustee of the College of Philadelphia, 1762-1791; Pres. of the College of Physicians, 1786-1805; died 1808.

JOHAN REDMAN, M.D., was born in Philadelphia, February 27, 1722. He received his preparatory education at the academy of Rev. William Tennant, and began his medical studies under Dr. John Kearsley, Jr. From Philadelphia he went to Bermuda where he remained several years practicing his profession. Then he went to Edinburgh where he attended lectures and "walked" the hospitals. From Edinburgh he went to Paris to study and from Paris to Leyden, where he was graduated July 15, 1748. Then he went to Lon-

don, remaining some time at Guy's Hospital. Returning to Philadelphia he soon built up a lucrative practice. In 1751 he was elected a member of the lower branch of City Councils. In this same year he was elected one of the consulting staff of the Pennsylvania Hospital and this position he held until 1780. He was a Trustee of the College of Philadelphia from 1762 until its consolidation with the University of the State of Pennsylvania under the name University of Pennsylvania in 1791, when he resigned. In 1762 Dr. Redman was attacked by a disease of the liver and subsequent



JOHN REDMAN

delicate health compelled him largely to restrict his practice. In 1786 on the foundation of the Philadelphia College of Physicians, Dr. Redman was chosen President and held the office until 1805 when old age compelled his retirement. From 1787 to 1808 he was a Fellow of the College. Dr. Redman was a believer in heroic treatment of disease and used the practice of bleeding extensively in the yellow fever epidemics of 1762 and 1793. He wrote up an account of the former visitation of the disease, presenting it to the College of Physicians in 1793. It was not printed until 1865. A staunch Presbyterian Dr. Redman was for many years an elder of the Second Presbyterian Church of Philadelphia and for many years, too, a Trustee

of Princeton College. He was also a member of the American Philosophical Society. He died March 19, 1808.

MORGAN, John, 1735-1789.

Founder Medical School — Professor Medicine 1765-1789.

Born in Philadelphia, 1735; educated at Nottingham Academy, Chester Co., Pa., and at the College of Philadelphia, graduating with the first class from the latter, 1757; A.M., 1760; studied medicine in Philadelphia, London, Edinburgh, Paris and Padua, obtaining his M.D. degree from Edinburgh in 1763; he was the first teacher of medicine in the College of Philadelphia and with Dr. Shippen organized the Medical School; was one of the early members of the American Philosophical Society, and travelled to Jamaica in 1773, principally with the object of collecting funds for the College; was the first General Director of the Medical Service of the Patriot Army, a position from which he was removed in 1777; Visiting Physician of the Pennsylvania Hospital; published several medical tracts; died 1789.

JOHAN MORGAN, M.D., F. R. S., was born in Philadelphia in 1735. He was the son of Evan Morgan, a Welshman. He received a classical education at Nottingham Academy, Chester county, Pennsylvania. He was transferred to the College of Philadelphia on May 25, 1754, and received the degree of Bachelor of Arts, May 17, 1757, at the first commencement of that institution. He received his Master's degree in course, 1760. During the last years of his attendance at the College, he began the study of medicine under Dr. John Redman of Philadelphia, under whom he studied for six years, thirteen months of which he spent in the Pennsylvania Hospital as Resident Apothecary. At the close of his term at the Hospital he devoted himself for four years to military life. He held a commission as Lieutenant, April 1, 1758, but acted only as a surgeon in the war between Great Britain and her Colonies and France. He resigned from the army at the close of the war. He sailed for Europe in 1760, and attended the lectures and dissections of Cullen and John Hunter in London; he then spent two years in Edinburgh under the instruction of Monroe, Cullen, Rutherford, Whyte and Hope and in 1763, received the degree of Doctor of Medicine from Edinburgh University. He then went to Paris and studied anatomy with M. Sue. At the meeting of the French Academy of Surgery at Paris in 1764, he showed a preparation of the vessels of the kidney which he had executed, and was therefore the first to make

known the art of making anatomical preparations in Paris and the south of France. He became a member of the Royal Academy of Surgery at Paris, having been made correspondent on July 5, 1764. During the summer he travelled in France, Switzerland and Italy. During his travels he made the acquaintance of Morgagni, Professor of Anatomy at Padua, to whom he had letters from Dr. Sevati of Bologna. In the autumn, he returned to London where he was made a fellow of the Royal Society of London, and Licentiate of the Royal College of Physicians, London and Edinburgh. He became a member of the Arcadian Belles-Lettres Society, Rome, in 1764. Early in 1765 he returned to Philadelphia and with Dr. Shippen, Jr., was the pioneer in systematic medical teaching in America. On May 3, 1765 he was elected by the Trustees of the College of Philadelphia to the Chair of Theory and Practice of Physic, the first Medical Professorship in this country. On May 30 and 31, 1765, at a Public Anniversary Commencement of the College, he delivered the famous Inaugural Address, which he had prepared in Paris. It was entitled "A Discourse upon the Institution of Medical Schools in America." He saw the fruits of his labor in 1768, for in that year — June 21 — five students received degrees in medicine, being the first degrees of the kind conferred in America. He was author of a "Dissertation on the Reciprocal Advantages of a Perpetual Union between Great Britain and her American Colonies," for which he received a gold medal from John Sargent, of London, in 1766. He was active in establishing the American Philosophical Society, of which he was a member, in 1766. He visited Jamaica in 1773, to obtain donations for advancing general literature in the College of Philadelphia. Congress appointed him Director-General and Physician-in-Chief of the General Hospital of the American Army in October 1775. In 1777 he was removed from office without an opportunity to vindicate himself, owing to dissensions between the surgeons of the General Hospital and of the Regiments, which gave rise to calumnies against him. He subsequently applied for a special committee of Congress to investigate the charges and was honorably acquitted. He served as a member of the Medical staff of the Pennsylvania Hospital from 1773 to 1777, and was again elected in 1778, and served until 1783. Dr. Morgan introduced the practice of writing prescriptions, instead of furnishing his own medicine, a daring innovation at that time, but which has since been generally adopted by the representative phy-

sicians of this country. He published beside the papers already mentioned the following: — *Tentamen Medicum de Puris Confectione*, 1763; *A Recommendation of Inoculation*, 1766; and *A Vindication of Public Character in the Station of Director-General*, etc. He married Mary, daughter of the Hon. Thomas Hopkinson. He died at Philadelphia, October 15, 1789, aged fifty-three years.

[Portrait on page 75.]

DAVIDSON, James, 1732-1809.

Third Rector of the Academy — Prof. Greek and Latin 1768-1779, 1782-1806.

Born at Newtown-Stewart, Ireland, 1732; educated at Univ. of Glasgow; became a Presbyterian clergyman, and emigrated to America in 1763 or 1764; was Principal of Newark, Del., Academy; appointed Professor of Languages in the College of Philadelphia, 1766; was Principal of a school in Charleston, S. C., 1778-80; resumed his Professorship in the reorganized Univ. of Pa., 1782, retaining this position until 1806; Rector of the Academy, 1780-91; wrote a popular Latin grammar; died 1809.

JAMES DAVIDSON was born in Newtown-Stewart, Tyrone county, Ireland, in 1732. He was educated in the University of Glasgow, and at an early age was ordained to the ministry of the Presbyterian Church. He emigrated to Delaware in 1763 or 1764, not long after the signing of the preliminaries of peace at Versailles, France. He was soon after appointed Principal of Newark (Delaware) Academy, and Pastor of two churches in that neighborhood; preaching in them alternately. March 8, 1766, he was offered the Professorship of Humanity in the College, and removing to Philadelphia he took charge of that office, retaining it until the capture of the city in 1778. He then fled with his family to Chester County, whence upon the invitation of some of his former pupils, he went to Charleston, South Carolina, and took charge of a large school. The taking of Charleston by the British in 1780, again obliged him to fly, and after a short period he returned to Philadelphia. The University of the State of Pennsylvania having just been established, he accepted the offer of the Professorship of Languages. Shortly after this the College of Philadelphia having regained its funds, invited him to resume his Professorship in it, which he did. After the University and College were united he was elected Professor of Languages in the reunited institution and retained this position until 1806 when he was obliged to resign owing to old age. He was also Rector of the Academy from 1780 to 1791. He became a mem-

ber of the Philosophical Society in 1768. He received the honorary degree of Master of Arts from the University of Pennsylvania in 1780. At one time he preached in the First Presbyterian Church of Philadelphia, but leaving that church on account of some affront, he joined the Protestant Episcopal Church. He was an excellent linguist, and published a Latin Grammar which for many years was extensively used in the schools of Philadelphia. Professor Davidson died in Philadelphia, June 1809 and was buried in the grounds of St. Peter's Protestant Episcopal Church, Philadelphia. His grandson Robert Baldwin Davidson who graduated at the University of Pennsylvania in the Class of 1826 was for a long time the "oldest living graduate," and died recently at the age of ninety-two. Professor Davidson was married to Margaret Linn, daughter of a prosperous maltster of Cookstown, Tyrone county, Ireland.

KUHN, Adam, 1741-1817.

Professor Materia Medica and Botany 1768-1797.

Born in Germantown, Philadelphia, 1741; studied medicine with his father, and subsequently at the University of Upsala, Sweden, and in Edinburgh, where he received his degree of M.D. June 1767; was Prof. at the College in Philadelphia under its various forms from 1768 to 1797, exercising much influence also as a botanist; was connected with the Pennsylvania Hospital; died 1817.

ADAM KUHN, M.D., was born in Germantown, Philadelphia, November 17, 1741, (old style). His grandfather was John Christopher Kuhn, his father, Adam Simon Kuhn, both natives of Farfeld, a small town near Heilbronn, on the Neckar, in the circle of Swabia, Germany. They emigrated to Philadelphia in 1733. His father was an educated man and a successful and skillful medical practitioner. He subsequently removed to Lancaster where he became a magistrate and an elder of the Lutheran Church. Dr. Adam Kuhn's early studies in medicine were with his father. In 1761 he went to Norway and Sweden where he studied Botany under Linnæus and other Professors of the University of Upsala, until July or August 1764; he also resided in London for one year; then went to Edinburgh where he received his degree of Doctor of Medicine, on June 12, 1767. His thesis was "*De Lavatione Frigida*." He returned to America in January 1768, after visiting France, Holland and Germany. Upon his return he was at once appointed Professor of Materia

Medica and Botany in the College of Philadelphia being the third of the group of Medical Professors. He commenced his first course of lectures in May, three months after his arrival from Europe. He continued in this position twenty-one years, until transferred to the Chair of Practice. In January 1774, he was one of the physicians of the society for inoculating the poor. He was one of the founders of the College of Physicians and its President in 1808. He was also a member of the American Philosophical Society, and was an honorary member of the Massachusetts Medical Society. He was made Professor of the Theory and Practice of Medicine in the University of the State of Pennsylvania in 1789, and was transferred to the same chair in the University of Pennsylvania in 1792, from which he resigned 1797. He was twice elected to the Medical Staff of the Pennsylvania Hospital, serving from 1774 to 1781, and from 1782 to 1798, when he resigned. He was elected a Trustee of the University in 1806, but declined to serve. His talent for observation was profound, he was studious, loved music, and was abstemious and regular in his diet and neat in his person. He married Elizabeth, daughter of Isaac Hartman, in the Island of St. Croix, West Indies, May 1780, and had two sons. He died in Philadelphia, July 5, 1817, in the seventy-sixth year of his age.

RUSH, Benjamin, 1745-1813.

Professor Chemistry 1768-1789, Medicine 1789-1813.

Born in Philadelphia, 1745; early education at Nottingham Academy, Pa.; graduated A.B. Princeton 1760; studied medicine under John Redman and in Dr. Shippen's Anatomy Class in Philadelphia; obtained degree of M.D. at Edinburgh, Scotland; studied also in London and Paris; elected to a Medical Professorship in the College 1769, which he held in various forms during forty-four years; was active in the state and national service during the Revolutionary period; wrote largely on medical and various subjects; LL.D. Yale, 1812; died 1813.

BENJAMIN RUSH, M.D., LL.D., was born in Byberry Township, Philadelphia county, Pennsylvania, December 24, 1745. His mother was a sister of the wife of the Rev. Samuel Finley. His grandfather, James Rush, commanded a troop of horse in Cromwell's Army, and on the restoration of the monarchy, emigrated to America in 1683. Dr. Benjamin Rush, when about nine years of age was sent to the academy in Nottingham, Chester county, Pennsylvania, which was then conducted by the Rev. Samuel Finley, D.D., afterwards President

of Princeton College. He was sent to Princeton while in his fourteenth year, and received the degree of Bachelor of Arts in 1760 before he had completed his fifteenth year. The next six years he spent in the study of medicine under Dr. John Redman, an eminent physician of Philadelphia. Among the first books on medicine read by him were the writings of Hippocrates, whose Aphorisms Dr. Rush translated from the Greek into English while yet an apprentice of seventeen years of age. About this time he began to keep a note book of remarkable occurrences which he continued through life, and from a part of this record we have the only account remaining of the yellow fever of 1793 in Philadelphia. Rush was one of Dr. Shippen's ten pupils who attended the first course of anatomical lectures given in this country. At the expiration of his apprenticeship in 1766, he went to the Medical School of the University of Edinburgh, Scotland, which at that time had the greatest reputation of any Medical School in Europe, and from this institution he received the degree of Doctor of Medicine in 1768. The Trustees of Princeton appointed Dr. Rush their commissioner to solicit Dr. Witherspoon of Paisley, Scotland, to accept the Presidency of the College, and the Presbytery of which Dr. Witherspoon was a member to accept his resignation, both of which commissions he ably and successfully executed in 1767. From Edinburgh he went to London, where he spent the winter of 1768 attending the hospitals and medical lectures; the following spring he went to France, and in the fall of the same year he returned to Philadelphia. In 1769 he was elected Professor of Chemistry in the College of Philadelphia and in 1789 succeeded to the Chair of Theory and Practice of Medicine, vacated by the death of Dr. John Morgan. In 1791 he was appointed Professor of the Institutes and Practice of Medicine, and of Clinical Practice in the reunited University of Pennsylvania, and on the resignation of Dr. Kuhn in 1804, he received the additional Professorship of the Practice of Physic. These last three Professorships he held until the end of his life. When he began his teaching in 1769 there were some twenty students in his class, and in 1812, just before the close of his career, they amounted to four hundred and twenty. He was active in the national service during the Revolution and early national period, having been Fleet Surgeon in the Pennsylvania Navy from September 1775, to July 1776, member of the Continental Congress from July 20, 1776 to July 1777, a signer of

the Declaration of Independence and Physician General of the Revolutionary Army in the Middle Department in 1777. He was a member of the Pennsylvania Convention for the adoption of the Federal Constitution in 1787, resident Port Physician of Philadelphia, 1790-1795, and Treasurer of the National Mint from 1799 until his death. He was a member of the staff of the Pennsylvania Hospital for 1783. His influence was instrumental in establishing Dickinson College in Carlisle, Pennsylvania, and in bringing from Scotland the Rev. Dr. Nisbet of Montrose to preside over it. The Philadelphia Dispensary, the first of the kind in the United States, owes its origin to Dr. Rush. He arranged with Dr. Moyes, the blind philosopher, to give a public lecture, the proceeds of which were used as a nucleus for private contributions, which came in so rapidly as to make possible the organization of the institution in 1786. He was an active member of the Society for Promoting Political Inquiries which usually met at Dr. Franklin's house, and in 1787 he read before that society an important paper on the effect of public punishments upon criminals and upon society. In 1808, he with Robert Ralston, formed the Philadelphia Bible Society, the first of its kind in that city. In 1768 he was elected to the American Philosophical Society, was one of its Secretaries in 1773, Vice-President from 1797 to 1801 and contributed six papers to its Transactions. He was President of the American Society for the Abolition of Slavery; President of the Philadelphia Medical Society; one of the Founders of the College of Physicians of Philadelphia and a member of many other learned and benevolent societies both in America and Europe. During his whole life he was active in improving the practice of medicine and entirely changed the methods of diagnosing diseases, in many cases originating new treatments. He started among other things the practice of bleeding, and urged the extensive use of calomel. The height of his reputation as a physician was attained during the epidemic of yellow fever in Philadelphia in 1793, when he devised methods of treatment of that disease which were successful, thus proving his assertion that the disease could be cured. The printed works of Dr. Rush consist of seven volumes, six of which treat of medical subjects and include a volume of introductory lectures; the seventh is a collection of essays, literary, moral, and philosophical. Among his writings his Inquiry into the Effects of Ardent Spirits upon the Human Body and

Mind has been more read than any other of his works. Many large editions of this tract have been distributed in the United States. His account of the climate of Pennsylvania is also a masterpiece of its kind. He received the degree of Doctor of Laws from Yale in 1812. In January 1776 he married Julia, daughter of the Hon. Richard Stockton of New Jersey. They had thirteen children, one of whom held the office of Secretary of the Treasury of the United States. Dr. Rush died in Philadelphia, April 19, 1813, in the sixty-ninth year of his age.

[Portrait on page 76.]

WILSON, James, 1742-1798.

Professor English Literature 1773-1779, Law 1790-1798.

Born near St. Andrews, Scotland, 1742; educated at Glasgow, St. Andrews and Edinburgh; in 1761 emigrated to New York, and came to Philadelphia, 1766; Prof. of English Language in the College of Philadelphia, 1773; studied law, and practiced in Reading, Carlisle, Annapolis and Philadelphia; member of Pa. Provincial Convention, 1774 and 1775, and of Congress until 1787; signer of the Declaration of Independence; a Colonel in the Revolutionary Army; member of the Convention to form the Constitution of 1787, and of the Pa. Ratification Convention; received degree of A.M. from the College of Philadelphia, 1766; LL.D., 1790; Prof. of Law in the College, 1790; series of law lectures have been published; Trustee of the College, 1779-91; Justice of the Supreme Court of the U. S., 1789-98; died 1798.

JAMES WILSON, LL.D., one of the most prominent men in America during the Revolutionary period, was born in Scotland, near St. Andrews, September 14, 1742. He studied at St. Andrews, Edinburgh and Glasgow, at the last named University having Drs. Blair and Watts for his tutors. In 1761 he emigrated to America, staying for a time in New York, and removing to Philadelphia in 1766. Being a well educated man he was engaged for a time as Professor of English Literature at the College. Subsequently he studied law with John Dickinson, and practiced for a short time each at Reading, Carlisle and Annapolis before becoming a member of the Philadelphia Bar in December 1778. From that time forward he had a brilliant career as advocate, judge, statesman, professor and writer. He was given the honorary degree of Master of Arts by the College of Philadelphia in 1766 and that of Doctor of Laws in 1790. He was a member of the Pennsylvania Provincial Convention in 1774 and 1775, and a member of Congress from 1775 to 1778, in 1782, 1783, and from 1785 to

1787. He was a signer of the Declaration of Independence and when the war broke out was appointed a Colonel in the army. In 1787 he was a member of the Constitutional Convention, and of the Pennsylvania Ratification Convention. He was a Commissioner to treat with the Indians and a member of the Pennsylvania Constitutional Convention of 1789. On September 29, 1789, he was appointed by Washington a Justice of the Supreme Court of the United States and served as such till his death. In 1779 he had been elected a Trustee of the College of Philadelphia, and in 1790 when it was determined to establish a Law Professorship he was chosen to act in that capacity. He delivered a first and a portion of a second course of lectures, but was then prevented from completing the course by certain official duties and never resumed it, though he held the position nominally until his death. These lectures have been published in three volumes. In 1791 Judge Wilson was appointed by the Lower House of the Assembly of Pennsylvania to revise and digest the laws of the Commonwealth, but the plan was not carried out owing to the lack of a legislative appropriation. He was a Director of the Bank of North America, and held various other public positions. Late in life he became involved in land speculation, and became overwhelmed with misfortune, lying in a debtor's prison at the suit of Pierce Butler, a fellow member of the Federal Constitutional Convention. His writings on politics and jurisprudence and his judicial decisions enjoy a high reputation. In the principles of finance and of constitutional law as it then existed he was particularly learned. As an orator he held high rank both as an advocate and as a parliamentary debater. He was one of the ablest and most active of the members of the Federal Convention. He was also in some respects the ablest member of the first Supreme Court. Washington, passing by the Wythes and Pendletons of Virginia, chose him as the preceptor of his nephew Bushrod Washington. He was a man of large and powerful frame and appears in the portrait which now hangs in the University Law School with an open honest face and with bright blue eyes beaming mildly from behind heavy, silver-rimmed spectacles. He died while on a visit to Edenton, North Carolina, August 28, 1798. He married first, Rachel, daughter of William Bird of Berks county, Pennsylvania; second, Hannah, daughter of Ellis Gray of Boston, Massachusetts.

[Portrait on page 98.]

CANNON, James, 1740-1782.

Professor Mathematics 1773-1782.

Born in Edinburgh, Scotland, 1740; came to America, 1763; educated at Univ. of Edinburgh; graduated College of Philadelphia, 1767; was Tutor and Prof. of Mathematics in the College; active on the patriot side during the Revolution; author of the *Cassandra Letters*; active in state politics; died 1782.

JAMES CANNON, A.M. was born in Edinburgh, Scotland, in 1740. His early education was received at the University of Edinburgh, and coming to America in 1763, he graduated from the College of Philadelphia with the Class of 1767. When the Revolution broke out he was Professor of Mathematics in the same institution but nevertheless took an active position on the patriot side. It appears from the diary of Christopher Marshall that he was the leading spirit in private meetings held to select candidates to be placed before the people in opposition to those representing more conservative sentiments. He was very active in forming and organizing the Association of Philadelphia, and was Secretary of the American Manufactory formed by citizens of Philadelphia at the suggestion of Congress to manufacture woolen, linen and cotton fabrics. He was the author of the *Cassandra Letters*, which elevated him in the esteem of the patriots. He became a member of the Constitutional Convention of Pennsylvania July 15, 1776, and being placed on the committee appointed to draw up the instructions to the delegates of Pennsylvania in Congress, he became the author of that instrument. The Convention made him a Justice of the Peace for Pennsylvania. He served as a member of the Council of Safety from July 24, 1776, to December 4, 1777, one of the few who were not members of the Supreme Executive Council. He died January 28, 1782, at Philadelphia, and was buried in Christ Church graveyard.

PENN, Richard, 1735-1811.

Benefactor — Trustee 1772-1775.

Born in England, 1735; studied at Oxford but did not graduate; then studied law but became discouraged; came to Pennsylvania with his older brother in 1763, and after his father's death came a second time, now as Lieutenant-Governor, in 1771; he quarrelled with the other members of the family, and was superseded by his younger brother in 1773; subsequently he held another office in the Provincial government; on the growth of strained relations between the Colonies and England he favored the former and gave testimony favorable to them before the House of Lords, Nov. 10, 1775; he remained in England, however, during the war and was reduced to great poverty; later the Pennsyl-

vania estates devolved in part upon him and his fortunes improved; he was a member of Parliament 1796 to 1808; died 1811.

RICHARD PENN was born in England, in the year 1735; he was the son of Richard Penn who was the son of William Penn the first Proprietary and Hannah Lardner. He entered St. John's College, Cambridge, but left it without taking a degree. The family put him to the law, but as he lacked industry and perseverance, the study grew irksome, and he desired some easier means of support. He reached his twenty-seventh year without



RICHARD PENN

From original painting at Pennsylvania Historical Society

having chosen a profession. His brother having been appointed Lieutenant-Governor, he accompanied him to Pennsylvania. They arrived in Philadelphia, October 30, 1763. John Penn gave him a seat in the Council, and he qualified on January 12, 1764. He was the first President of the Jockey Club, founded in November 1766, with about eighty members to "encourage the breeding good horses and to promote the pleasures of the turf." The members subscribed upwards of £3 each per annum and in October of each year there were races for the gentlemen's purse of 100 guineas, the sweep-stakes of 25 guineas, the ladies' purse (for colts and fillies) and the City plate of £50 contributed by the vintners, innkeepers and others

benefited by the concourse of strangers. The club lasted until the Revolution. Richard Penn was President until succeeded by Andrew Allen in 1769. In the beginning of the latter year he returned to England. After his father's death, he was appointed by his uncle and brother Lieutenant-Governor of Pennsylvania and the Lower Counties, and arrived the second time in Philadelphia, October 16, 1771. With pleasing manners and endeavoring to keep on good terms with the people, he succeeded in making himself the most popular of his family. All his dealings with the Provincial Assembly were very friendly. He was especially attentive to the commercial interests of the Colony and during his administration, a degree of unexampled prosperity prevailed. He had a dispute with his brother concerning his father's will, claiming that the manors were not appurtenant to the Proprietaryship, but were included in the private real estate directed to be sold for the benefit of the residuary legatees. As a result of this dispute, he was superseded in the Governorship by his brother John, who arrived in August 1773. Richard Penn showed the same interest in the College which his father and uncle had given such abundant proof of and was elected a Trustee in 1772. He was President of the Board for the year 1773-1774. Richard Penn's feelings were enlisted against the oppressive acts of the British Government. He entertained the members of the Continental Congress at his house, two or three dining with him each day, Washington being among his guests. He left Philadelphia in the summer of 1775, carrying with him the Second Petition of Congress to the King. He and Arthur Lee, agent for Massachusetts in London, delivered it to the Earl of Dartmouth, Secretary of State for the Colonies, on the 1st of September. On the 10th of November, 1775, he appeared at the Bar of the House of Lords, and was sworn and examined. His answers were: "He had heard of no violence or unfair proceedings in the election of members of Congress, they were men of character, and their proceedings conveyed the sense of the provinces, which would be governed by their decisions: he thought they did not carry on the war for independence, they had taken up arms in defence of their liberties,—it was the opinion of all he had ever conversed with that America was able to resist the arms of Great Britain, the spirit of resistance was quite general; when he left Pennsylvania the province had twenty thousand men in arms, and forty-five hundred had been

since raised, he supposed there were sixty thousand fit to bear arms and he believed all would willingly come forward if necessary; Pennsylvania raised more than enough corn to feed her people and could manufacture certain munitions of war in good quantities; the Colonies had great hopes of the petition which he had brought over, it was styled the Olive Branch; if it were not granted, they might form foreign alliances, and, if they did, would stick by them; most thinking men thought that its refusal would be a bar to all reconciliation, the colonies were inclined to acknowledge the imperial authority of Great Britain, but not in taxation; it would not be safe in the colonies to write against Congress, etc." Lord Lyttleton said that Penn "betrayed throughout the whole of his examination the indications of the strongest prejudice." In England he became very poor. After the war however his property improved, and John Penn agreed to pay him one-fourth of whatever sums were received by him as his share of the £130,000 named in the Divesting Act, and one-third of all sales made by him since that Act was passed. John Penn's death in 1795, moreover, vested in him a life estate in the entailed property. He was a member of the British Parliament from 1796 to 1806, representing the borough of Lancaster until 1802, and afterwards the borough of Haslemere. He visited Philadelphia in 1808, and appears in its directory for that year as dwelling at No. 210 Chestnut Street, between Eighth and Ninth. He died at Richmond, Surrey, England, May 27, 1811, in his seventy-sixth year. He married, May 21, 1772, Mary, daughter of William Masters and his wife Mary, daughter of Thomas Lawrence, the Councillor. He had five children.

WHITE, William, 1748-1836.

Trustee 1774-1836, President of the Board 1790-1791.

Born in Philadelphia, 1748; graduated College of Philadelphia, 1765; A.M., 1767; D.D., 1783; Clergyman P. E. Church; Rector United Parishes of Christ, St. Peter's and St. James's churches, 1779-1836; Chaplain to Congress, 1777-85 and 1789-1801; first Bishop of Pa., 1786-1836; Presiding Bishop of the Episcopal Church in U. S., 1796-1836; Trustee College of Philadelphia and Univ. of Pa., 1774-1836; Pres. Board of Trustees, 1790-91; died 1836.

WILLIAM WHITE, D.D., First Bishop of Pennsylvania, was born Philadelphia, March 24, 1748, the son of Colonel Thomas and Esther (Hewlings) White, widow of John Neuman. He entered the Academy of Philadelphia at the

age of seven and later entered the College, where he graduated in 1765, receiving the Master of Arts degree in 1767. He then pursued theological studies which he completed in 1770. It was necessary at that time for candidates to go to England to be ordained, so he sailed the same year and was ordained in the Royal Chapel, December 23, 1770, as Deacon and in 1772 as Priest in Fulham Chapel by the Bishop of London. Returning to this country he became Assistant Minister of Christ and St. Peter's Churches, and in 1779 Rector of the united parishes of Christ, St. Peter's and St.



WILLIAM WHITE

James. He was an active supporter of the Colonial Cause in the Revolutionary War, leaving Philadelphia in 1777 during the British occupation of the city. He was Chaplain to Congress, 1777-1785 and again from 1789 to 1801. Returning to Philadelphia after its evacuation by the British he devoted his energies to the rebuilding of the Episcopal Church in America, and was President of the first general convention of the church called to form a constitution and make the necessary alterations in the liturgy consequent upon a separation from the mother country. In 1786 he was elected the first Bishop of Pennsylvania and sailed for England to obtain consecration. After considerable difficulties he succeeded and returned to Philadelphia in 1787.

He was elected a Trustee of the College of Philadelphia in 1774 and continued to serve after the union until his death. He was President of the Board of Trustees of the College, 1790-1791. In addition to his Episcopal duties he also served as President of the Philadelphia Bible Society, the Prison Society, the Deaf and Dumb Asylum and the Institute for the Blind. From 1796 to his death he was the Presiding Bishop of the Episcopal Church in the United States and as such consecrated eleven Bishops. He was the author of numerous works on religious subjects, among others: Lectures on the Catechism, Comparative view of the Controversy between the Calvinists and the Arminians and Memoirs of the Protestant Episcopal Church in the United States. He was granted the honorary degree of Doctor of Divinity by the College of Philadelphia in 1783. In 1773 he married Mary, daughter of Captain Henry Harrison, Mayor of Philadelphia. He died in Philadelphia, July 17, 1836.

SHIPPEN, William, 1736-1808.

Founder Medical School—Prof. Anatomy and Surgery 1774-1806.

Born in Philadelphia, 1736; was educated at Princeton, graduating A.B. in the Class of 1754; studied medicine under his father in Philadelphia, and under the Hunters at Edinburgh, where he took his degree of M.D. in 1761; he delivered the first continuous course of lectures on Anatomy given in America, and after Dr. John Morgan had been elected to teach the Theory and Practice of Medicine Dr. Shippen was elected September 23, 1765, to teach Anatomy, and thus the Medical School was inaugurated; April 1777, he was put by Congress in charge of all the military hospitals under the new government, a position which he held until 1781; died 1808.

WILLIAM SHIPPEN, generally known as Dr. William Shippen the younger, son of William and Susannah (née Harrison) Shippen, (who was the daughter of Joseph Harrison, of Philadelphia) was born in Philadelphia, October 21, 1736; graduated Bachelor of Arts Princeton 1754, and delivered the Valedictory for his class. He studied with his father until 1758, when he went to England, and studied under Drs. John Hunter, William Hunter and MacKenzie. He graduated Doctor of Medicine from the University of Edinburgh in 1761 and after a short visit to France, returned to Philadelphia in May 1762. On November 16, 1762, he commenced the first course of lectures on Anatomy ever delivered in America. The opening lecture was given in the State House.

He continued to lecture until September 23, 1765, when he was elected Professor of Anatomy and Surgery in the Medical School of the College of Philadelphia of which he and Dr. John Morgan were the founders. On July 15, 1776, he was appointed "Chief Surgeon for the Flying Camp." In March 1777 he laid before Congress a plan for the organization of a hospital department, which with some modifications, was adopted, and on April 11, 1777, he was unanimously elected Director General of all the Military Hospitals for the Armies of the United States, resigning January 3, 1781. On the reorganization of the College of Philadelphia as the University of the State of Pennsylvania, he was elected May 11, 1780, Professor of Anatomy and Surgery which position he retained during the subsequent changes till his resignation in 1806. He was one of the originators of the College of Physicians, 1787, and was its President from 1805 until his death. He was elected to the American Philosophical Society in November 1777. He married about 1760, Alice, daughter of Colonel Thomas Lee, of Virginia, and Hannah Ludwell his wife. She was born in Virginia, June 4, 1736, and died in Philadelphia, March 25, 1817. Dr. Shippen died in Germantown, Philadelphia, July 11, 1808. He had eight children.

[Portrait on page 74.]

MIFFLIN, Thomas, 1744-1800.

Trustee 1773-1791.

Born in Philadelphia, 1744; graduated College of Philadelphia, 1760; merchant; member Provincial Assembly, 1771-75; member Continental Congress, 1782-83; President of Congress, 1783; Speaker Pa. Assembly, 1785-88; member Constitutional Convention, 1787; Pres. Supreme Executive Council of Pa., 1788-90; Pres. Constitutional Convention of Pa., 1790; Gov. of Pa., 1790-99; member State Legislature, 1799-1800; Quartermaster-Gen. and Major-Gen., Continental Army and Aide-de-Camp to Gen. Washington; Trustee College of Philadelphia, 1773-1791; died 1800.

THOMAS MIFFLIN, Governor of Pennsylvania and President of Congress, was born in Philadelphia, January 1844, the son of John and Elizabeth (Bagnall) Mifflin. He graduated from the College of Philadelphia in 1760, after which he entered the counting-house of William Coleman. Returning from a tour of Europe which he made after attaining his majority, he went into business with his brother. He soon began to take an interest in public life, and although a member of

the Society of Friends he took a decided position against the encroachments of the Crown upon the liberties of the Colonies. He was elected to the Pennsylvania Assembly in 1771, was re-elected until 1775, and was also sent as one of the first delegates to Congress. As soon as war broke out, he became Major of a regiment for the defence of Pennsylvania, and shortly after went to Boston and became Aide-de-Camp to General Washington. In 1775 he was appointed Quartermaster-General, as Washington says "from a thorough persuasion of his integrity and my own experience of his activity." In 1776



THOMAS MIFFLIN

he was made Brigadier-General and was most active in recruiting and organizing volunteers in that period of the war when every man was needed. With four other members of the Assembly he travelled through Pennsylvania, awakening enthusiasm and inciting the people to take up arms for the defence of their country. He succeeded in raising a considerable force which took part in the movements following the Battle of Trenton. In 1778 he was appointed Major-General and although much criticism has been since made of his conduct as Quartermaster-General, Congress seems to have had always implicit confidence in him as is evidenced by their placing in his hands \$1,000,000 to settle the claims incurred during his

administration of the office. He was returned to the Continental Congress as Delegate from Pennsylvania in 1782, and in 1783 he became President of that body, receiving General Washington's resignation of the command of the army December 23. After presiding over Congress for a year Mifflin retired, but in 1785 was recalled to public life as Speaker of the Assembly of Pennsylvania. In 1787 he was a member of the Convention which framed the Constitution of the United States, and in 1788 became President of the Supreme Executive Council of Pennsylvania. In the discharge of the functions of this office he was the head of the state government until the Constitution of 1790 was framed under his direction as President of the Convention. At the first election under this constitution, he was chosen Governor and served till 1799, being twice re-elected. During his administration he suppressed the Whiskey Riots near Pittsburg. In 1799 he was again elected to the Assembly. He was chosen a Trustee of the College of Philadelphia in 1773 and served until its union with the University of the State of Pennsylvania in 1791. His wife was Sarah, daughter of Morris Morris. He died January 20, 1800, in Lancaster, Pennsylvania where the Assembly had its sessions.

TILGHMAN, James, 1716-1793.

Trustee 1775-1788.

Born near Chestertown, Md., 1716; went to Philadelphia to practice law, 1760; Sec. of the Pa. Proprietary Land Office, 1765; Provincial Councillor, 1767; Trustee of the College of Philadelphia, 1775-1788; died 1793.

JAMES TILGHMAN, Provincial Councillor of Pennsylvania and last Secretary of the Proprietary Land Office of Pennsylvania, was born at the old Tilghman country seat on the Chester River, Eastern Shore of Maryland, December 6, 1716, the son of Richard and Anna Maria (Lloyd) Tilghman. He was the grandson of Richard Tilghman, a Surgeon in the English Navy who bought the manor of Canterbury, on the Choptank River, Maryland, which was granted him by patent dated January 17, 1659, and occupied in 1661. In 1663 Richard Tilghman established his seat on the Chester River, the Hermitage, still in the possession of the family. James Tilghman studied law and entered into practice in Annapolis, whence he removed to Philadelphia about 1760. He had attained an eminent position in his profession when he was asked by John Penn in 1765 to succeed William Peters as

Secretary of the Proprietary Land Office. Mr. Tilghman was already familiar with the land business of Lord Baltimore. Proprietary of the adjoining Province. He accepted the position first stipulating a salary of \$1500, besides certain fees. Mr. Tilghman reduced the work of the Land Office to a regular and equitable system. He was chosen a member of Common Councils of the City of Philadelphia in 1764, and became a member of the Provincial Council in 1767. He retained this last position and that of Secretary of the Land Office until the outbreak of the Revolution. Mr. Tilghman's position in war times was a difficult one. At the beginning of hostilities he favored a compromise of the troubles between England and the Colonies, but he soon came to be regarded as a loyalist. He had wished a repeal of the Acts of Parliament obnoxious to the Colonies and had denounced the Boston Port Bill, but he also denounced the Boston Tea-Party. On the approach of the British to Philadelphia he was placed under arrest by the state authorities, but was soon paroled. Permission was granted him, on August 31, 1777, to visit his family in Maryland and return within a month. The occupation of Philadelphia by the British prevented his return and he remained at Chestertown. On May 16, 1778, he was discharged from parole. He was a Trustee of the University of Pennsylvania (then the College of Philadelphia) from 1775 to 1788, when he resigned. He married September 30, 1743, Anne Francis. He died August 24, 1793, at Chestertown.

sition to the Stamp Act, was a signer of the Non-Importation Agreement, and in 1775 was made Vice-President of the Committee of Safety formed for the defence of Pennsylvania. In the same year, he was appointed one of the delegates to the Continental Congress by the Assembly of Pennsylvania, and was made Chairman of the Secret Committee whose function was to procure arms and ammunition. In April 1776 he was empowered by Congress to negotiate bills of exchange and from that time he became the chief financial agent of the Colonies. When the Declaration of Independence



ROBERT MORRIS

MORRIS, Robert, 1734-1806.

Trustee 1778-1791.

Born in Liverpool, England, 1734; merchant; member Continental Congress; signer Declaration of Independence; financier of the United Colonies during the Revolution; signer of the Articles of Confederation; Superintendent of Finance, 1781-84; member Assembly of Pa., 1786; member Constitutional Convention of U. S., 1787; first U. S. Senator from Pa., 1789-95; Trustee of College of Philadelphia, 1778-91; died 1806.

ROBERT MORRIS, Patriot and Statesman, was born in Liverpool, England, January 31, 1734 (new style). He was the son of Robert Morris, who came to America when his son was of an early age and engaged in the tobacco trade. The younger Robert Morris entered the counting-house of Charles Willing and subsequently became a partner in the firm of Willing & Morris, probably the best known importing house in the Colonies. Morris took an active part in the oppo-

was proposed he at first voted against it, thinking that the time had not yet come to take such decided measures but afterwards signed the document in August 1776. In December of the same year, General Washington sent word to Morris from Trenton that he would be unable to hold the Continental Army together unless a large amount of specie were at once supplied. Morris borrowed this sum on his personal credit and forwarded it to Washington, and it is not too much to say that it was his efforts which turned the tottering scale of the fate of the Revolution in the direction of success. In 1777 he was again sent as delegate to Congress and declined the Presidentship of that body, serving however on the Committee of Com-

merce, which had succeeded the Secret Committee. He signed the Articles of Confederation in 1778, and in 1780 organized the Bank of Pennsylvania "to supply the army with provisions for two months" and subscribed to it £10,000. In 1781 he was chosen Superintendent of Finance under the Articles and once more at a critical time he saved the finances of the country and made possible the military successes which brought the Revolution to a successful conclusion. In addition he founded the Bank of North America, the first incorporated National Bank, and when the Assembly of Pennsylvania annulled the Charter of the Bank he sought and obtained a seat in the Assembly for the purpose of securing a rescinding of this action. In 1787 he was one of the Convention which framed the Constitution of the United States, and was the First Senator of the United States from Pennsylvania. President Washington offered him the Secretaryship of the Treasury which he declined. After the end of his term in the Senate, he speculated largely in unimproved land, and was finally ruined through the dishonesty of his partner. He was imprisoned for debt from February 16, 1798, until August 26, 1801, and was allowed to remain in prison without any assistance from the nation he had served so well. Mr. Morris was married March 2, 1769, to Mary White. He was a Trustee of the College of Philadelphia from 1778 to the Union in 1791. He died May 7, 1806.

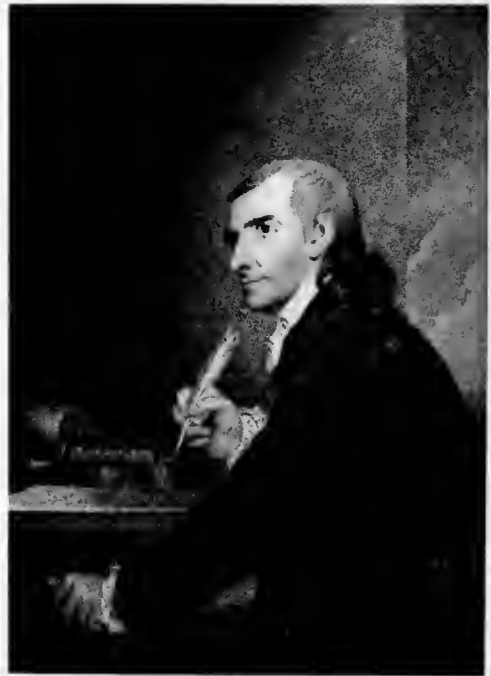
HOPKINSON, Francis, 1737-1791.

Trustee 1778-1791.

Born in Philadelphia, 1737; graduated College of Philadelphia, 1757; lawyer; member Provincial Council of N. J., 1774-76; delegate to Continental Congress, 1776-77; signer Declaration of Independence; Chief Navy Department of the Confederation and Treas. Continental Loan Office; Judge of the Admiralty, 1779-89; Trustee College of Philadelphia, 1778-91; first Judge U. S. Dist. Court of Pa., 1790-91; author of poems and various articles; LL.D. College of Philadelphia, 1790; died 1791.

FRANCIS HOPKINSON, LL.D., a graduate of the first class to receive degrees from the College of Philadelphia, and one of the most prominent patriots in the Revolutionary War, was born in Philadelphia, September 21, 1737, son of Hon. Thomas and Mary (Johnson) Hopkinson. He graduated from the College of Philadelphia in 1757, and took the degree Master of Arts in 1760, and that of Doctor of Laws in 1790, also receiving the Master of Arts degree from the College of New

Jersey, *gratiae causa*, in 1763. He studied law under Hon. Benjamin Chew and was admitted to the Bar in 1761. His first public service was to act as Secretary to a conference between the Governor and the Indians of the Lehigh region. In 1759 he became Secretary of the Library Company, as also of the Vestry of Christ Church and Saint Peter's, where he made use of his talent for music by instructing the children in psalmody. He visited England in 1766, and in 1768 he married Ann Borden of Bordentown. From this time on he took an active part in the politics of his country.



FRANCIS HOPKINSON

In March 1772 he was made Collector of the Port of Newcastle, and in 1774 he was appointed to a seat in the Provincial Council of New Jersey. In 1776 he resigned all offices which were incompatible with his allegiance to the Colonial party and became a delegate to the Continental Congress. As a member of this body he signed the Declaration of Independence. In the same year he was appointed by Congress to "execute the business of the Navy under their direction." All through the war he was constantly writing prose and verse, mostly of a satirical character, in support of his political faith. The most famous of these articles was the Battle of the Kegs, written in 1778, and instantly achieving a widespread popularity. In

1779 he was appointed Judge of the Admiralty from Pennsylvania and he presided over this court until Admiralty Jurisdiction became vested in the United States. In 1778 he became a Trustee of the College of Philadelphia serving in that capacity until his death. He was an active participator in the debates of the Convention of 1787 which formed the Constitution of the United States, and he produced at this time a humorous work, entitled *The History of a New Roof*, which seems to have had a great influence upon some of the most distinguished men of the time. He died of apoplexy, May 9, 1791.

HUTCHINSON, James, 1752-1793.

Trustee 1779-89, Prof. *Materia Medica* and Chem. 1789-93.

Born in Bucks Co. Pa., 1752; educated at an academy in Burlington, N. J., at a school in Virginia, and possibly in the College of Philadelphia; received medical degree from College of Philadelphia, 1774; studied medicine in England, 1774-77; in medical service in the patriot cause in America, 1777-81; active in Philadelphia in political affairs during the Revolution and subsequently; held various medical appointments in Philadelphia, 1777-93; Trustee of the University, 1779-89; Prof. of *Materia Medica* and Chemistry, 1789-93; one of the incorporators of the College of Physicians of Philadelphia; died 1793.

JAMES HUTCHINSON, M.D., an influential physician and patriot of Revolutionary times, was born in Wakefield Township, Bucks county, Pennsylvania, January 29, 1752, his father and mother both being members of the Society of Friends. His early education was obtained in an academy at Burlington, New Jersey, and later in a Virginia school, presumably at Alexandria. According to the family tradition he studied and obtained the degree of Bachelor of Arts at the College of Philadelphia, but there is no record of the fact in existence. He did, however, obtain the degree of Bachelor of Medicine from the College accompanied by a gold medal for superior knowledge of Chemistry in the year 1774. From 1773 to 1775 he was also Apothecary of the Pennsylvania Hospital. He then went abroad, where he studied in London under Dr. John Fothergill. He was recalled to America by the outbreak of the Revolution and departed from England by way of France in 1777. He was there intrusted by Franklin with important despatches to Congress. His vessel was chased by a British warship and he only succeeded in reaching the American coast with his despatches by escaping under fire in an open boat, the passen-

ger vessel being subsequently captured with all his personal belongings, including a medical library which he had gathered in England and France. He then served in the army as a Surgeon, with two assistants in 1777 inoculating three thousand four hundred ninety-six men while the army lay at Valley Forge. In 1777 he was with General Sullivan in the expedition against Rhode Island; from 1778 to 1781, he was Surgeon of the Pennsylvania State Navy. He was a member of the Philadelphia Committee of Safety after the evacuation of that city by the British. He was active



JAMES HUTCHINSON

in all local political affairs at that time and a member of the Committee of Correspondence of the first Democratic Society formed in the United States just before his death in 1793. He was one of the physicians of the Pennsylvania Hospital in 1777 and again from 1779 to 1793. He and Dr. Rush were the health officers of the port of Philadelphia from 1778 to 1793. He was a member of the American Philosophical Society. His official connection with the University of Pennsylvania, a connection which has been continued through a line of descendants and representatives to the present time, was begun in 1779 when he was named as one of the Trustees of the University of the State of Pennsylvania in the Act of Reorganization

of the institution. He served until 1781; he was then elected Professor of the Practice of Medicine but declined, as he did also an election to the Chair of Materia Medica and Chemistry in 1783. He accepted this latter position, however, on a re-election in 1789 after the old College authorities had been reinstated, and held it also in the reunited institution until his death. He was one of the incorporators and an officer of the College of Physicians of Philadelphia and has his name inscribed on their tablet to their Fellows "Who have fallen whilst in the performance of duty during pestilence or war." His right to this honor arises from his having contracted yellow fever in his charitable practice during the epidemic of that disease in Philadelphia in the year 1793, dying of the attack September 5, of that year at the age of forty-two. Dr. Hutchinson was twice married; first, to Lydia, daughter of John Biddle and sister of Clement Biddle, and second, to Sidney Howell also of Philadelphia.

**MUHLENBERG, Frederick Augustus,
1750-1801.**

Trustee 1779-1786.

Born in Montgomery Co., Pa., 1750; educated at Univ. of Halle, Germany; clergyman of the Lutheran Church; member of Continental Congress, 1779; Speaker of the Assembly, 1781-2; Register of Wills and Recorder of Deeds for Montgomery Co., 1784; member first four Congresses of U. S., and twice Speaker; Trustee Univ. of State of Pa., 1779-1786; died 1801.

FREDERICK AUGUSTUS MUHLENBERG, Clergyman and Statesman, was born at the Trappe, Montgomery county, Pennsylvania, June 2, 1750, the son of Rev. Henry Melchior and Anna Maria (Weiser) Muhlenberg. He was educated at the University of Halle, Germany, returning in 1770, when he was ordained to the ministry of the Lutheran Church. From 1773 to 1775 he was Pastor of the Church at Lebanon, Pennsylvania, and then became Pastor of Christ German Lutheran Congregation in New York City, which charge he left in 1776 on account of his well known sympathy with the Colonial cause, which made it impossible for him to remain in New York. He had charges at New Hanover, Oley and New Goshenhoppen until 1779, when he left the ministry to enter the political field, being chosen to the Continental Congress in that year. In 1780 he was elected a member of the Assembly of Pennsylvania and was Speaker of that body in 1781-1782. Besides being

one of the first Justices of Montgomery county he was also commissioned Register of Wills and Recorder of Deeds in 1784. He was President of the Pennsylvania Convention to ratify the Federal Constitution, and at the first election under the new government he was elected to Congress on the Anti-Federal ticket. He was Speaker of this Congress and was re-elected to the Second, Third and Fourth Congress. Governor McKean appointed him in 1800 Receiver-General of the Pennsylvania Land Office. He was a Trustee of the University



FREDERICK A. MUHLENBERG

From an engraving made from painting in possession of the family

of the State of Pennsylvania from 1779 to 1786. He died in Lancaster, Pennsylvania, the seat of the State Government, June 4, 1801.

CADWALADER, John, 1742-1786.

Trustee 1779-1786.

Born in Philadelphia, 1742; non-graduate of Class of 1760, College of Philadelphia; merchant; member of Committee of Safety, Philadelphia; member Provisional Congress and of Md. Legislature; Brig. Gen. in service of Pa. and Md. during Revolutionary War; Trustee of the College of Philadelphia, 1779-86; died 1786.

JOHAN CADWALADER, a Trustee of the College of Philadelphia, and one of the most prominent Pennsylvanians during the Revolution, was

born in Philadelphia, January 10, 1742, son of Dr. Thomas and Hannah (Lambert) Cadwalader. He entered the College of Philadelphia with the Class of 1760, but did not graduate, leaving College to enter mercantile life with his brother, Lambert Cadwalader. He was one of the signers of the Non-Importation Agreement and at the outbreak of the war he commanded the Philadelphia "Silk Stocking Company," officially known as the Third Battalion of Associators. He was also a member of the Committee of Safety. It was before this Battalion that the Rev. William Smith, First Provost



JOHN CADWALADER

of the College of Philadelphia, delivered his celebrated address in Christ Church in 1775. Being promoted to be Brigadier-General, he commanded the Pennsylvania troops in the winter campaign of 1776. General Cadwalader was at the head of the detachment which crossed the Delaware River on December 27, 1776, and joined General Washington, taking part in the Battle of Princeton. In his report to Congress Washington says: "General Cadwalader is a man of ability, a good disciplinarian, a man of good principles and of intrepid bravery." In 1777 he was chosen by Congress Brigadier-General of the Cavalry of the United States, but declined the appointment. He was, however, instrumental in organizing the militia of the Eastern

Shore of Maryland and afterwards rejoining Washington's Army, took part in the Battles of Brandywine, Germantown and Monmouth. He was always an enthusiastic supporter of Washington, and at the time of the "Conway Cabal," whose purpose was the substitution of General Gates for General Washington as Commander-in-Chief, he fought a duel with General Conway, in which the latter was dangerously wounded. This duel is referred to by Thackeray in *The Virginians*. In 1779 he became a Trustee of the College of Philadelphia, and also a member of the Legislature of Maryland. He was married twice: to Elizabeth Lloyd of Maryland, and Williamina Bond of Philadelphia. He died February 10, 1786, at Shrewsbury in Kent county, Maryland.

SMITH, Jonathan Bayard, 1742-1812.

Trustee 1779-1812.

Born in Philadelphia, 1742; graduated Princeton, 1760; Sec. of Committee of Safety, 1775; member of Continental Congress, 1777; Colonel of "Associators," 1777; Justice of the Court of Common Pleas, Quarter Sessions, and Orphans Court, 1778; Trustee of the University, 1779-1812; Auditor-General of Pa., 1794; died 1812.

JONATHAN BAYARD SMITH, Member of the Continental Congress and one of the Trustees of the University of the State of Pennsylvania, was born in Philadelphia, February 21, 1742, the son of Samuel Smith, the well-known merchant. He was educated at Princeton where he graduated in 1760. He entered mercantile life. Mr. Smith was among the first Philadelphians who advocated the independence of the Colonies. On the formation of the Committee of Safety in 1775, he was chosen Secretary, and in February 1777, he was chosen by the Pennsylvania Assembly a delegate to the Continental Congress. He was Prothonotary of the Court of Common Pleas from April 4, 1777, to November 13, 1778. It was he who presided at the memorable public meeting of the "Real Whigs" in Philadelphia on December 1, 1777, where resolutions were passed "That it be recommended to the Council of Safety that in this great emergency every person between the age of sixteen and fifty years be ordered out under arms." During 1777 Mr. Smith was commissioned Lieutenant-Colonel of a battalion of "Associators" under his brother-in-law, Colonel John Bayard. He later commanded a battalion. In 1778 he was appointed a Justice of the Court of Common Pleas, Quarter Sessions, and Orphans

Court, which post he held many years. Judge Smith became in 1779 a member of the first Board of Trustees of the University of the State of Pennsylvania. When the combination with the College of Philadelphia was made in 1791 under the name of the University of Pennsylvania he was elected by the University of the State of Pennsylvania a Trustee of the University of Pennsylvania and he held the position until his death. In 1792 he was chosen an Alderman, and in 1794 he was elected Auditor-General of Pennsylvania. He had already, in 1781, been one of the auditors of the accounts of the Pennsylvania troops in the United States service. From 1779 to 1808 he was a Trustee of Princeton. He was for forty years a member of the American Philosophical Society. He was a Grand Master of Masons in Philadelphia and a Vice-President of the Sons of Washington. He died in Philadelphia, June 16, 1812.

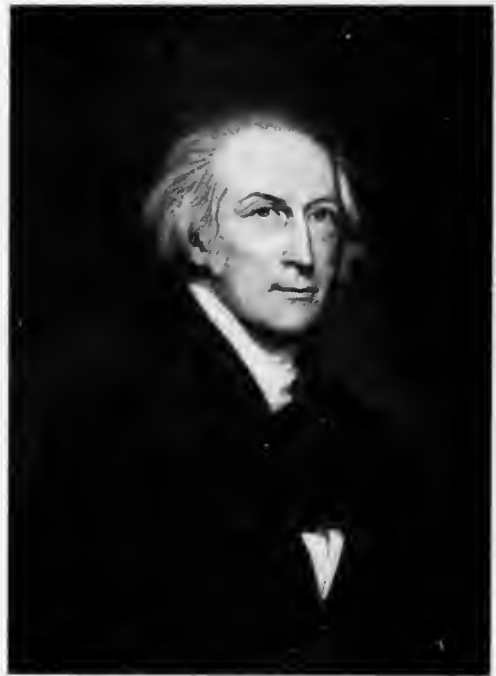
CLYMER, George, 1739-1873.

Trustee 1791-1813.

Born in Philadelphia, 1739; merchant; member Common Council of Philadelphia, 1767; Alderman, 1774; member Committee of Safety, 1775-76; member Continental Congress, 1776-80; signer of Declaration of Independence; member Assembly of Pa., 1785-88; member Constitutional Convention and of First Congress of U. S.; Trustee of the University, 1791-1813; died 1813.

GEOERGE CLYMER, Congressman and Patriot of the Revolution, was born in Philadelphia, March 16, 1739, of English parentage. His father having died when he was seven years of age, he was educated by his uncle and entered the counting-house of the latter. In 1767 he became a member of the Common Council of Philadelphia and was instrumental in refusing admission to the tea sent from England in 1773. He was elected an Alderman of the city in 1774, a member of the Committee of Safety in 1775, and being chosen a member of the Continental Congress in 1776, he signed the Declaration of Independence. In 1777 he was again elected to Congress, and in 1778 was appointed one of the Commissioners to frame the Indian Treaty at Fort Pitt. He was chosen Congressman again in 1780 and about this time assisted in organizing the Bank of North America. At the close of the Revolution he removed to Princeton, New Jersey, but returning to Philadelphia shortly after, he was elected to the Assembly, serving from 1785 to 1788. He was a member of the Conven-

tion which framed the Federal Constitution and in November 1788, he was elected to the First Congress of the United States. In 1791 he was appointed by President Washington a Collector of the Excise, but this position proving disagreeable on account of the insurrection he resigned in 1794. In 1791 he was chosen Trustee of the University of Pennsylvania which position he held till his death. He was appointed with Messrs. Pickens and Hawkins in 1796 to negotiate a treaty with the Creek and Cherokee Indians, which was consummated in the same year. After his withdrawal from



GEORGE CLYMER

public affairs he served as President of the Academy of the Fine Arts and of the Pennsylvania Bank. He died at Morrisville, Bucks county, Pennsylvania, January 23, 1813.

RITTENHOUSE, David, 1732-1796.

Professor 1779-82, Trustee 1779-80, Vice-Provost 1780-82.

Born in Philadelphia, 1732; chiefly self-educated; set up as an instrument maker, 1750; obtained high reputation by the production of his orrery, 1755; member and Pres. of the American Philosophical Society, and recipient of higher degrees from several Colleges; employed in running several early state boundaries; held public positions under Pa. State government during the Revolution and afterward; Director of

the U. S. Mint, 1792-95; Prof. Astronomy and Vice-Provost, 1779-82; Trustee, 1782-96; died 1796.

DAVID RITTENHOUSE, LL.D., was born near Germantown, Philadelphia, April 8, 1732. He was the son of Matthias Rittenhouse, an emigrant from Holland who settled on the Wis-sahickon, and Elizabeth (William or Williams) Rittenhouse. They were married in October 1728. David Rittenhouse was brought up on his father's farm. In his eighteenth year he built a work-shop by the side of the public road and set up business as a maker of clocks and mathematical instruments. When twenty-three years of age, he planned and made an orrery by which the revolutions of the heavenly bodies were presented more completely than ever before. This was purchased by the College of New Jersey, and he immediately made another for the College of Philadelphia. He was elected a member of the American Philosophical Society, January 19, 1768, and was appointed one of the Committee to observe the transit of Venus on June 3, 1769, and the transit of Mercury on November 9, of that year. His reports of these events gave him a great reputation. He was employed in settling the boundaries between New York and New Jersey in the same year, and afterwards those between Pennsylvania and Virginia; Pennsylvania and New York, and New York and Massachusetts. He was a member of the Pennsylvania Constitutional Convention of July 15, 1776, and the Pennsylvania Board of War, March 14, 1777, and Treasurer of Pennsylvania from 1777 to 1789. He was appointed Director of the United States Mint in 1792, and continued to hold that position until 1795, when he resigned on account of ill health. His connection with the College of Philadelphia began in the construction for it of the orrery before alluded to, and in his voluntary care given to the philosophical instruments used in experimentation in the courses on Natural Philosophy given there. He was given the degree of Master of Arts by this institution in 1767. When the University was re-constructed in 1779 he had been named as one of the new Trustees, but was instead made Professor of Astronomy, and the next year Vice-Provost. He resigned these positions in 1782, and was then elected a Trustee. He also obtained the degree of Master of Arts from the College of New Jersey in 1772 and from William and Mary in 1784, and was made Doctor of Laws by the College of New Jersey in 1788. In 1782 he was elected a member of the American Academy of Arts and

Sciences at Boston, and a fellow of the Royal Society of London in 1795. He succeeded Dr. Benjamin Franklin as President of the American Philosophical Society, and held that office to the time of his death, from 1791 to 1796. He died in Philadelphia, June 26, 1796, and was buried in the graveyard attached to the Pine Street Presbyterian Church. He married, first, Eleanor Colston, and second, Hannah Jacobs of Lancaster, Pennsylvania.

[Portrait on page 91.]

DAVIDSON, Robert, 1750-1812.

Professor Greek and Latin 1780-1782, History 1782-1784.

Born in Elkton, Md., 1750; received degree of A.B. at College of Philadelphia, 1771; A.M., 1780; D.D., 1784; became a Presbyterian minister; Prof. of Greek and Latin in Univ. of State of Pa., 1780-82; Prof. of History, 1782-84; Prof. of History and Belles-Lettres in Dickinson College, 1785-86; Pastor of a church in Carlisle, Pa., and then President of Dickinson College, 1804-09; published several works; died 1812.

ROBERT DAVIDSON, D.D., was born in Elkton, Maryland, in the year 1750. He entered the College of Philadelphia, graduated Bachelor of Arts in 1771, and was given the degree of Master of Arts in 1780, and in 1784 was made a Doctor of Divinity by the same institution. He was the Valedictorian of his class at graduation. Later he studied for the Presbyterian ministry and in due time was ordained. He was appointed Professor of the Greek and Latin Languages in the University of the State of Pennsylvania, which represented the old College of Philadelphia, and served from 1780 to 1782, when his title was changed to Professor of History, the first and for a long time the last instance of that title being used. During this time he was connected with the First Presbyterian Church as assistant to Rev. John Ewing, the Pastor, and Provost of the University. He resigned from the University in 1784 and was elected Vice-President and Professor of History and Belles-Lettres in Dickinson College which had just been established at Carlisle, Pennsylvania. He was Pastor of a church in Carlisle and Moderator of the General Assembly in 1796. He was President of Dickinson College from 1804 to 1809, when he resigned. He was elected a member of the American Philosophical Society in 1783. He published an Epitome of Geography in verse, The Christians A. B. C., New Metrical Version of the Psalms, besides numerous articles on a variety of subjects. Dr. Davidson died in Carlisle, Pennsylvania, December 13, 1812. He was married three times. It is

not known who was his first wife; his second wife was Margaret, daughter of Hon. John Montgomery of Carlisle, Pennsylvania; and his third wife was Jane, daughter of Hon. William Harris.

KUNZE, John Christopher, 1744-1807.

Professor German 1780-1784.

Born in Artern, Germany, 1744; graduated Leipzig Univ.; clergyman of Lutheran Church; Pastor St. Michael's and Zion's Churches, Philadelphia; Prof. German, Univ. of Pa., 1780-84; Pastor Trinity and Christ Churches, New York, 1784-1807; Prof. Oriental Languages Columbia, 1784-87 and 1792-99; died 1807.

JOHAN CHRISTOPHER KUNZE, D.D., was born in Artern, near Mansfield, Germany, August 5, 1744. He received his early education



JOHN C. KUNZE

at the orphanage in Halle, then studied theology at the University at Leipzig. For three years he taught at Kloster Bergen and then received a call to Philadelphia, where he was appointed second Pastor of St. Michael's and Zion's Congregations in 1770. In 1771 he married Margaretha Henrietta, daughter of the Reverend H. M. Muhlenberg. Shortly after this he founded a Lutheran Theological Seminary in Philadelphia, but this institution was soon closed on account of the outbreak of the Revolutionary War. In 1780 he became Professor

of German in the University of Pennsylvania which conferred upon him the honorary degrees of Master of Arts in 1780 and of Doctor of Divinity in 1783. This was the first instance of a Doctorate of Divinity being granted to a clergyman of the Lutheran Church in this country. In 1784 he resigned his chair in the University and accepted the call of the united churches of Trinity and Christ Church in New York. He also became Professor of Oriental Languages in Columbia, serving from 1784 to 1787 and again from 1792 to 1799. In 1786 he received the New York Ministerium which had been founded by his brother-in-law, Rev. Frederick A. C. Muhlenberg, in 1773. Dr. Kunze was the first Lutheran Pastor who made provision for stated English services. He translated the Catechism into English and in 1795 issued the first English-Lutheran hymn-book. He was also well known as a scientist, publishing in 1806 a new method for calculating the eclipses. He was official translator for Congress in 1785. Dr. Kunze died July 24, 1807.

MAGAW, Samuel, 1735-1812.

Professor Moral Philosophy 1782-1791, Vice-Provost 1782-1791.

Born in Pennsylvania, 1735; graduated in the first class College of Philadelphia, 1757; A.M. in course; Tutor in the College; went to England to obtain ordination and returned to do missionary work; Rector of St. Paul's Church, Philadelphia, 1781-1804; Prof. of Moral Philosophy and Vice-Provost of the University, 1782-91; D.D. Univ. of Pa., 1783; died 1812.

SAMUEL MAGAW, D.D., was born in Pennsylvania, probably in Cumberland county, where his parents first settled, in 1735, and died in Philadelphia, December 1, 1812. He was a member of the first class graduated from the College of Philadelphia in 1757, when he received the baccalaureate degree; the Master's degree was conferred in course in 1760. He was educated for a tutorship at the suggestion of the College authorities, and later studied divinity and went to England for orders in 1767. On his return he became a missionary of the Society for Propagating the Gospel at Dover and Duck Creek, Delaware, and was appointed Rector of St. Paul's Church, Philadelphia, in 1781, which office he held until 1804. He received the honorary degree of Doctor of Divinity from the University of Pennsylvania in 1783. Dr. Magaw was Vice-Provost and Professor of Moral Philosophy in the University, from 1782 to 1791 and when the union of the College and the University occurred in 1791 he was the only Professor in

the Faculty of the latter who was not included in the new combined body, his withdrawal being a voluntary preference on his part that his friend Dr. Andrews should be elected. He assisted Rev. James Abercrombie, D.D., in founding the Academy of the Protestant Episcopal Church in Philadelphia. He was elected a member of the American Philosophical Society in 1784. Numerous sermons that he preached on special occasions have been published. Bishop White in his memoirs of the Protestant Episcopal Church makes honorable mention of the part which Dr. Magaw had taken in 1784 in the organization of the Protestant Episcopal Church in the United States. He married Lucia, daughter of Andrew Doz of Philadelphia.

SERGEANT, Jonathan Dickinson, 1746-93.

Trustee 1785-1793.

Born in Newark, N. J., 1746; graduated College of N. J., 1762; graduated College of Philadelphia, 1763; lawyer; Sec. and member N. J. Provincial Congress; member Continental Congress, 1775-76; Atty.-Gen. of Pa., 1777-80; Trustee of the University, 1785-93; died 1793.

JONATHAN DICKINSON SERGEANT, Lawyer and Statesman, and one of the founders of the Republic, was born in Newark, New Jersey, in 1746, the son of Jonathan and Abigail (Dickinson) Sergeant. He graduated from the College of New Jersey (Princeton) in 1762, and then, entering the College of Philadelphia graduated from that institution in 1763, receiving the degree Master of Arts from the College of New Jersey in 1765 and from the College of Philadelphia in 1771. He studied law in the office of the Hon. Richard Stockton in Princeton, New Jersey, and was admitted to the Bar. Before he was twenty years of age we find him taking an active part in the opposition to the Stamp Act and in 1774 he was the Clerk of the New Jersey Convention which elected delegates to the Continental Congress. He became Secretary of the same Convention the next year and in 1776 he was chosen a member of the Continental Congress, then sitting in Philadelphia. He resigned this seat in this body the same year to become a member of the Provincial Congress of New Jersey, believing that he could better serve the interests of his country in the latter office. He was instrumental in keeping New Jersey loyal to the Colonial cause and in 1776 was one of a Committee to frame a Constitution for the new state. In November 1776 he was chosen a delegate from New Jersey to the Continental Con-

gress and in the next year he became a resident of Pennsylvania. He was appointed Attorney-General of Pennsylvania in 1777, and held this office until 1780 when he resigned. He was also a member of the Committee of Safety and of the American Philosophical Society. In 1785 he was elected a Trustee of the University of the State of Pennsylvania and was re-elected after the union, serving till his death October 8, 1793. This was due to yellow fever which visited Philadelphia in that year, and to which he fell a victim while serving on the Committee of



JONATHAN D. SERGEANT

Health. He was married twice: first to Margaret Spencer in 1775, and second to Elizabeth Rittenhouse in 1788.

PATTERSON, Robert, 1743-1824.

Professor Mathematics 1782-1813, Vice-Provost 1810-1813.

Born in Ireland, 1743; emigrated to America, 1768; Principal of a school in Wilmington, Del., 1774; Prof. of Mathematics in the University, 1782-1813; Vice-Provost 1810-13; officer in the Continental Army; Director of the U. S. Mint; A.M. and LL.D. from the University; Pres. of the American Philosophical Society, in whose Transactions he published various communications; died 1824.

ROBERT PATTERSON, LL.D., was born in the north of Ireland, May 30, 1743. He emigrated to Philadelphia in 1768, and was ap-

pointed Principal of the Academy of Wilmington, Delaware, in 1774. During the Revolution he acted as Brigade Major in the Continental Army. He was appointed Professor of Mathematics in the University in 1782, which position he held until 1813, during the last three years of that period serving also as Vice-Provost. In 1805 Professor Patterson became Director of the United States Mint in Philadelphia. First admitted to the American Philosophical Society in 1783, he was in 1819, elected to its Presidency, and remaining in that office until 1824, published various writings in the Transactions



ROBERT PATTERSON

From painting at American Philosophical Society

of the society. He died in Philadelphia, July 22, 1824. Professor Patterson received the honorary degree of Master of Arts, from the University of Pennsylvania, in 1788, and that of Doctor of Laws in 1819. He was an Elder of the Scotch Presbyterian Church of Philadelphia for nearly half a century. He married Amé Hunter Ewing of Philadelphia.

FITZSIMMONS, Thomas, 1741-1811.

Trustee 1791-1811.

Born in Philadelphia, 1741; merchant; Captain of the Militia in War of the Revolution; member of the Council of Safety and Navy Board; member Conti-

mental Congress, 1782; member Legislative Assembly of Pa.; member Constitutional Convention, 1787; member U. S. Congress, 1789-1795; Trustee of the University, 1791-1811; founder of the Bank of No. Amer.; Pres. of Insurance Co. of No. Amer.; died 1811.

THOMAS FITZSIMMONS, Congressman and patriot, was born in Philadelphia in 1741, of Irish parentage. His father, being a Catholic, was forced to leave Ireland on account of proscriptive laws. He engaged in mercantile pursuits and having married a daughter of Robert Meade, he formed a partnership with George Meade who was one of the prominent ship owners of the city. At the outbreak of the Revolution Mr. Fitzsimmons took an active part on the Colonial side, raised and commanded a military company, saw active service in the campaign of 1776 and served on the Council of Safety and the Navy Board in the defense of Philadelphia. His house subscribed £5000 in 1780 to supply the necessities of the army. In 1782 he was elected a member of the Continental Congress and was constantly associated with Hamilton, Madison and Carroll in planning ways and means to meet the financial problems which were distressing the country. After the conclusion of the war he was for several years a member of the General Assembly of Pennsylvania, and in 1787 he sat as a member of the Federal Convention which framed the Constitution of the United States. The Constitution ratified and the government organized, Mr. Fitzsimmons was elected by the City of Philadelphia a member of the House of Representatives. He took a leading part in the deliberations of that body, being one of the first to urge the laying of a protective tariff on imports. He was always a staunch Federalist, and was finally defeated for reelection in 1794 by the Democratic reaction. He served as Trustee of the University of Pennsylvania from 1791 until his death, was a founder and Director of the Bank of North America and President of the Insurance Company of North America. He died August 26, 1811, and is buried in St. Mary's Churchyard on Fourth Street below Walnut in Philadelphia.

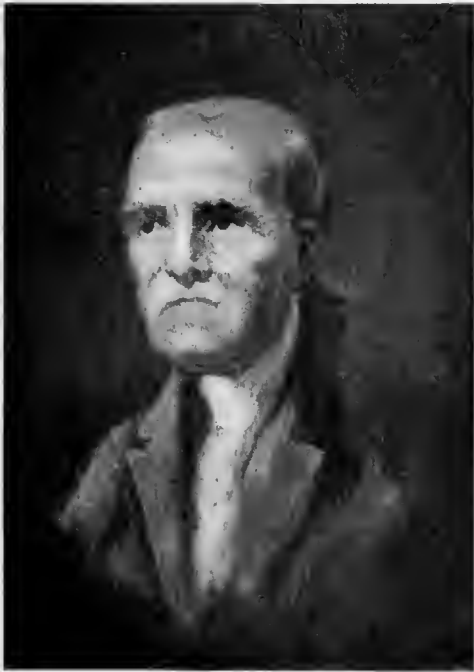
INGERSOLL, Jared, 1749-1822.

Trustee 1787-1800.

Born in New Haven, Conn., 1749; graduated Yale, 1766; studied law at the middle Temple, London, 1766-70; delegate to the Continental Congress, 1780-81; member U. S. Constitutional Convention, 1787; Trustee of the University, 1787-1800; candidate of Federal

Party for Vice-Pres. of U. S., 1812; Pres. Judge Dist. Court of Philadelphia, 1820-22; died 1822.

JARED INGERSOLL, Jurist, was born in New Haven, Connecticut, in 1749, the son of the famous stamp-agent. He graduated at Yale in 1766 and then went abroad, studying almost five years at the Middle Temple in London and over a year at Paris, where he made the acquaintance of Benjamin Franklin. Upon his return to Philadelphia he entered the office of Joseph Reed, the distinguished lawyer. Jared Ingersoll the elder was at this time Admiralty Judge for the Colony of Pennsylvania,



JARED INGERSOLL.
From original painting

with his residence in Philadelphia. At the outbreak of the Revolution father and son parted, the father holding fast in his allegiance to England and the son espousing the cause of the Colonies. Jared Ingersoll the younger soon took a prominent place in the public life of Pennsylvania. He was a delegate to the Continental Congress in 1780-1781, a representative in the convention that framed the Federal constitution in 1787, twice Attorney-General of Pennsylvania and United States District Attorney, besides receiving and declining the appointment of Chief Judge of the Federal Court. Mr. Ingersoll was a Trustee of the University of Pennsylvania from 1787 until 1800, when he resigned. In 1812 he

was the Federal candidate for the Vice-Presidency of the United States but was defeated. From 1820 until his death October 31, 1822, he was President Judge of the District Court of Philadelphia county. At the Bar Mr. Ingersoll was noted as a brilliant advocate — Horace Binney in his *Leaders of the Old Bar of Philadelphia* declares that he never knew a lawyer so quick to take advantage of an opponent's slip or so plausible with a jury.

FOX, Edward, 1752-1822.

Secretary and Treasurer 1788-1822.

Born in Dublin, Ireland, 1752; Auditor-Gen. of accounts between Congress and State of Pa., 1780; Sec. and Treas. of the University, 1788-1822; died 1822.

EDWARD FOX was born in Dublin, Ireland, in 1752, the son of Thomas and Elizabeth (Fuller) Fox. He was involved in political troubles when he had scarcely turned twenty and came to this country. At the time of his arrival in America he was a young man of some means and he brought letters of introduction to many prominent people. He secured admission to the law-office of Samuel Chase of Maryland as a student. He was admitted to the Bar but he did not practice for any length of time. By 1777, he was living in Philadelphia. In 1780 he married Elizabeth Sergeant, whose step-sister married Provost Ewing. In 1780 Mr. Fox acted as Auditor-General of accounts between Congress and the State of Pennsylvania. In 1788 he was elected Agent, Secretary and Treasurer of the University of the State of Pennsylvania. After the consolidation of this institution with the College of Philadelphia he was chosen as Secretary and Treasurer of the University of Pennsylvania, as the combined schools were thereafter known, and held the office until the time of his death. During all this time he managed the pecuniary affairs of the University and kept the minutes. In 1793 on the incorporation of the Bank of Pennsylvania Mr. Fox was elected cashier. He did not long retain this position, but resigned it to accept that of Auctioneer for the district of Northern Liberties, Philadelphia, to which he was appointed by Governor Mifflin. In 1796 he became interested in the North American Land Company and eventually lost all his money through it. In 1799 he was commissioned Recorder of Deeds for the City and County of Philadelphia and continued in this office until 1809, meanwhile doing a brokerage business for a time. In 1810, on the

organization of the American Fire Insurance Company Mr. Fox was elected Secretary, retaining this position up to the time of his death April 11, 1822.

PETERS, Richard, 1744-1828.

Trustee 1789-1791.

Born in Philadelphia, 1744; graduated College of Philadelphia, 1761; A.M., 1765; LL.D., 1827; admitted to the Bar, 1763; Register of the Admiralty, 1771; Captain of Provincial troops, 1775-76; Sec. of Continental Board of War, 1776-81; member Continental Congress, 1782-83; Speaker of State Assembly, 1788-90; Trustee of the University, 1789-91; Speaker of State Senate, 1791; Judge of U. S. Dist. Court, 1792-1828; died 1828.

RICHARD PETERS, LL.D., Jurist and Agriculturist, was born June 22, 1744, at Belmont, the country seat of his father, Judge Peters, in what is now Fairmount Park, Philadelphia. His mother was Mary Breintnall. He entered the College of Philadelphia (now the University of Pennsylvania) in 1758 and graduated in 1761 as Valedictorian. After graduation he studied law, being admitted to the Bar in 1763. He received the degree of Master of Arts from the College in 1765 and that of Doctor of Laws in 1827. He soon rose to eminence in his profession. In 1771 he became Register of the Admiralty, retaining this post until the Revolution broke out. He commanded a company of provincial troops in 1775, and on June 13, 1776, was elected by Congress Secretary of the Continental Board of War. Peters discovered that Benedict Arnold was misusing government funds and an attempt to stop this robbery led to an open quarrel between him and Arnold. In 1780 Peters was one of those who subscribed \$25,000 each to the Pennsylvania Bank for the provisioning of the Continental Army. In December 1781, he resigned his post in the war office, receiving a vote of thanks from Congress for his services. He was a member of the Continental Congress, 1782-1783, a member of the Assembly in 1787, and Speaker of this body, 1788-1790, in which capacity he and General Thomas Mifflin, the Speaker of the State Senate, were the representatives of Pennsylvania who met Washington as he entered the state on his way to New York to be inaugurated as first President of the United States. Peters was a Trustee of the University of Pennsylvania from 1789 to 1791. In 1791 he became Speaker of the State Senate. On the formation of the Federal government he was tendered the Com-

trollership of the Treasury but he declined it. He was commissioned Judge of the United States District Court for Pennsylvania April 11, 1792, and held the office until his death. Judge Peters was actively interested in farming, being one of the founders and the first President of the Philadelphia Agricultural Society. He held the Presidency until his death. He entertained lavishly at Belmont, and was celebrated as a wit over the wine. Judge



HON. RICHARD PETERS

From the painting in possession of the Pennsylvania Historical Society

Peters published Admiralty Decisions of the District Court of the United States for the Pennsylvania Districts, 1780-1807. He died August 22, 1828.

NIXON, John, 1733-1808.

Trustee 1789-1791.

Born in Philadelphia, 1733; merchant; signer of the Non-Importation Agreement, 1765; Lieut.-Col. Third Battalion of Associators; member Committee of Safety; first public reader of the Declaration of Independence, July 8, 1776; served in the Winter Campaign of 1776-77; Pres. Bank of No. Amer., 1792-1808; Manager Pa. Hosp., 1766-72; Trustee College of Philadelphia, 1789-91; died 1808.

JOHN NIXON, famous for having been the first to read publicly the Declaration of Independence, was born in Philadelphia in 1733, son of

Richard and Sarah (Bowles) Nixon. He succeeded to the shipping business of his father after the latter's death, in 1749, and at the age of twenty-three became a Lieutenant in the Dock Ward Company, a kind of Home Guard of the city. He signed the Non-Importation Agreement in 1765 and was active in opposition to the Stamp Act. When the war began, he became Lieutenant-Colonel of the Third Battalion of Associators, known as the "Silk Stockings," of which John Cadwalader was Colonel. He was also a member of the Committee of Safety after October 1775, and acted as Chair-



JOHN NIXON

man at most of its meetings, besides being placed in command of the battalions which guarded the city. The Declaration of Independence having been passed, Congress ordered it to be read publicly in each of the states, and on July 8, 1776, Colonel Nixon read the Declaration from the State House. He took part in the Trenton and Princeton campaigns at the head of the Third Battalion, Colonel Cadwalader having become a Brigadier-General, and he is mentioned for gallantry in the reports of those battles. In 1780 he was one of the subscribers to the Pennsylvania Bank, formed for the purpose of supplying the Army of the United States with provisions. He became a Director of the Bank of North America in 1784, and in January

1792 was elected President, which office he filled until his death. In addition to this he filled many other positions of responsibility, being one of the Auditors of Public Accounts, Treasurer of the Society for the Encouragement of American Manufactures and the Useful Arts, and an Alderman of Philadelphia, 1789-1796. In 1789 he was elected a Trustee of the College of Philadelphia and served until the union of the College with the University of the State of Pennsylvania in 1791. He was a Manager of the Pennsylvania Hospital in 1766; and again from 1768 to 1772. He married, October, 1765, Elizabeth Davis. He died December 31, 1808.

WISTAR, Caspar, 1761-1818.

Trustee 1789-1791, Medical Professor 1791-1818.

Born in Philadelphia, 1761; M.B. College of Philadelphia, 1782; M.D. Univ. of Edinburgh, 1786; Prof. Chem. College of Philadelphia, 1789; Adjunct Prof. Anatomy, Mid-wifery and Surgery, 1719-1808; Prof. Anatomy, 1808-18; Trustee College of Philadelphia, 1789-91; Pres. Soc. for Abolition of Slavery, 1813-18; Pres. Amer. Phil. Soc., 1815-18; died 1818.

CASPAR WISTAR, M.D., Collector of the Wistar Museum Anatomical Collection at the University of Pennsylvania, and founder of the Wistar parties, was born in Philadelphia, September 13, 1761. His parents who were Friends, sent him to the Penn Charter School. He was present as a non-combatant at the Battle of Germantown, where he ministered to the relief of the wounded. It is said that the sights of the battlefield determined him to make medicine his life-work. He began his studies under Dr. John Redman as soon as possible and secured the degree of Bachelor of Medicine from the University of Pennsylvania in 1782. Going abroad to complete his medical education he studied at London, Dublin and Edinburgh, receiving the Doctor of Medicine degree from the University of Edinburgh in 1786. While in Scotland he was for two successive years President of the Royal Medical Society of Edinburgh, and also President of a society for the investigation of natural history. He returned to Philadelphia in January 1787, and entered the practice of his profession. He was at once appointed one of the physicians to the Dispensary and almost at once he was in possession of a large practice. He was made Professor of Chemistry in the College of Philadelphia in 1789. In 1791 on the consolidation with the University of the State of Pennsyl-

vania he was elected Adjunct Professor of Anatomy, Midwifery and Surgery. On the death of his associate, Dr. William Shippen, Jr., in 1808, he was chosen Professor of Anatomy and held the position until his death. In 1789 Dr. Wistar became a Trustee of the College of Philadelphia but retired on the consolidation in 1791. He was for years Physician to the Pennsylvania Hospital, retiring in 1810. A Fellow of the College of Physicians from 1787 he became one of its censors in 1794 and held the position until his death. After eight years membership in the American Philosophical Society in 1795 he became Vice-President and in 1815 on the resignation of Thomas Jefferson as President Dr. Wistar succeeded to the office. In 1813 on the death of Dr. Benjamin Rush, Dr. Wistar became President of the Society for the Abolition of Slavery and continued in the office until his death January 22, 1818. During the years of his Professorship of Anatomy at the University he was indefatigable in the collection of anatomical specimens, many of which he received from Leghorn, from the famous collection of Mascagne. At the time of his death this collection was presented to the University of Pennsylvania where it is preserved with the Hornor collection in the Wistar Museum. Dr. Wistar's name is handed down to posterity in two ways independent of its association with medicine. The well-known climbing vine, wistaria, was named in honor of him and the "Wistar parties," still in vogue in Philadelphia, perpetuate the remembrance of the social side of his nature. It was his habit to throw open his house once every week in the winter to all notable in public life, science, art and literature then in Philadelphia, whether citizens or travellers. These assemblies in a modified form are still continued in Philadelphia under the old name "Wistar parties." Dr. Wistar was married twice: first to Isabella Marshall of Philadelphia, who died in 1790, and second to Elizabeth Mifflin, a niece of Governor Mifflin.

[Portrait on page 97.]

McKEAN, Thomas, 1734-1817.

Trustee 1779-1817, President of Trustees 1788-1791.

Born in Chester Co., Pa., 1734; lawyer; Judge of Common Pleas and Orphans' Court, 1765; member of Stamp Act Congress, 1765; member Continental Congress from Del., 1774-83; Speaker of Del. Assembly, 1772; signer of the Declaration of Independence; Colonel in the Revolutionary Army; author of Constitution of Del., 1777; Chief-Justice of Pa., 1777; Pres. of Del., 1777; signer of Articles of Confederation, 1779;

Pres. of Congress, 1781; published the Laws of Pa., 1781; member of Pa. Constitutional Convention, 1789; Gov. of Pa., 1799-1808; Trustee of Univ. of Pa., 1779-1817; Pres. Board of Trustees, 1788-1791; LL.D. College of N. J., 1761, Dartmouth 1782 and Univ. of Pa. 1785; died 1817.

THOMAS McKEAN, LL.D., Governor and Chief-Justice of Pennsylvania, was born in Chester county, Pennsylvania, March 19, 1734, son of William and Letitia (Finney) McKean. After receiving the elements of a good education, he studied law and was admitted to practice before he was of age. He afterward went to England and



THOMAS McKEAN, LL.D.

studied at the Middle Temple in London, where he was admitted in 1758. When but twenty-three he was appointed Clerk of the Assembly of Pennsylvania and in 1762 he was selected to codify and print the laws of the state. In 1762 he was elected to the Assembly of Delaware from Newcastle county and was returned for seventeen successive years. In 1763 he married Mary Borden and was thus brother-in-law of Francis Hopkinson of the Class of 1757 of the College of Philadelphia. In 1765 he was a member of the Stamp Act Congress and took a decided stand against the King, being one of the Committee appointed to draw up resolutions to the House of Commons. He represented Delaware in the Continental Congress from 1774 to 1783, and

during this time was also Speaker of the Delaware Assembly and took an active part in the Convention which framed the Declaration of Independence. It was as a result of his urgent message that Cæsar Rodney made his famous ride to Philadelphia in time to cast the vote of Delaware in favor of the Declaration. His service in the Revolution was not confined to civil life, as he headed a regiment which served under Washington in New Jersey in 1776. During his absence in the army he had been elected a member of the Constitutional Convention of Delaware, and on his return he wrote the entire Constitution in a single night. The next day it was unanimously adopted. In 1777, under this Constitution, he became President of Delaware. In the same year he also became Chief-Justice of Pennsylvania, in which office he remained for the following twenty-two years. He added to these duties assistance in the preparation of the Articles of Confederation, which he signed in behalf of Delaware in 1779. In 1781 he was elected President of Congress, and not content with filling two such high offices as this and the Chief-Justiceship of Pennsylvania at once, he published the Laws of Pennsylvania in the same year. In 1779, he became a member of the Board of Trustees of the University of the State of Pennsylvania, and at the Union in 1791 with the College of Philadelphia he was chosen again as a Trustee of the University of Pennsylvania. He was President of the Board from 1788 to 1791. In 1789 he assisted in preparing a Constitution for the State of Pennsylvania, and in 1799 he was elected Governor of the state. He was twice re-elected, serving until 1808, and showed on many occasions remarkable strength of character in dealing with the opposition which a man of his pronounced views and determined nature naturally encountered. He was threatened with impeachment during his last term but the motion was finally defeated. He received the honorary degree of Master of Arts from the College of Philadelphia in 1763, and that of Doctor of Laws from the College of New Jersey in 1781, from Dartmouth College in 1782, and from the University of the State of Pennsylvania in 1785. He was a member of the Society of the Cincinnati and the American Philosophical Society and the first President of the Hibernian Society. McKean County in Pennsylvania and McKean Street in Philadelphia are named after him. He was joint author of the Commentaries on the Constitution in 1790. His first wife having died in 1773, he married Sarah Armitage of Newcastle. He died June 24, 1817.

CARSON, John, 1752-1794.

Trustee 1791-1794.

Born in Philadelphia, 1752; graduated College of Philadelphia, 1771; graduated, M.D., Edinburgh, 1776; incorporator and original fellow of the College of Physicians, 1787; Trustee of Univ. of Pa., 1791-94; Prof. Chem., 1794; died 1794.

JOHNSON CARSON, M.D., was born in Philadelphia, November 12, 1752, the son of William and Mary Carson. He entered the University of Pennsylvania (then the College of Philadelphia) in 1768 and graduated in the Class of 1771. His father, an Irishman from Antrim, believed in the



JOHN CARSON

educational institutions of the old country and sent him over to Edinburgh for his medical education. There he graduated in 1776. An Attending Physician at the Philadelphia Dispensary, he was on February 24, 1786, appointed one of the committee to draw up "rules for the regulation of the dispensary." He resigned from the dispensary May 2, 1787. He was an incorporator and original fellow of the College of Physicians. In the year of his death, 1794, while serving as Trustee of the University of Pennsylvania, a position he had held since 1791, he was elected to the Chair of Chemistry in that institution. Dr. Carson was a member of the American Philosophical Society and Surgeon of the First Troops Philadelphia City Cavalry. He was

also a member of the Hibernian Society and one of its first two physicians. He married Agnes, daughter of John Hunter of Edinburgh, Scotland. He died October 26, 1794, in Philadelphia and was buried in the churchyard of the Second Presbyterian Church on Arch Street above Fifth.

DALLAS, Alexander James, 1759-1817.

Trustee 1794-1817.

Born in the Island of Jamaica, 1759; studied law in London; removed from Jamaica to Philadelphia, 1783; admitted to the Bar, 1785; Sec. of Pa., 1791; Trustee Univ. of Pa., 1794-1817; U. S. Dist. Att. for Eastern Dist. of Pa., 1801-14; Sec. of the U. S. Treasury, 1814-16; died 1817.

ALEXANDER JAMES DALLAS, Secretary of the United States Treasury, was born in the Island of Jamaica, June 21, 1759. He was sent by



ALEXANDER J. DALLAS

his father, a Scotch physician, to Edinburgh for his education. While studying there and at Westminster under James Elphinston, Mr. Dallas became a friend of Dr. Johnson and of Benjamin Franklin. After completing his law studies in London, Mr. Dallas returned to Jamaica in 1780 but in 1783 he removed to Philadelphia. He took the oath of allegiance in June 1783, and two years later was admitted to practice in the United States courts. Mr. Dallas soon became prominent as a lawyer and

also as a writer. He wrote frequently for periodicals and was for a time Editor of the *Columbian Magazine*. In January 1791, he was appointed Secretary of the Commonwealth of Pennsylvania and in December 1793, his commission was renewed. He was again appointed in 1796 and held the office until Thomas Jefferson became President in 1801 and appointed him United States District Attorney for the Eastern District of Pennsylvania. This office he held until 1814 when he was called into the Cabinet as Secretary of the Treasury by President Madison. His administration of the department was able and energetic. After March 1815, he discharged the duties of Secretary of War as well as those of Secretary of the Treasury. He retired from office in November 1816, and returned to the practice of law in Philadelphia. Besides law reports and treasury reports Mr. Dallas was the author of several books, and he left unfinished at his death a *History of Pennsylvania*. Mr. Dallas was a Trustee of the University of Pennsylvania from 1794 to 1817. He died January 14, 1817.

WOODHOUSE, James, 1770-1809.

Professor Chemistry 1795-1809.

Born in Philadelphia, 1770; A.B. Univ. of Pa., 1787, and M.D., 1792; Surgeon General St. Clair's expedition, 1791; Prof. Chemistry at the University, 1795-1809; died 1809.

JAMES WOODHOUSE, M.D., was born in Philadelphia, November 17, 1770, the son of John and Sarah (Robinson) Woodhouse. He received his collegiate education at the University of the State of Pennsylvania, graduating as Bachelor of Arts in 1787. He studied medicine with Dr. Rush, and graduated in 1792, as Doctor of Medicine, at the first commencement after the union of the Medical Schools of the College of Philadelphia and the University of the State of Pennsylvania. Before his graduation he served in the army as a medical assistant, taking part, in 1791, in General St. Clair's unfortunate campaign against the western Indians. While studying medicine the attention of Dr. Woodhouse was especially directed to the chemistry of medicine, in which he acquired a considerable reputation even before graduation, and he continued his studies in this direction. The Chair of Chemistry at the University, left vacant by the death of Dr. Hutchinson in 1793, was early in 1794, conferred upon Dr. John Carson, a member of the Board of Trustees, but Dr. Carson dying before he could occupy it, Dr. Priestley was called upon to fill it. He

declined and a struggle ensued between Dr. Woodhouse and Dr. Adam Seybert, resulting in the selection, in 1795, of Dr. Woodhouse. He filled the chair with great distinction until his death in 1809,



JAMES WOODHOUSE

From canvas in Medical Department of the University

when he was succeeded by Dr. John Redman Coxe. Dr. Woodhouse is said to have been the first to demonstrate the superiority of Pennsylvania anthracite coal over the bituminous coals of Virginia for intensity and regularity of heating power. He became a member of the American Philosophical Society in 1796, was one of its Secretaries and Councillors and contributed frequently to its publications as well as to those of many other scientific bodies. Among his works are: a Dissertation on the Chemical and Medical Properties of the Persimmon Tree, his graduation thesis, 1792; Observations on the Combinations of Acids, Bitters and Astringents, 1793, and Experiments and Observations in the Vegetation of Plants. He died in Philadelphia, June 4, 1809.

RAWLE, William, 1759-1836.

Trustee 1794-1836.

Born in Philadelphia, 1759; completed law studies at Middle Temple, London, 1782; admitted to Bar in Philadelphia, 1783; member of Assembly, 1789; U. S.

Dist. Atty. for Pa., 1791-1800; Trustee of the University, 1794-1836; Pres. Historical Society of Pa., 1824-36; revised the civil code of Pa., 1830; LL.D. Princeton, 1827, and Dartmouth, 1828; died 1836.

WILLIAM RAWLE, LL.D., was born in Philadelphia, April 28, 1759, the only son of Francis and Rebecca (Warner) Rawle. He was a great-grandson of Francis Rawle who came to Philadelphia in 1686 to escape religious persecution in England. William Rawle was brought up in the Quaker belief of his ancestors, and was educated at the Friend's Academy in Philadelphia. His father died when he was but two years old. His step-father being loyalist he was taken to New York on the evacuation of Philadelphia by the British and there he began the study of law under Counsellor Kempe. He left New York for England in 1781 and was admitted to the Middle Temple when he completed his law studies. After travelling on the continent he returned to Philadelphia, January 1783, and was admitted to the Bar, September 15, 1783, two months before his marriage to Sarah Coates Burge. In 1786 he was elected a member of the American Philosophical Society and Secretary of the Library Company. It was not long after his admission to the Bar that he attained a reputation as a lawyer. In October 1789 he was chosen a member of the State Assembly as a Federalist. In 1787 he had joined the Society for Political Inquiries which met at Franklin's house, but practical politics were not to his mind and he refused a reelection to the Assembly. Mr. Rawle was appointed United States District Attorney for Pennsylvania in 1791 and while in this office, which he held until 1880, he in 1794 and 1798 prosecuted the offenders in the western whiskey riots. He was a Trustee of the University of Pennsylvania, 1794-1836. At the incorporation of the Law Academy of Philadelphia in 1821 he was chosen its first Vice-President. In 1822 he was made Chancellor of the Associated Members of the Bar of Philadelphia, and upon its union in 1827 with the Law Library Company of Philadelphia under the name of the Law Association of Philadelphia he was elected Chancellor of the new institution and held the office until his death. He was one of the founders of the Historical Society of Pennsylvania in 1824 and its first President. He twice declined the position of President Judge of the District Court of Philadelphia county. He was attorney and counsel for a long period of the Bank of the United States. He was a prominent abolitionist and for many years the President of the

Abolition Society. In 1830 together with Thomas I. Wharton and Joel Jones, Mr. Rawle revised the civil code of Pennsylvania. Besides legal reports and addresses he wrote biographical sketches and religious essays. His culture and position at the



WILLIAM RAWLE

Bar were recognized by Princeton which gave him the degree of Doctor of Laws in 1827. In 1828 Dartmouth conferred on him the same degree. He died April 12, 1836.

THOMSON, James G., 1777-1847.

Prof. Greek and Latin 1802-28.

Born at Carlisle, Pa., 1777; graduated Dickinson College, 1797; A.M. 1802; hon. A.M. University of Pa., 1807; Prof. of Greek and Latin Languages, Univ. of Pa., 1802-28; member American Philosophical Society; died 1847.

JAMES G. THOMSON, A.M., was born in Carlisle, Pennsylvania, in 1777. He attended Dickinson College from which he received the degrees of Bachelor of Arts in 1797 and Master of Arts in 1802. In 1802 he was elected Professor of Greek and Latin Languages in the University of Pennsylvania which position he occupied until 1828, when he resigned and devoted the remainder of his life to agriculture, principally at Hartsville, Pennsylvania. A few years before his

death he removed to Frederickstown, Maryland, where his brother was living. Professor Thomson became a member of the American Philosophical Society in 1818. He was granted the honorary degree of Master of Arts by the University of Pennsylvania in 1807. His wife was Mary, daughter of Professor James Davidson, A.M., the last Rector of the Academy of Philadelphia and Professor of Greek and Latin Languages at the University of Pennsylvania. Professor Thomson died at Frederickstown in 1847.

TILGHMAN, William, 1756-1827.

Trustee 1802-1827.

Born in Talbot Co., Md., 1756; educated at College of Philadelphia, 1769-82; admitted to the Bar in Md., 1783; member Md. Legislature, 1788-91; member Md. Senate 1791-93; Chief Judge U. S. Circuit Court, 1801-02; Trustee of Univ. of Pa., 1802-27; Chief-Justice Pa. Supreme Court, 1805-27; Pres. American Phil. Soc., 1824-27; died 1827.

WILLIAM TILGHMAN, Jurist, was born at Fausley, Talbot county, Maryland, August 12, 1756, the son of James Tilghman, the councillor, and Anne (Francis) Tilghman, a cousin of Sir Philip Francis, reputed author of the Junius Letters. When he was about seven years old he was placed at the Academy, an adjunct of the College of Philadelphia. Here he remained until his fourteenth year when he passed into the College Department. He left College before graduation, and in 1772 entered the law-office of Benjamin Chew. In December 1776, he went down to Maryland and here, at his father's estate in Chestertown he spent the war time, emerging in 1783 to be admitted to the Bar in Maryland. His first ten years of practice were spent in Maryland, where he sat in the State Legislature, 1788-1791, and in the State Senate 1791-1793. He served as an Elector from Maryland in 1789. In 1793 he returned to Philadelphia and practiced there until his elevation to the bench. He married July 1, 1794, Margaret Elizabeth Allen. His first judicial office was that of Chief Judge of the United States Circuit Court for the circuit including Pennsylvania, to which he was appointed by President Adams. The office was abolished in 1802 and Judge Tilghman returned to the practice of his profession. This same year, 1802, he became a Trustee of the University of Pennsylvania and held the position until his death in 1827. In 1805 he was appointed President of the Court of Common Pleas of Philadelphia county, and in 1806,

through the instrumentality of his cousin, Edward Tilghman, the distinguished lawyer, who had himself declined the position, he was made Chief-Justice of the Pennsylvania Supreme Court. In



WILLIAM TILGHMAN

From painting at American Philosophical Society

1809 in compliance with the direction of the State Legislature he set to work on a series of reports on the English statutes in force in Pennsylvania. This is his most important legal work. Judge Tilghman freed his own slaves by a plan of emancipation, but he would never, because of his position on the bench, come out as an active anti-slavery worker. He was President of the American Philosophical Society from 1824 to 1827. He died in Philadelphia, April 30, 1827.

PHYSICK, Philip Syng, 1768-1837.

Professor Surgery and Anatomy 1805-1837, Emeritus 1831-1837.

Born in Philadelphia, 1768; graduated College Dept. Univ. of Pa., 1785; M.D. Edinburgh Univ. 1792; Prof. Surgery Univ. of Pa., 1805-19; Prof. Anatomy, 1819-31; Pres. Philadelphia Med. Soc., 1824; Emeritus Prof. Surgery and Anatomy at the University, 1831-37; died 1837.

PHILIP SYNG PHYSICK, M.D., was born in Philadelphia, July 7, 1768, the son of Edmund and Abigail (Syng) Physick. His father was Re-

ceiver-General and Keeper of the Great Seal of the Province of Pennsylvania and after the Revolution the agent for the Penn estates. He entered the University of Pennsylvania in 1782 and graduated in 1785. He at once began the study of medicine under Dr. Adam Kuhn, then Professor of the Theory and Practice of Medicine in the University, at the same time attending lectures, but he did not take his Bachelor of Medicine degree from this institution. In 1788 he went to London and became the pupil of the famous Dr. John Hunter. In London he also attended lectures by all the great physicians of the day, among them the Cruikshanks, Horne, Clarke, Baillie and Osborne. Dr. Hunter soon made him House-Surgeon in St. George's Hospital, which position he held for a year. On leaving he received the diploma of the Royal College of Surgeons. In 1791 he went to Edinburgh University and received the degree of Doctor of Medicine there in 1792. Returning to Philadelphia he was hardly established in practice before the terrible yellow fever epidemic of 1793 broke out. He at once volunteered for



PHILIP S. PHYSICK

From canvas in Medical Department of the University

service and was elected Physician to the Yellow Fever Hospital at Bush Hill. In 1794 he was appointed Surgeon to the Pennsylvania Hospital and Physician to the Almshouse Infirmary. In

1798 when another yellow fever epidemic occurred Dr. Physick resumed his old post at Bush Hill Hospital and was attacked by the disease as in the previous visitation. For his services in these two epidemics Dr. Physick, after the subsidence of the second, received public recognition. In 1800 he consented to lecture on surgery before the students of the University of Pennsylvania, although there was no separate Chair of Surgery in the Faculty. The Trustees recognized his work in 1805 by creating a Chair of Surgery and asking him to fill it. This chair he held until 1819, when he was transferred to the Professorship of Anatomy, in which he continued until 1831, when he was made Emeritus Professor of Surgery and Anatomy. Of Dr. Physick's many famous operations perhaps the most famous was that of lithotomy on Justice Marshall in 1831, when the justice was seventy-six and the doctor was sixty-three. It was entirely successful. Dr. Physick was a member of the American Philosophical Society from 1802, President of the Philadelphia Phrenological Society in 1822, President of the Philadelphia Medical Society in 1824, a member of the Academy of Medicine of France from 1825 and an honorary fellow of the Royal Medical and Chirurgical Society of London from 1836. He married Elizabeth Emlen in 1800. He died December 15, 1837, in Philadelphia.

BINNEY, Horace, 1780-1875.

Trustee 1806-1836.

Born in Philadelphia, 1780; graduated Harvard, 1797; admitted to the Bar, 1800; member of the State Legislature, 1806-07; Trustee of the Univ. of Pa., 1806-36; member of Congress, 1832-34; died 1875.

HORACE BINNEY was born in Philadelphia, January 4, 1780, the son of Dr. Barnabas Binney, Surgeon in the Revolutionary Army, and Mary (Woodrow) Binney. At eight years of age he was sent to a classical school in Bordentown, New Jersey, where he prepared for Harvard, entering that College in 1793. He graduated in 1797 and at once went into the law-office of Jared Ingersoll. He secured admission to the Bar in 1800, and it was not long until he was looked upon as one of the leaders of the Philadelphia Bar. He was elected to the State Legislature in 1806, but served only one year and declined a re-election. His legal business had by this time grown very large, but he found leisure between 1807 and 1814 to publish six volumes of decisions of the Supreme Court

of Pennsylvania. Mr. Binney's attention to business and legal literature was so close that his health broke down in 1830. He retired from active practice of the law but was soon as busy as ever in running for Congress. He accepted the nomination as a protest to President Jackson's hostility to the United States Bank. The veto of the bill to recharter this institution aroused great indignation in Philadelphia. Mr. Binney, on election to the Twenty-third Congress, was conspicuous in the debate on the question of the removal of the United States deposit from the bank. At the end of his



HORACE BINNEY

term in Congress he declined re-election and gave up what little practice he retained at the time his health broke down in 1830. In 1836 he resigned as Trustee of the University to which position he had been elected in 1806. He still, from time to time, gave written opinions upon legal questions. Mr. Binney's final appearance at the Bar was a memorable one. In 1844 he was matched against Webster in the famous Graid will case. The Supreme Court of the United States maintaining the validity of the will, Mr. Binney's triumph over Webster was complete. Mr. Binney devoted the remainder of his long life to writing and study, dying at the great age of ninety-five, August 12, 1875.

COXE, John Redman, 1773-1864.

Trustee 1806-1809, Professor in Medical Department from 1809.

Born in New Jersey, 1773; studied at Univ. of Edinburgh; graduated Med. Dept. Univ. of Pa.; Phys. of the Port of Philadelphia, 1798; Trustee of the University, 1806-1809; Prof. of Chem. Med. Dept., 1809; Prof. *Materia Medica* and Pharmacy, 1819; Editor of *Medical Museum* and author of works on medicine; died 1864.

JOHAN REDMAN COXE, M.D., was born in New Jersey in 1773. He went to England in 1783 and obtained his classical and a portion of his medical education in that country and in



JOHN R. COXE

Scotland, taking medical lectures in Edinburgh. Returning to America in 1790, he graduated at the University of Pennsylvania in the Department of Medicine. After graduation he studied for some time in the hospitals of London and Paris, and returning to Philadelphia in 1797, became one of the resident physicians of Bush Hill Hospital. He was appointed Physician to the Port of Philadelphia in 1798, and was placed upon the medical staff of the Pennsylvania Hospital in 1802, from which he resigned in 1807. In 1809 he became Professor of Chemistry in the Medical School of the University of Pennsylvania and in 1819 was transferred to the Chair of *Materia Medica* and Pharmacy. He was the Editor of the *Medical Museum*, the first medical journal to be uniformly issued in the City

of Philadelphia. He also edited *The American Dispensary* and a *Medical Dictionary* in 1808. He was the author of an *Exposition of the Works of Hippocrates* and an *Essay on the Origin of the Discovery of the Circulation of the Blood*. He was much interested in the cultivation of the Jalap Plant, and in the progress of vaccination, performing some of the first operations of that practice in this country. At the time when the wisdom of substituting vaccination for inoculation was still doubtful in the public mind he successfully vaccinated his own child, then an infant, and exposed him afterwards to the influence of small pox. Dr. Coxe was a Trustee of the University from 1806 to 1809. He died March 22, 1864.

MEREDITH, William Tuckey, 1772-1844.

Trustee 1809-1840.

Born in Philadelphia, 1772; graduated College of Philadelphia, 1790; lawyer; Pres. Schuylkill Bank, 1814; member of Common and Select Council; City-Solicitor of Philadelphia, 1811-13; Trustee Univ. of Pa., 1809-40; died 1844.

WILLIAM TUCKEY MEREDITH, City Solicitor of Philadelphia, was born in Philadelphia, December 5, 1772, the son of Jonathan and Elizabeth Meredith. He was educated at the College of Philadelphia, graduating in 1790, and afterward studying law, being admitted to the Bar in 1795. In the same year he married Gertrude Gouverneur Ogden. Mr. and Mrs. Meredith were both contributors to *The Portfolio*, a paper edited by Dennie, and formed a part of the literary coterie of which the magazine was the expression. In 1814 Mr. Meredith became President of the Schuylkill Bank, and gave up the active practice of his profession for a time. He was also a member of Common Council and later of Select Council and served as City Solicitor from 1811 to 1813. He was Trustee of the University of Pennsylvania from 1809 to 1840, a Director of the Academy of Fine Arts and a member of the Philosophical Society, the Hand-in-Hand Fire Company and the Wistar Club. He was twice stricken with paralysis and died September 26, 1844.

PATTERSON, Robert Maskell, 1787-1854.

Vice-Provost 1813-28, Prof. Natural Phil. and Math. 1814-28.

Born in Philadelphia, 1787; received A.B., A.M. and M.D., from Univ. of Pa.; studied in London and Paris; Prof. of Natural Philosophy, Chemistry and Mathematics at the University, 1814-28; Prof. of Natural Philosophy in Univ. of Va., 1828-35; Director of

the U. S. Mint, Philadelphia, 1835-53; Pres. of the Philosophical Society for many years; Trustee of the University, 1836-54; prominent in Philadelphia organizations; died 1854.

ROBERT MASKELL PATTERSON, M.D., was born in Philadelphia, March 23, 1787, son of Robert Patterson. LL.D., Vice-Provost of the



ROBERT M. PATTERSON

From Painting at American Philosophical Society

University, and Amé Hunter (Ewing) Patterson. He entered the University of Pennsylvania in 1801 and graduating Bachelor of Arts in 1804, took the Master's degree in course. In 1808 he graduated from the Medical Department, and then studied Chemistry under Sir Humphrey Davy in London. During his sojourn abroad he acted as Consul General for the United States in Paris in 1809. Soon after his return to Philadelphia, he was elected to succeed his father as Professor of Natural Philosophy, Chemistry and Mathematics in the University, and held that office from 1814 to 1828. He was also Vice-Provost from 1813 to 1828. In 1829 he became Professor of Natural Philosophy in the University of Virginia, where he remained until 1835, when he was appointed, like his father, Director of the United States Mint in Philadelphia, which office he held until 1853, when he resigned owing to ill health. Professor Patterson was elected a member of the American Philosophical Society

in 1809, while in his twenty-second year, the first to be admitted to the society at that age. He was its President from 1845 to 1853. On May 25, 1843, while Vice-President of that society he delivered a discourse on its early history, at the celebration of its hundredth anniversary. He was Trustee of the University from 1836 to 1854, one of the founders of the Franklin Institute of Philadelphia and one of its Vice-Presidents, and one of the founders of the Musical Fund Society of Philadelphia and its President from 1838 to 1853. He became a member of the American Academy of Arts and Sciences in 1839. He married Helen Hamilton, daughter of Thomas Leiper, of Philadelphia. He died in Philadelphia, September 5, 1854.

CHEW, Benjamin, Jr., 1758-1844.

Trustee 1810-1844.

Born in Philadelphia, 1758; graduated College of Philadelphia, 1775; lawyer; Trustee of the University, 1810-44; died 1844.

BENJAMIN CHEW, Jr., was born in Philadelphia, September 30, 1758, son of Benjamin, Chief-Justice of Pennsylvania, and Elizabeth



BENJAMIN CHEW, JR.

(Oswald) Chew. He graduated at the College of Philadelphia in 1775, being the Valedictorian of his Class. His valedictory, which was published in the

Pennsylvania Magazine, shows a remarkable degree of forensic ability as well as an advanced liberal opinion upon the questions of the day. He afterwards studied law at the Middle Temple in London and became a member of the Philadelphia Bar, being admitted to practice in the Supreme Court of Pennsylvania in 1787. He was elected Trustee of the University of Pennsylvania in 1810, and was a member of the American Philosophical Society. He married Katherine Banning of Maryland in 1788, and died April 30, 1844.

SERGEANT, John, 1779-1852.

Trustee 1813-1836.

Born in Philadelphia, 1779; graduated Princeton, 1795; entered Philadelphia Bar, 1799; member Pa. Legislature, 1808-10; Trustee of the University, 1813-36; member of Congress, 1815-23, 1827-29, 1837-42; Vice-Presidential candidate with Clay, 1832; LL.D. Dickinson 1826, and Harvard, 1844; died 1852.

JOHN SERGEANT, LL.D., Lawyer and Statesman, was born in Philadelphia, December 5, 1789, the son of Jonathan Dickinson Sergeant and the great-grandson of Jonathan Dickinson, the first President of Princeton College. His mother was Margaret Spencer. Mr. Sergeant graduated at Princeton in 1795. He at first intended becoming a merchant, but abandoning this idea, he studied law in the office of Jared Ingersoll and was admitted to the Philadelphia Bar in 1799. For half a century he was known throughout the United States as one of the most prominent and learned members of his profession and its acknowledged leader in Philadelphia. Mr. Sergeant entered public life in 1801, when he was appointed Commissioner of Bankruptcy of Jefferson. He was a member of the Pennsylvania State Legislature from 1808 to 1810, and of Congress 1815-1823, 1827-1829 and 1837-1842. In 1820 he was active in securing the passage of the Missouri Compromise. In 1826 he was appointed one of the two Envoys to the Panama Congress. He was President of the Pennsylvania Constitutional Convention in 1830, and Whig candidate for the Vice-Presidency on the ticket with Henry Clay in 1832. In 1836 he resigned as Trustee of the University of Pennsylvania, an office he had held since 1813. In 1841 he declined the mission to England. His last public service was that of arbitrator to determine the long pending Pea Patch island controversy. The question at issue concerned the title to this island as

derived by the United States from the State of Delaware, and by James Humphreys claiming through Henry Gale from the State of New Jersey. This involved the question of the boundary between the two states, or, in other words, the claim to the Delaware River. The decision in favor of the United States incidentally decided the boundary dispute in favor of Delaware. Mr. Sergeant was President of the Apprentices' Library and of the Philadelphia House of Refuge from its foundation. He received the degree of Doctor of Laws from Dickin-



JOHN SERGEANT

son College in 1826 and from Harvard in 1844. He married Margareta Watmough in 1813. He died November 23, 1852. *

BARTON, William Paul Crillon, 1786-1856.

Professor Botany 1816-1828.

Born in Philadelphia, 1786; graduated Princeton, 1805; graduated Medical School Univ. of Pa., 1808; Prof. Botany at the University, 1816-28; died 1856.

WILLIAM PAUL CRILLON BARTON, M.D., was born in Philadelphia, November 17, 1786. He received his education at Princeton, graduating in the Class of 1805. While there each member of the class assumed the name of some celebrated man; that which he took was Count Paul Crillon, and he retained it after his

College days were over as part of his name. He studied medicine at the University of Pennsylvania under the direction of his uncle, Dr. B. S. Barton, receiving his degree in 1808. His thesis on Nitrous Oxide Gas became the standard treatise on the subject. After practising medicine in Philadelphia he became Surgeon to the Pennsylvania Hospital. Soon afterwards he was appointed a Surgeon in the Navy. In 1816 he became Professor of Botany in the University of Pennsylvania, resigning the office in 1828. Dr. Barton was for several years Professor of Materia Medica and Botany at Jefferson Medical College, Philadelphia. He was a Fellow of the College of Physicians in Philadelphia, a member of the American Philosophical Society, and President of the Linnean Society. He wrote a number of books on medical and botanical subjects. He died in Philadelphia, February 29, 1856.

[Portrait on page 112.]

CHAPMAN, Nathaniel, 1780-1853.

Professor of Medicine 1816-1850.

Born in Fairfax Co., Va., 1780; graduated Univ. of Pa., Medical Dept., 1801; M.D. Edinburgh Univ., 1804; Asst. Medical Dept. Univ. of Pa., 1810-13; Prof. *Materia Medica*, 1813-16; Prof. *Theory and Practice of Medicine*, 1816-50; founded the Philadelphia Medical Institute, 1817; Pres. Amer. Medical Association, 1848; died 1853.

NATHANIEL CHAPMAN, M.D., was born May 28, 1780, at the Chapman family seat, Summer Hill, then in Fairfax county, Virginia. His father was George Chapman and his mother Amelia (Macrae) Chapman. The Chapmans were an old Virginian family descended from a Captain of Cavalry in the British Army who was a cousin of Sir Walter Raleigh. Very little is known of the early years of Dr. Chapman's life. It is known that he attended the Alexandria Classical Academy. He subsequently spent a short time in two Colleges, according to a story he used to tell, but since he said that he owed neither any obligation their names have not come down to us. His medical education was commenced in the office of Dr. John Weems of Georgetown. He then studied with Dr. Dick of Alexandria for two years and after that, going to Philadelphia and entering the office of Dr. Benjamin Rush, took his degree from the University of Pennsylvania in 1801. To complete his medical studies he went abroad, spending one year with Dr. Abernethy in London and two years at Edinburgh

University, from which he received the degree of Doctor of Medicine. He returned to Philadelphia in 1804, and entered into practice, attaining before he was thirty a national reputation. He married, in 1804, Rebecca, daughter of Colonel Clement Biddle. His connection with the teaching staff of the University began in 1810, when he was appointed Assistant to Dr. T. C. James, Professor of Midwifery. This position he held until 1813, when he became Professor of *Materia Medica*. During the three years that he held this position he delivered the lectures that he afterwards published as *Elements of Therapeutics and Materia Medica*. This book was regarded at the time as an authority. From 1816 to 1850 he served as Professor of the *Theory and Practice of Medicine*. In his field Dr. Chapman was recognized, after the death of Dr. Physick in 1837, as the leading physician in America. In 1848 he was elected by acclamation the first President of the American Medical Association. He was the founder of the American Journal of the Medical Sciences in 1820, and was six times President of the Philadelphia Medical Society. Dr. Chapman was as prominent outside medical circles as within them. He took an active interest in social matters, and was the successor of Dr. Duponceau as President of the American Philosophical Society. Among the many enterprises in connection with his profession with which Dr. Chapman was associated one of the most important was the Philadelphia Medical Institute which he founded in 1817, and in which he delivered his famous summer lectures for years. He died in Philadelphia, July 1, 1853.

CADWALADER, Thomas, 1779-1841.

Trustee 1816-1836.

Born in Philadelphia, 1779; graduated Univ. of Pa., 1795; lawyer; Brig.-Gen. Pa. Vols., 1814; Maj.-Gen. Pa. Militia; member of Commission to revise Cavalry and Artillery Tactics of U. S. Army; Trustee of the University, 1816-36; died 1841.

THOMAS CADWALADER was born in Philadelphia, October 28, 1779, son of General John and Williamina (Bond) Cadwalader. He graduated from the University of Pennsylvania in 1795, and was afterwards admitted to the Bar, but did not practise law, as his time was occupied in the management of the Penn Estate and others. In 1799 while serving in a cavalry troop, he was one of sixteen who suppressed an insurrection in Pennsylvania and captured the ringleaders. In the War of 1812 he was a Lieutenant-Colonel of Cavalry, but

was soon promoted to the grade of Brigadier-General in command of the "Advanced Light Brigade," the members of which were renowned for their discipline and efficiency. He was afterwards Major-General of the First Division of Pennsylvania Militia. He declined various positions, among them the Ministry to England, which he was offered by President Monroe. He was a Trustee of the University of Pennsylvania from 1816 to 1836, and was appointed with General Scott and Colonel Taylor in 1826 to revise the Cavalry and Artillery Tactics of the United States Army. He was the author of



THOMAS CADWALADER

many articles in the magazines of his time, and his home at the corner of Ninth and Arch streets in Philadelphia was a centre for the culture and learning of the city and country. He married, June 25, 1804, Mary Biddle. He died October 31, 1841.

HARE, Charles Willing, 1778-1826.

Professor Law 1817-1826.

Born in Virginia, 1778; lawyer; member Lower House of Legislature of Pa.; Prof. Law Univ. of Pa., 1817-1826; died 1826.

CHARLES WILLING HARE was born in Virginia in 1778 while his parents, Robert and Margaretta Hare, residents of Philadelphia, were guests at the house of a relation. He was

admitted to the Bar of Philadelphia, December 7, 1799, and achieved a brilliant success in his profession; besides serving for a time as a member of the Lower House of the State Legislature of Pennsylvania. In 1817, the Trustees of the University of Pennsylvania, having decided to re-establish the Chair of Law which had lapsed since the death of Judge James Wilson in 1798, appointed Mr. Hare Professor of Law. He delivered his introductory lecture in April 1817 and announced his intention of lecturing upon the following subjects: 1, national jurisprudence; 2, international jurisprudence, including constitutional law of the United States and the State of Pennsylvania; 3, "All that is peculiar to and distinguishable in the jurisprudence of the United States and Pennsylvania, from that system from which our laws and institutions take their origin." This lecture was published in the *Analectic Magazine* for December 1818. Unfortunately, the promise of this announcement was never fulfilled. Shortly after his appointment, Professor Hare was afflicted with loss of reason, after having lectured but one season. He died in 1826.

[Portrait on page 111.]

HEWSON, Thomas Tickell, 1773-1848.

Professor Comparative Anatomy 1816-1828.

Born in London, England, 1773; removed to Philadelphia, and graduated Univ. of State of Pa., 1789; Prof. Comparative Anatomy in the University, 1816-28; Pres. Philadelphia College of Physicians, 1835-48; died 1848.

THOMAS TICKELL HEWSON, M.D., was born in London, England, April 9, 1773, the son of William and Mary (Stevenson) Hewson. His father, who was the celebrated anatomist, died the year after his son's birth, and his mother brought him to the United States, settling in Philadelphia. He at once entered the University of the State of Pennsylvania, being a member of the Class of 1789, in the College Department, and receiving the degree of Bachelor of Arts and Master of Arts. In 1789 he returned to London, where he acted as House-Surgeon in St. Bartholomew's Hospital. He afterwards went to the University of Edinburgh to attend the medical lectures there. In 1796 he returned to Philadelphia where he soon established himself in a lucrative practice. He was Censor and Secretary of the College of Physicians from 1802 to 1835, and President from 1835 to 1848. He was Physician to the Walnut Street Prison from 1806 to 1818, rendering active and efficient service

in the terrible epidemic of 1817-1818. From 1816 to 1828, when he resigned, Dr. Hewson was Professor of Comparative Anatomy in the University of Pennsylvania. In 1811 he became Surgeon to the Philadelphia Hospital, holding the office many years; from 1817 to 1837 he was Physician to the Philadelphia Orphan Asylum, and from 1818 to 1837 Physician to the Pennsylvania Hospital. Dr. Hewson was a member of many medical societies in this country and in England and Scotland, and contributed freely to the medical journals. He received the honorary degree of Doctor of Medicine from Harvard in 1822. He married Emily Banks. He died in Philadelphia, February 17, 1848.

BIDDLE, Nicholas, 1786-1844.

Trustee 1818-1844.

Born in Philadelphia, 1786; graduated Princeton, 1801; Editor of the *Portfolio*, 1806; member of the State Legislature, 1810-11; State Senator, 1813; Trustee of the Univ. of Pa., 1818-44; Pres. Bank of the United States, 1823-36; Pres. U. S. Bank of Pa., 1836-39; died 1844.

NICHOLAS BIDDLE, Financier, was born in Philadelphia, January 8, 1786, the son of Charles and Hannah (Shepard) Biddle. He entered the University of Pennsylvania in 1796, as a member of the Class of 1799, but was removed from College before graduation as his parents thought that he was too young to study a profession. He was afterwards sent to Princeton where he graduated in 1801. He at once entered upon the study of law, but before he was ready for the Bar he accepted the position of Secretary to John Armstrong, Minister to France, and accompanied him to Paris. Mr. Biddle's first experience in financial affairs was gained from having to audit and pay certain claims against the United States from the purchase money paid for Louisiana. Upon the completion of this duty he went to London where he became Secretary to Monroe, then United States Minister to England. In 1807 he returned to Philadelphia and commenced the practice of law, devoting, however, much attention to literature. In association with Joseph Dennie in 1806 he undertook the Editorship of the *Portfolio*, which he continued alone upon the death of his associate, at the same time engaging in other literary work. He compiled a commercial digest and prepared for press the Narrative of Lewis and Clark's Expedition to the Pacific Ocean. In 1810 he was elected to the State Legislature, where

he took a prominent place as an advocate of a system of common schools. In 1813 he was elected to the State Senate, where he took an active part in the war debates. He made his first decided appeal to the public in a speech in favor of the Bank of the United States. This speech marks his entrance into his life-work—the study of finance. In 1817 he was the Democratic candidate for Congress but was defeated by the Federalists. When the Bank of the United States was re-chartered in 1819 President Monroe appointed Mr. Biddle a government Director, and



NICHOLAS BIDDLE

when Mr. Cheves resigned in 1823 Mr. Biddle was appointed President, retaining the position until the expiration of the charter. The "bank war" inaugurated by President Jackson in 1829 undermined the credit of the institution, and after the bill to recharter the bank was vetoed in 1832, Mr. Biddle's efforts to save the bank were unavailing. The withdrawal of the government deposits by Jackson's order in 1833 precipitated financial disasters that affected the whole country. The charter expired in 1836 and the Bank of the United States was no more. A state bank, called the United States Bank of Pennsylvania, was chartered in the same year, 1836, and Mr. Biddle was chosen its President. He resigned the Presidency in 1839

and the bank failed two years later. In the discussion which followed its failure Mr. Biddle asserted that the cause of its insolvency did not originate in the time of his Presidency. Mr. Biddle was very prominent in the public life of Philadelphia. He was President of the Agricultural and Horticultural societies and active as a Trustee of the University of Pennsylvania, which office he held from 1818 to 1844. He was a leading spirit in the establishment of Girard College under the provisions of the founder's will. He married Jane M., daughter of John Craig. He died February 27, 1844.

DU PONCEAU, Peter Stephen, 1760-1844.

Trustee 1818-1836.

Born in the Isle of Ré, France, 1760; came to America with Baron Steuben, 1777; admitted to the Bar in Philadelphia, 1785; Trustee of the University, 1818-36; Provost of the Law Academy of Philadelphia, 1821-44; Pres. Amer. Phil. Soc., 1828-44; Pres. Hist. Soc., 1837-44; died 1844.

PETER STEPHEN DU PONCEAU, A.M., LL.D., Linguist and Lawyer, was born June 3, 1760, in the Isle of Ré, off the western coast of France. He was brought up by his father, a military man, for the army, but his mother after his father's death persuaded him to study for the priesthood. In 1775 he abandoned his ecclesiastical studies and went to Paris, where he gained a precarious livelihood by teaching and translating. He was by this time possessed of a fair knowledge of Italian and English, as well as of Greek and Latin. His knowledge of English and his familiarity with military life commended him to Baron Steuben who took him, as Private Secretary and Aide-de-Camp, to America. From 1777 when he landed at Portsmouth, New Hampshire, to 1779, he shared the fortunes of war with the Continental Army, suffering the privations of that terrible winter at Valley Forge. In 1779 he left the army; in 1781 he became a citizen of Pennsylvania; in 1782 he was appointed Secretary to Livingston who had the Department of Foreign Affairs. After the close of the war Mr. Du Ponceau began the study of law in the office of William Lewis, and was admitted to the Bar in 1785. He very soon worked his way to the front and was generally ranked with Ingersoll, Dallas, Lewis, Edward Tilghman and Rawle. So high was his position at the commencement of the century as a jurist, in the Roman and French laws more especially, that he was offered by President Jefferson the office

of Chief Judge of Louisiana. He declined the honor. Mr. Du Ponceau translated many law books and wrote many legal treatises. He became a Trustee of the University of Pennsylvania in 1818 and held the office eighteen years. In 1819 he published, under the auspices of the American Philosophical Society, a treatise on The Structure of the Indian Language. This book won him a considerable reputation, and possibly in recognition of that work he was given the Doctor of Laws degree by Harvard in 1820. He was Provost of the Law Academy of Philadelphia, from 1821 to 1844, President of the



PETER S. DU PONCEAU

From original canvas at American Philosophical Society

American Philosophical Society from 1828 to 1844 and Chancellor of the Law Association of Philadelphia from 1836 to 1844. He was very active in the proceedings of the Pennsylvania Historical Society, of which he was President from 1837 to 1844. In the latter year he received the honorary degree of Master of Arts from the University of Pennsylvania. He died April 1, 1844.

HARE, Robert, 1781-1858.

Professor Chemistry 1818-1848.

Born in Philadelphia, 1781; chemist; Prof. of Chemistry William and Mary College, 1818; Prof. Chemistry in Med. Dept., Univ. of Pa., 1818-48; author of

many scientific articles and others on moral subjects; died 1858.

ROBERT HARE, M.D., one of the most eminent scientists of the first half of this century, was born in Philadelphia, January 17, 1781, the son of Robert and Margaret (Willing) Hare. At a very early age he began to make discoveries in the field of Chemistry, to which he had devoted himself, and in 1801 invented the hydrostatic or oxy-hydrogen blowpipe. He read a paper before the American Philosophical Society in June 1803, in which he described an apparatus by means of which he fused for the first time in large quantities lime, magnesium and platinum. He invented the Calorimotor and Deflagrator and improved the voltaic pile, and was the author of a process for denarcotizing laudanum. He was elected Professor of Chemistry and Natural Philosophy in William and Mary College in 1818, and in the same year became Professor of Chemistry in the Medical department of the University of Pennsylvania, where he served until 1848. He was a life member of the Smithsonian Institute to which he donated his chemical and physical apparatus after his resignation from the University. In the later years of his life he became a convert to Spiritualism, and wrote and lectured in support of his views. Dr. Hare was a member of the American Philosophical Society and the American Academy of Arts and Sciences and contributed largely to scientific periodicals. He also wrote Moral Essays, under the *nom de plume* of Eldred Graysen, which appeared in the Portfolio. He was granted the honorary degree of Doctor of Medicine by Yale in 1806 and by Harvard in 1816. He married, September 1811, Harriet Clark, and died in Philadelphia, May 15, 1858.

INGERSOLL, Joseph Reed, 1786-1868.

Trustee 1822-1856.

Born in Philadelphia, 1786; graduated Princeton, 1804; member Congress, 1835-37 and 1843-49; Trustee of the University, 1822-56; LL.D. Lafayette and Bowdoin, 1836; D.C.L. Oxford, 1845; minister to England, 1852; died 1868.

JOSEPH REED INGERSOLL, LL.D., D.C.L., Lawyer, was born in Philadelphia, June 14, 1786, the son of Jared Ingersoll, the distinguished advocate, and brother of Charles Jared Ingersoll, the statesman and writer. Mr. Ingersoll graduated at Princeton College in 1804 and studied law with his father. In later life politics and literature di-

vided his interests with law. In 1822 he became a Trustee of the University of Pennsylvania, holding office for thirty-four years. In 1835 he was elected to Congress as a Whig, and served until 1837. He was returned in 1843 and was twice re-elected, retiring in 1849. For a time Mr. Ingersoll was Chairman of the Judiciary Committee. He was a firm advocate of protection and an ardent supporter of Henry Clay. One of Mr. Ingersoll's most memorable speeches in the House was in defence of Clay's tariff of 1842. In 1852 he was appointed by President Fillmore Minister



JOSEPH R. INGERSOLL

From the original picture painted by his students and presented to the Law Library of Philadelphia

to England, as successor to Abbott Lawrence, and held the office about one year, when he was succeeded by James Buchanan. Mr. Ingersoll now retired to private life and devoted himself to literary pursuits. For his work in letters and law the degree of Doctor of Laws was conferred upon him by Lafayette and also by Bowdoin in 1836, and the degree of Doctor of Civil Laws by Oxford in 1845. He was a strong Union man and at the time of the Civil War prepared an able essay entitled *Secession, a Folly and a Crime*. He published a translation from the Latin of Roccus's Tracts *De Navibus et Naulo* and *De Assecuratione*, 1809.

and a Memoir of Samuel Breck, 1863. He died in Philadelphia, February 20, 1868.

REED, Joseph, 1741-1785.

Trustee 1782-1785.

Born in Trenton, N. J., 1741; graduated College of N. J., 1757; lawyer; Pres. Second Provincial Congress, 1775; Aide-de-Camp to Gen. Washington, 1775-78; member Assembly of Pa., 1777; Pres. Executive Council of Pa., 1778-81; Trustee Univ. of the State of Pa., 1782-85; died 1785.

JOSEPH REED, Statesman and Patriot, was born in Trenton, New Jersey, August 27, 1741. He graduated from the College of New Jersey in 1757, and studied law, being admitted to the Bar in 1763. He then spent two years in London at the Middle Temple, and returning in 1765, began practice in New Jersey. He visited England, however, again in 1770 to marry Esther de Berdt, and this time upon his return he settled in Philadelphia. Here he carried on an extensive correspondence with the Colonial Office in England, emphasizing the resistance with which taxation without representation was meeting. In 1775 he was President of the Second Provincial Congress, and in 1775, upon Washington's arrival in Boston, Reed became his Confidential Secretary and Aide-de-Camp. Returning to Philadelphia he became Chairman of the Committee of Safety and a member of the Assembly. In 1776 he was offered the position of Colonel and Adjutant-General, but declined as he did also the subsequent appointments to the grade of Brigadier-General, and to the Chief-Justiceship of Pennsylvania, preferring to serve as a volunteer under Washington during the Campaigns of 1776 and 1777. He was again elected to the Assembly of Pennsylvania in 1777, and in 1778 was chosen President of the Supreme Executive Council of Pennsylvania, in which capacity he acted as Governor of the State. During his administration he exposed the misconduct of Benedict Arnold and succeeded in breaking down the disastrous financial system of Pennsylvania by forcing the repeal of the legal tender laws. In 1778 overtures were made to Governor Reed from the Crown looking toward the securing of his good offices in bringing about a reconciliation between the Colonies and the Mother Country. In the course of these negotiations he is said to have made the reply that he was not worth purchasing but such as he was the King of England was not rich enough to buy him.

He was a Trustee of the University of the State of Pennsylvania from 1782 to his death, which occurred March 5, 1785.

BACHE, Alexander Dallas, 1806-1867.

Professor Natural Philosophy and Chemistry 1828-1836.

Born in Philadelphia, 1806; graduated U. S. Military Academy, 1825; Lieut. of Engineers; Asst. Prof. of Engineering at U. S. Military Acad., 1825-26; Prof. Natural Phil. and Chem. Univ. of Pa., 1828-36 and 1843-44; first Pres. of Girard College; Pres. Central High School of Philadelphia and Supt. of Public Schools, 1841-42; Supt. U. S. Coast Survey, 1844-67; Vice-Pres. U. S. Sanitary Commission during Civil War; Pres. Amer. Phil. Soc. and Nat. Acad. of Sciences; author of numerous works on scientific subjects; died 1867.

ALLEXANDER DALLAS BACHE, LL.D., was born in Philadelphia, July 19, 1806, son of Richard and Sarah (Franklin) Bache, and grandson



ALEXANDER D. BACHE

From the original canvas at American Philosophical Society

of Benjamin Franklin. He received his education at the United States Military Academy, where he graduated with the Class of 1825. After his graduation he was appointed Lieutenant of Engineers, but on account of his teaching ability he was selected to fill the position of Assistant Professor of Engineering. After some time spent at the Academy he was given charge of the construction of Fort

Adams at Newport, and it was at this place he met his future wife, Nancy Clarke Fowler. Professor Bache was appointed Professor of Natural Philosophy and Chemistry at the University of Pennsylvania in 1828, which position he held until 1836. During this time he became associated with the Franklin Institute and contributed constantly to its Journal, carrying on at the same time extensive experiments and observations in physics and meteorology and winning renown for his researches in the subject of boiler expansion. Upon the foundation of Girard College he was chosen its first President, and went to Europe to study the various school systems there. The funds for the erection of the College not being available at his return, Professor Bache became President of the Central High School of Philadelphia. During 1841-1842 he was Superintendent of the public schools in that city, and under the auspices of the American Philosophical Society, of which he was a prominent member, he directed a magnetic and meteorological observatory. In 1843 he returned to his Chair of Chemistry at the University, but after one year he resigned to accept the position of Superintendent of the United States Coast Survey. Under his able direction, the Survey at once became practically valuable and was of vital assistance during the Civil War, especially in 1863 when he was Chief Engineer in charge of the defence of Philadelphia. In addition to his other duties he was one of the incorporators of the Smithsonian Institute and was a member of its Board of Managers until his death. Professor Bache was Vice-President of the United States Sanitary Commission during the Civil War, and President of the American Philosophical Society, the American Philosophical Association for the Advancement of Science and the National Academy of Sciences. He was an honorary member of the Royal Society of London, the Royal Academy of Turin, the Imperial Geographical Society of Vienna and the Institute of France. The degree of Doctor of Laws was conferred upon him by the University of New York in 1836, by the University of Pennsylvania in 1837 and by Harvard University in 1851. He was the author of many papers on scientific subjects, his main work being his *Observations at the Magnetic and Meteorological Observatory at Girard College*, published in three volumes, 1840-1847. He left \$42,000 in trust to the National Academy of Sciences, the income of which is to be devoted to physical research. He died in Providence, Rhode Island, February 17, 1867.

ADRAIN, Robert, 1775-1843.

Professor Mathematics 1827-1834, Vice-Provost 1828-1834.

Born in Carrickfergus, Ireland, 1775; emigrated to America on account of his connection with the Irish Rebellion of 1798; taught school in various places; Prof. of Mathematics at Rutgers, Columbia, and the Univ. of Pa., holding the position here 1827-34; edited Hutton's Mathematics, the periodical, *Mathematical Diary*, and published essays in mathematical and physical subjects; received LL.D. from Columbia, 1818; died 1843.

ROBERT ADRAIN, LL.D., was born in Carrickfergus, Ireland, September 30, 1775, and died in New Brunswick, New Jersey, August



ROBERT ADRAIN

10, 1843. He participated in the Irish rebellion of 1798, during which he received a severe wound, and was obliged to fly to America. He taught school in New Jersey and Pennsylvania, and was a contributor to scientific journals. From 1809 to 1813 he was Professor of Mathematics in Queens College, now Rutgers College, and then resigned to accept the Chair of Mathematics and Natural Philosophy at Columbia, where he continued until his resignation in 1825. He then returned to Rutgers College as Professor of Mathematics, remaining until 1827. In this year he accepted the Professorship of Mathematics in the University of Pennsylvania which he held until 1834 when he resigned. He edited Hutton's Mathematics, published essays

on the figure and magnitude of the earth and on gravity, and was Editor of the Mathematical Diary from 1825 to 1829. He received the degree of Doctor of Laws from Columbia in 1818. He married Anna Pollock of New Jersey.

WYLIE, Samuel Brown, 1773-1852.

Professor Ancient Languages 1828-1845, Vice-Provost 1834-1845.

Born in Moybarg, Antrim, Ireland, 1773; came to America, 1828; Prof. of Ancient Languages in the University, 1828-45; Vice-Provost, 1834-45; Pastor of the First Reformed Presbyterian Church, Philadelphia; obtained degree of D.D. from Dickinson College, 1816; died 1852.

SAMUEL BROWN WYLIE, D.D., was born in Moybarg, County Antrim, Ireland, May 21, 1773, son of Adam and Margaret (Brown) Wylie.



SAMUEL B. WYLIE

He was appointed Professor of the Humanities, as they were then called, or of the Hebrew, Greek and Latin Languages in 1828, a position which he ably filled until his resignation in 1845. During that period he was Vice-Provost from 1834 until he resigned. He was for more than fifty years Pastor of the First Reformed Presbyterian Church in Philadelphia. He was elected a member of the American Philosophical Society January 17, 1806. He received the honorary degree of Doctor of Divinity

from Dickinson College in 1816. Few men have ranked higher than Dr. Wylie in classical literature and theological attainments as a successful teacher, a good Pastor or a practical Christian. He married Margaret, daughter of Andrew Watson of Pittsburg, originally from Scotland. Dr. Wylie died in Philadelphia, October 13, 1852.

HORNER, William Edwards, 1793-1853.

Benefactor—Adjunct Prof. Anatomy 1820-31, Professor 1831-53.

Born in Warrenton, Va., 1793; served as Surgeon's Mate U. S. A. War of 1812; graduated Med. Dept. Univ. of Pa., 1814; Adjunct Prof. Anatomy at the University, 1820-31; Prof. 1831-53; died 1853.

WILLIAM EDWARDS HORNER, M.D., was born in Warrenton, Fauquier county, Virginia, June 3, 1793, the son of William Horner, a prominent Virginia merchant, who had, however, received his education in Philadelphia. His mother was the daughter of William Edwards. A weak boy, he had a hard time of it at school, first at Warrenton and afterwards at Dumfries. After the completion of his classical education he commenced his medical studies with Dr. John Spence, at the same time attending medical lectures at the University of Pennsylvania. In 1813, before he had graduated, he received a commission as Surgeon's Mate in the Hospital Department of the United States Army, and was attached to the Ninth Military District, north of the Highlands in New York State. After serving in the field he returned to Philadelphia and took his degree in 1814. He went back to the front shortly afterwards and saw active service at the attack on Fort Erie and in the battle of Chippewa. After the cessation of the war Dr. Horner was stationed at Norfolk, Virginia, as Surgeon's Mate to a handful of troops. He saw there was little chance of promotion and resigned. After a short stay at his birthplace, Warrenton, he went to Philadelphia where he soon won the interest of Dr. Caspar Wistar. In 1818, after Dr. Wistar's death, Dr. John Sing Dorsey, Dr. Physick's nephew, who had succeeded to the Chair of Anatomy, chose Dr. Horner as his Demonstrator. Dr. Dorsey died in the same year and Dr. Physick, who succeeded him, continued Dr. Horner as Demonstrator. In 1820 he married Elizabeth Welsh, and in the same year, at the request of Dr. Physick, Dr. Horner was associated with him as Adjunct Professor of Anatomy. In 1831 Dr. Physick resigned the chair and was succeeded by Dr. Horner, who held it

until his death. His lectures were not his only important work for the University. The anatomical collection, founded by Dr. Caspar Wistar, was so largely added to by Dr. Horner that it is now called



WILLIAM E. HORNER
From canvas in Wistar Museum

the Wistar and Horner Museum. Indeed, at the time of Dr. Horner's death upwards of two-thirds of the collection was the result of his untiring efforts. Dr. Horner died March 13, 1853.

REED, Henry, 1808-1854.

Asst. Prof. Moral Philosophy 1831-34, Prof. Rhetoric and Eng. Lit. 1834-54, Vice-Provost 1845.

Born in Philadelphia, 1808; educated at private schools in Philadelphia; graduated Univ. of Pa., 1825; practised law, 1829-31; Asst. Prof. Eng. Lit. at the University, 1831; Asst. Prof. Moral Phil., 1831-34; Prof. Eng. Lit. and Rhetoric, 1834-54; Vice-Provost, 1845; wrote and edited various works on English and American history and literature; received the degree of LL.D. from Univ. of Vt., 1846; drowned at sea, 1854.

HENRY REED, LL.D., was born in Philadelphia, July 11, 1808, son of Joseph and Maria Ellis (Watmough) Reed. He was christened Henry Hope Reed, but the middle name was afterwards dropped. His early education was received at the classical school of James Ross in Philadelphia, an

institution of high repute in its day. He entered the Sophomore Class at the University of Pennsylvania in September 1822, and received the degree of Bachelor of Arts in 1825. He was Latin Salutatorian and Moderator of the Philomathean Society. He studied law under Jonathan Dickinson Sergeant and was admitted to practice in the District Court of the city and county of Philadelphia in 1829. In September 1831 he gave up the practice of his profession and was elected Assistant Professor of English Literature in the University of Pennsylvania. In November of the same year he was chosen Assistant Professor of Moral Philosophy, holding that position until 1834. In 1834 he was elected Professor of Rhetoric and English Literature, which position he held until 1854. He was Vice-Provost in 1845. He wrote the Life of Joseph Reed, in Sparks' American Biography, and Lectures on English Literature, on English History, on British Poets and on the History of the American Union, all of which have been published since his death by his brother Hon. William B. Reed of the Class of 1822. Professor Reed edited Lord Mahon's



HENRY REED

History of England; Alexander Reid's Dictionary of the English Language; George F. Graham's English Synonyms and the Poetical Works of Thomas Gray. Professor Reed was made a Doctor of Laws

by the University of Vermont in 1846. He married in 1834, Elizabeth White Bronsen, daughter of Enos Bronsen of Philadelphia, and had three children. In September 1854, he was lost at sea while returning from Europe to America on the ill-fated steamer Arctic.

BARNES, Albert, 1798-1870.

Trustee 1834-1870.

Born in Rome, N. Y., 1798; graduated Hamilton College, 1820; Pastor First Presby. Church, Philadelphia, 1830; author of many works on slavery and religious subjects; died 1870.

ALBERT BARNES, one of Philadelphia's foremost theologians, was born in Rome, New York, December 1, 1798. He graduated from



ALBERT BARNES

Hamilton College in 1820, studied at Princeton Seminary and was licensed to preach in 1823. He became Pastor of the First Presbyterian Church in 1830, which charge he held until 1867, when he resigned on account of poor health and partial blindness. He is famous for his trial for heresy on account of certain passages in his Commentary on the Scriptures, particularly the Epistle to the Romans, of which charge he was acquitted, and for his "Notes" on the Scriptures of which more

than one million volumes were sold. Among his other writings were: Scriptural Views of Slavery, 1846; The Way of Salvation, 1863; Closet Companion, 1854; How Shall Man be Just with God, 1855; The Church and Slavery, 1856; Miscellaneous Essays and Reviews, 1855; Way of Salvation Illustrated, 1856; Inquiries and Suggestions in Regard to the Foundation of Faith in the Word of God; Life at Three Score, 1858; The Atonement; Lectures on the Evidences of Christianity in the Nineteenth Century, 1868; Prayers for Family Worship. A collection of his theological works was published in New York in 1875. He was elected a Trustee of the University of Pennsylvania in 1834 and served until his death in 1870.

HODGE, Hugh Lenox, 1796-1873.

Professor Obstetrics 1835-1863, Emeritus 1863-1873.

Born in Philadelphia, 1796; graduated Princeton, 1814; M.D. Univ. of Pa., 1818; Prof. Obstetrics at the University, 1835-63; Emeritus Prof. of Obstetrics, 1863-73; published Principles and Practice of Obstetrics, 1864; died 1873.

HUGH LENOX HODGE, M.D., LL.D., was born in Philadelphia, June 27, 1796, the son of Dr. Hugh and Maria (Blanchard) Hodge. His brother was the distinguished Presbyterian theologian, Dr. Charles Hodge of Princeton Theological Seminary. Both brothers were educated at Princeton, Hugh graduating in 1814. Upon graduation he at once began the study of medicine in the office of Dr. Caspar Wistar. He matriculated in the Medical Department of the University of Pennsylvania and "walked" the Philadelphia and Pennsylvania Hospitals. In 1818 he received the degree of Doctor of Medicine. Wishing to raise money enough to complete his studies in Europe, in the same year he took a voyage to India in the capacity of Ship Surgeon. Fourteen years later, in the cholera epidemic that visited Philadelphia in 1832, the knowledge of Asiatic cholera which Dr. Hodge acquired on that voyage stood him in good service. When he returned from India to Philadelphia in 1820 it was without the funds necessary for the desired European trip, so he was compelled to begin practice at once. He rose very rapidly in his profession and when Professor Horner went to Europe in the summer of 1821, Dr. Hodge was selected to teach his anatomical class. In 1823 he was appointed Lecturer in Surgery in Dr. Chapman's summer school. In 1828 he married Margaret E. Aspinwall. Thus far in his career Dr. Hodge had con-

centrated all his energy on anatomy and surgery, teaching both with great acceptance and fast winning his way to fame as a surgeon. Failing eyesight compelled him to give up his work in these channels.



HUGH L. HODGE

Circumstances favored his choice of teaching Obstetrics as the way out. He exchanged his Lectureship of Surgery for that of Obstetrics, which the retirement of Dr. W. P. Dewees had left vacant. In 1834 Dr. T. C. James resigned the Chair of Obstetrics in the University and, after a hard fight with Dr. C. D. Meigs as rival, Dr. Hodge in 1835 secured the position in which he remained until 1863, when the almost total failure of his sight led him to resign. He remained Emeritus Professor until his death on February 23, 1873. Dr. Hodge was the inventor of a number of instruments of the utmost importance to obstetricians and the author of several books on his specialty. Among these are, *Principles and Practice of Obstetrics*, 1864; and *Fœticide*, 1869.

JACKSON, Samuel, 1787-1872.

Professor Institutes of Medicine 1835-1863.

Born in Philadelphia, 1787; educated at Univ. of Pa.; graduated, M.D., 1808; member Philadelphia City Cavalry, 1812-15; Pres. Philadelphia Board of Health, 1820; Prof. of Materia Medica, Philadelphia College

of Pharmacy, 1821; Prof. Institutes of Medicine in the University, 1835-63; died 1872.

SAMUEL Jackson, M.D., was born in Philadelphia March 22, 1787, the son of David and Susan (Kemper) Jackson. His father was a well-known physician and a Trustee of the College of Philadelphia. Dr. Jackson acquired his classical education at the University of Pennsylvania, but did not complete the course required for a degree. He began the study of medicine with Dr. James Hutchinson and upon his death passed over to the office of Professor Wistar, with whom he completed his studies. He received his degree of Doctor of Medicine from the University of Pennsylvania in 1808. After his graduation Dr. Jackson pursued for a time the drug business left him by his father but gave it up as soon as possible for the practice of his profession. He was still in the drug business when the War of 1812 broke out, and he at once joined the First Troop Philadelphia City Cavalry, with it taking part in the movements to protect Philadelphia from invasion by the British. In 1820 Dr. Jackson became President of the Philadelphia Board of Health



SAMUEL JACKSON

and conducted its management of the famous yellow fever epidemic with great ability. He, however, took the attitude, since discountenanced, that yellow fever was a non-imported and non-contagious dis-

ease. In 1821 he became Professor of *Materia Medica* in the Philadelphia College of Pharmacy. At the same time he held this chair he taught in Dr. Chapman's summer school, first as instructor in Chemistry and later as Lecturer in *Materia Medica* and Therapeutics. Dr. Jackson's connection with this institution lasted until 1844. In 1827 he became Assistant to Professor Chapman in the University of Pennsylvania. The chair embraced the Theory and Practice of Medicine, Chemical Medicine and the Institutes of Medicine. The delivery of lectures upon the last of these subjects was delegated to Dr. Jackson. In the cholera epidemic of 1832 he was one of the most active of Philadelphia physicians in combating the disease. In 1835 he became Professor of the Institutes of Medicine in the University, holding the position until 1863. Dr. Jackson contributed many articles to the medical journals, the most important being on yellow fever, cholera and pulmonary disease. He died in Philadelphia, April 4, 1872.

SMITH, Thomas Leaming, 1809-1841.

Secretary-Treasurer of Trustees 1838-1841.

Born in Philadelphia, 1809; graduated Univ. of Pa., 1828; lawyer; member City Council of Philadelphia, 1838-41; Sec. and Treas. Board of Trustees of the University, 1838-41; died 1841.

THOMAS LEAMING SMITH, A.M., was born in Philadelphia, December 8, 1809, the son of James S. and Lydia (Leaming) Smith. His father has been a member of the Class of 1799 and a Trustee of the University of Pennsylvania. Thomas Smith entered the University in 1825 and was prominent in debating and oratory, being Moderator of the Philomathean Society and Valedictorian of his class. He graduated in 1828 and after taking a Master of Arts degree studied law and was admitted to practice at the Philadelphia Bar. He was a member of the Philadelphia City Councils from 1838 to 1841, and during the same period was Secretary and Treasurer of the Board of Trustees of the University. His promising career was cut short by an early death, which occurred April 5, 1841.

RAWLE, William, Jr., 1788-1858.

Trustee 1836-1855.

Born in Philadelphia, 1788; educated at Princeton; admitted to the Bar in Philadelphia, 1810; Capt. Second Troop Philadelphia City Cavalry, War of 1812;

member of Philadelphia Common Council, 1835-40; Trustee of the Univ. of Pa., 1836-1855; died 1858.

RAWLE, WILLIAM, Jr., Lawyer, was born in Philadelphia, July 19, 1788, the son of William and Sarah C. (Burge) Rawle. He attended Princeton College for some time and then studied law, being admitted to the Bar in Philadelphia in 1810. During the War of 1812 he served as Captain of the Second Troop Philadelphia City Cavalry. Returning to the practice of the law he soon attained a rank at the Bar nearly equal to that of his father, the distinguished abolitionist. In 1814 he began



WILLIAM RAWLE, JR.

with Hon. Thomas Sergeant the preparation of reports of the decisions of the Supreme Court of the State of Pennsylvania. They published together eighteen volumes by 1828 when Judge Sergeant retired from the work. Mr. Rawle continued it until 1835, publishing five more volumes. From 1835 to 1840 he was a member of the Common Council of Philadelphia and for four of these years its President. He was elected a Trustee of the University of Pennsylvania in 1836 and held the position until 1855 when he resigned. He was chosen a member of the American Philosophical Society in 1841. He was for many years Vice-President of the Pennsylvania Historical Society and Secretary and afterwards a Director of the Library Company. As reporter of

the State Supreme Court he published twenty-five volumes of reports, 1818-1833. He married, October 7, 1817, Mary Anna Tilghman. He died August 9, 1858, at his son's country seat in Montgomery county.

EMLLEN, George, 1814-1853.

Secretary-Treasurer of Trustees 1841-1853.

Born in Philadelphia, 1814; graduated College Dept. Univ. of Pa., 1832; Pres. Law Academy, 1837; Sec. and Treas. Board of Trustees of the University, 1841-53; died 1853.

GEORGE EMLLEN was born in Philadelphia, September 25, 1814, the son of William Fishbourne and Mary Parker (Norris) Emlen.



GEORGE EMLLEN

He was educated at the University of Pennsylvania, graduating in the Class of 1832, and receiving the Master of Arts degree from the same institution. He was Valedictorian of his class. He studied law and became the President of the Philadelphia Law Academy in 1837. In 1840 he married Ellen Markoe. In 1841 he was chosen Secretary and Treasurer of the Board of Trustees of the University and held the office until his death, June 7, 1853. Mr. Emlen was also President of the Controllers of the Public Schools of Philadelphia. His son, George Emlen, graduated from the Law Department in 1865.

WHARTON, George Mifflin, 1806-1870.

Trustee 1841-1868.

Born in Philadelphia, 1806; graduated, Univ. of Pa., 1823; lawyer; Pres. Bd. of Pub. Educ. of Philadelphia; Pres. Select Council, 1856-59; U. S. Dist. Atty. for Eastern Pa., 1857-60; Trustee of the University, 1841-68; died 1870.

GEORGE MIFFLIN WHARTON was born in Philadelphia, December 20, 1806, the son of Fishbourne and Susan (Shoemaker) Wharton. He graduated from the University of Pennsylvania in 1823, having been, during his College course Moderator of the Philomathean Society and Latin Salutatorian of his Class. He studied law after graduation from the University and soon became prominent in the ranks of the legal profession in Philadelphia. He was Provost of the Law Academy from 1845 to 1855. Mr. Wharton was active in public affairs, especially in matters relating to education, serving for many years as President of the Board of Public Education. One of the city schoolhouses, located on Third Street below Pine Street, is named after him. He served as President of Select Council of Philadelphia 1856-1859, and was appointed United States District Attorney for Eastern Pennsylvania by President Buchanan, occupying that position from 1857-1860. He was elected a Trustee of the University of Pennsylvania in 1841 and served until 1868. He was married to Maria Markoe of Philadelphia and died in that city February 5, 1870.

MEREDITH, William Morris, 1799-1873.

Trustee 1842-1859.

Born in Philadelphia, 1799; graduated Univ. of Pa. 1812; A.M., 1816; lawyer; member Pa. Legislature, 1824-28; Pres. Select Council of Philadelphia, 1834-49; U. S. Dist. Atty., 1841; Sec. U. S. Treasury, 1849-50; Atty.-Gen. of Pa., 1861-67; Pres. Constitutional Convention of Pa., 1873; Trustee Univ. of Pa., 1842-59; died 1873.

WILLIAM MORRIS MEREDITH, A.M., one of the foremost lawyers of his time, a Cabinet officer, and a member of the Board of Trustees of the University, was born in Philadelphia, June 8, 1799, the son of William (Class of 1790), and Gertrude (Gouverneur Ogden) Meredith. He graduated at the University of Pennsylvania, in 1812, being the Valedictorian of his class, and receiving the degree of Master of Arts in 1816. He studied law and while success came slowly at first he was for some time before his death the acknowledged leader of the Bar of Pennsylvania.

At an early age he became interested in politics, being elected to the Legislature of Pennsylvania in 1824 and serving till 1828. He was also President of Select Council of Philadelphia from 1834 to



WILLIAM M. MEREDITH

1839, and a member of the Constitutional Convention of Pennsylvania in 1837, where his wide knowledge of constitutional law made his assistance of great value. In 1841 he became United States District Attorney for the Eastern District of Pennsylvania. His term of service in Select Council ended in 1849 when he was appointed by President Taylor as Secretary of the Treasury, serving till the expiration of the term in 1850. He then returned to Philadelphia and resumed the active practice of his profession until 1861, when he was elected Attorney-General of Pennsylvania, which position he held until 1867. He was a delegate to the Peace Convention in 1861, and declined the appointment as Senior Council for the United States before the Geneva Arbitrators in 1871. In 1873 he was again called to the service of his state to frame the new constitution, this time acting as President of the Convention. He was a Trustee of the University of Pennsylvania from 1842 to 1859, the Vice-Provost of the Law Academy from 1836 to 1837, the Chancellor of the Law Association of Philadelphia from 1857 to 1873 and a member of the

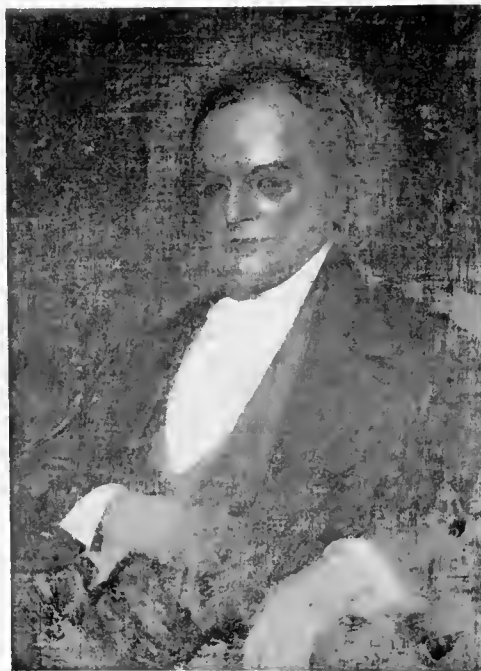
American Philosophical Society from 1837. He married Catherine, daughter of Michael Keppele of the Class of 1788, and died in Philadelphia, August 17, 1873.

SERGEANT, Thomas, 1782-1860.

Trustee 1842-1854

Born in Philadelphia, 1782; graduated Princeton, 1798; admitted to Philadelphia Bar, 1802; member of State Legislature, 1812-14; Associate Justice of District Court of Philadelphia, 1814; State Sec., 1817-19; Atty.-Gen., 1819-20; Postmaster of Philadelphia, 1828-32; Associate Justice of Supreme Court of Pa., 1834-46; Trustee of the Univ. of Pa., 1842-54; died 1860.

THOMAS SERGEANT, Jurist and Statesman, was born in Philadelphia, January 14, 1782, the son of Jonathan Dickinson and Margaret Spencer Sergeant. Like his brother, John Dickinson Sergeant, he was sent to Princeton for his education, graduating there in 1798. He studied law in the office of Jared Ingersoll and was admitted to the Bar in Philadelphia in 1802. A member of the State Legislature from 1812 to 1814, he was in the



THOMAS SERGEANT

From canvas at Pennsylvania Historical Society

latter year appointed Associate Justice of the District Court of Philadelphia. While Secretary of the Commonwealth from 1817 to 1819 he began the formation of the State Law Library at Harrisburg.

He was Attorney-General, 1819-1820, Postmaster of Philadelphia, 1828-1832, and Associate-Justice of the Supreme Court of Pennsylvania from 1834 until 1846, when he resigned. Judge Sergeant's decisions were notable for their brevity, clearness and accuracy and he goes on record as the only Judge on the Pennsylvania Bench whose decisions were never reversed. He had much to do with shaping the limited equity jurisdiction of the court. After his retirement from the bench in 1846 Judge Sergeant returned to practice, but his health was failing and he was finally compelled to give up professional work. In 1842 he became a Trustee of the University of Pennsylvania and continued in office until 1854 when he resigned. He was Provost of the Law Academy of Philadelphia in 1844-1845 and President of the Historical Society of Pennsylvania. Judge Sergeant produced a good deal of legal literature. Among his publications are: Constitutional Law, 1822; Sketch of the National Judiciary Powers Exercised in the United States Prior to the Adoption of the Present Federal Constitution, 1824; View of the Land Laws of Pennsylvania, 1838, and with William Rawle, Jr., Report of Cases Adjudged in the Supreme Court of Pennsylvania, 1814-1829. He married, September 14, 1812, Sarah Bache, a granddaughter of Benjamin Franklin. He died May 8, 1860.

HARE, George Emlen, 1808-1892.

Asst. Prof. Greek and Latin 1844-45.

Born in Philadelphia, 1808; graduated Union College, 1827; clergyman of P. E. Church; Rector of St. John's Church, Carlisle, Pa., 1830-34; Rector Trinity Church, Princeton, New Jersey, 1834-43; Asst. Prof. Greek and Latin, Univ. of Pa., 1844-45; Headmaster P. E. Acad., 1846-57; Prof. in Epis. Div. School, Philadelphia, 1852; D.D. Columbia, 1843; LL.D. Univ. of Pa., 1873; died 1892.

GEORGE EMLEN HARE, D.D., LL.D., was born in Philadelphia, September 4, 1808, the son of Charles Willing and Anne (Emlen) Hare. He graduated at Union College in 1827 and studied for the ministry of the Protestant Episcopal Church, being ordained in 1829. Before his ordination he had been called to the Rectorate of St. John's Church in Carlisle, Pennsylvania. He left this charge in 1834, to accept a call from Trinity Church in Princeton, New Jersey, where he served until 1843 when he became Assistant Professor of Greek and Latin Languages at the University of Pennsylvania. He resigned this Chair in 1845 to

become Headmaster and practically the re-founder of the Academy of the Protestant Episcopal Church in Philadelphia, being also Rector of St. Matthew's Church. In addition to these duties Dr. Hare began in 1857 the training of young men for Holy Orders, and when in 1862, his school grew to such dimensions that it passed into the Philadelphia Divinity School he became Professor of Biblical Learning and Exegesis, the duties of which Chair he continued to discharge until 1889. He was well known as one of the most proficient Hebrew scholars in the Episcopal Church and as such was called to serve as a member of The American Com-



GEORGE EMLEN HARE

mittee of the Revision of the Authorized English Version of the Bible. Among his works are: Christ to Return, 1840, and Visions and Narratives of the Old Testament, 1889. He was granted the honorary degree of Doctor of Divinity by Columbia in 1843 and of Doctor of Laws by the University of Pennsylvania in 1873. In 1830 he married Elizabeth Catharine Hobart. He died February 15, 1892.

MORTON, Henry Jackson, 1807-1890.

Trustee 1844-1890.

Born in New York City, 1807; graduated Columbia, 1827; A.M. 1830; D.D. Univ. of Pa., 1844; Clergyman of P. E. Church; Rector St. James' Church, Philadel-

phia, 1836-87; Rector Emeritus, 1887-90; Trustee Univ. of Pa., 1844-90; died 1890.

HENRY JACKSON MORTON, D.D., was born in New York City, September 25, 1807, the son of Major-General Jacob Morton. He graduated at Columbia College in 1827, receiving his Master of Arts degree in 1830, and afterward studied law with his brother, Washington J. Morton. Determining to enter the Protestant Episcopal ministry, however, he took a course at the General Theological Seminary of that church in New York City, where he graduated in 1830, being ordained Deacon by



HENRY J. MORTON

Bishop Hobart. In the same year he became Assistant to Bishop William White in the Rectorate of St. James Church in Philadelphia and was ordained to the Priesthood in 1831. For five years he remained in this office and then became Rector of St. James. For fifty-one years he served as Pastor of this church and then resigned to become Rector Emeritus. For many years he was President of the Standing Committee of the diocese of Pennsylvania. In 1844 he was elected a Trustee of the University of Pennsylvania and remained in that office till his death. The University bestowed the honorary degree of Doctor of Divinity upon him in 1844. Dr. Morton published *The Sunday-School Teacher's Call* and *The Sunday-School Teacher's Aid* in 1838. He died in Philadelphia in 1890.

ALLEN, George, 1808-1876.

Professor Greek and Latin 1845-1876.

Born in Milton, Vt., 1808; graduated Univ. of Vt., 1827; Prof. Languages, Univ. of Vt., 1828-30; clergyman; Prof. Ancient Languages, Delaware College, Newark, Del., 1837-45; Prof. Greek and Latin, Univ. of Pa., 1845-76; Papal Consul in Philadelphia; author of many articles on religious subjects and upon chess topics; LL.D. Univ. of Pa., 1868; died 1876.

GEORGE ALLEN, LL.D., one of the foremost classical scholars of his time, was born in Milton, Vermont, December 17, 1808, the son of Hon. Heman and Sarah (Prentiss) Allen. He graduated at the University of Vermont in 1827, and remained there for two years as substitute for one of the Professors of Languages, then studied for the Bar and was admitted in 1834. He never practised law, however, his mind being already turned in the direction of theology. He had been brought up as a member of the "Standing Order" as the Congregationalist Churches were called but about 1824 he became attached to the Episcopal faith, of which he was ordained a minister in 1834. During his Rectorate he began writing for the *New York Review*, among other articles being one upon *The Study of Works of Genius*, and a defense of his former teacher, Dr. James Marsh, President of the University of Vermont, against the attacks of the Rev. J. McVickar, in his edition of Coleridge's *Aids to Reflection*. In 1837 owing to an attack of bronchitis he resigned his Rectorship and having received calls from several Colleges, he accepted the Chair of Ancient Languages at Delaware College, Newark, Delaware. Here he remained until 1845 when he became Professor of Languages at the University of Pennsylvania, and began his term of thirty years there as a member of the Faculty of the Arts Department. In 1847 he was received into the Catholic Church. In taking this step he may have been influenced by the Oxford Movement which had just reached its climax in the conversion of John Henry Newman, for whose writings Professor Allen always had the deepest admiration. However that may be, it was only after a thorough examination of the subject that he decided upon his final step and he remained a layman of the Church until his death. In 1864 after the election of Professor Francis A. Jackson to the Chair of Latin, Professor Allen devoted himself more exclusively to the study and teaching of Greek Language and Literature. It is worthy of note that, notwithstanding the fact that the University at the time of Professor Allen's conversion was a distinctly

Protestant institution, there seems to have been no permanent effect of his change of religious opinion either on the friendship of his colleagues or the love and respect of his pupils who differed from



GEORGE ALLEN

him. Every one who studied under him unites in praising his qualities as a scholar and a most courteous gentleman, and he seems to have been regarded as the most distinguished member of the Faculty of Arts. This appreciation culminated in 1868 when the University conferred upon him the honorary degree of Doctor of Laws. In addition to his classical studies, Professor Allen was well known as an authority on all subjects related to the game of chess, possessing the most complete library on that topic in America. He wrote in 1863 a *Life of Philidor*, *Chapters on Chess in Philadelphia*, and *The History of the Automaton Chess Player in America for The Book of the First American Chess Congress in 1859*. He also was much interested in music and military science, and contributed to the *United States Service Magazine*, edited by his colleague, Professor Henry Coppée. Professor Allen was married July 7, 1831, to Mary Hancock Withington. He died in Worcester, Massachusetts, May 28, 1876, and was buried in the Cathedral Cemetery in Philadelphia. The exercises at the University were suspended from the date of his

death until after the funeral, the Faculties of Arts and of the Towne Scientific School wore a badge of mourning for thirty days and the chair which he had occupied in Chapel was draped until the end of the first term of the following year.

POTTER, Alonzo, 1800-1865.

Trustee 1845-1865.

Born in Beekman, N. Y., 1800; graduated Union College, 1818; Prof. Math. and Natural Phil. Union College, 1821; Rector St. Paul's Church, Boston, 1826; Vice. Pres. Union College, 1831; Bishop of Pennsylvania, 1845; writer on religious and economic subjects; Trustee Univ. of Pa., 1845-65; D.D. Kenyon College, 1834, and Harvard 1843; LL.D. Union, 1846; died 1865.

ALONZO POTTER, D.D., LL.D., Protestant Episcopal Bishop of Pennsylvania, was born in Beekman, New York, July 6, 1800, the son of Joseph and Anna Potter. He graduated with high honors at Union College in 1818, and soon after was baptized into the Protestant Episcopal Church in Philadelphia where he began to study for the ministry. In 1821 he became a Tutor at Union College and a year later Professor of Mathematics



ALONZO POTTER

and Natural Theology, while still continuing his theological studies. In 1824 he was ordained and in the same year he was married to Sarah Maria Nott, daughter of the President of Union College.

The Rectorate of St. Paul's Church, Boston, becoming vacant in 1826 he was called to that city where he remained until 1831, when he returned to Union College to fill the Chair of Moral Philosophy and Political Economy. In 1838 he was chosen Vice-President of the same institution, which position he occupied for seven years. He declined in the same year the Assistant Bishopric of the Eastern Diocese, comprising most of the New England States, but in 1845 accepted a call to the Bishopric of Pennsylvania. His administration of twenty years in that responsible position was marked by a notable growth of the Episcopal Church in Pennsylvania. To his efforts are due the building of the Hospital of the Episcopal Church, the organization of the Divinity School in West Philadelphia and the erection of thirty-five churches of his denomination. He also found time to make extended trips through his diocese, delivering addresses and charges to the clergy, and to write numerous articles on religious and economic subjects. Among these are *Natural Theology and Christian Evidence, Political Economy, its objects, uses, and Principles Considered, etc.* He received the honorary degree of Doctor of Divinity from Kenyon College in 1834, and from Harvard University in 1843, and the degree of Doctor of Laws from Union College in 1846. He was a Trustee of the University of Pennsylvania from 1845 to his death, which occurred July 4, 1865, in the harbor of San Francisco, upon a journey taken in search of health.

CARSON, Joseph, 1808-1876.

Professor *Materia Medica and Therapeutics* 1850-1876.

Born in Philadelphia, 1808; graduated College Dept. Univ. of Pa., 1826, and Med. Dept. 1830; Prof. *Materia Medica*, Philadelphia College of Pharmacy, 1836-50; Prof. *Materia Medica and Therapeutics* at the University, 1850-76; died 1876.

JOSEPH CARSON, M.D., was born in Philadelphia, April 19, 1808, the son of Joseph and Elizabeth (Lawrence) Carson. He was educated at the Germantown Academy, at White's School in Philadelphia and at the University of Pennsylvania, from which he graduated in 1826. He entered the wholesale drug store of Dr. Edward Lowber, and remaining there a short time acquired a love for botany which remained with him through life. He now commenced the study of medicine at the University of Pennsylvania, graduating as Doctor of Medicine in 1830. He did not settle down to practice at once but shipped as Surgeon on an

East Indiaman, visiting Madras and Calcutta. Returning to Philadelphia he began practice. In 1841 he married Mary, sister of Dr. Paul B. Goddard. She died the next year, and in 1848 he married Mary Hollingsworth. After the first ten years his practice rapidly increased and he gained a prominent position as an obstetrician, but ill-health compelled him to give up this branch of practice. He was Resident at the Pennsylvania Hospital 1830-1831; Professor of *Materia Medica* at the Philadelphia College of Pharmacy 1836-1850; Lecturer on *Materia Medica* at the Phila-



JOSEPH CARSON

delphia Medical Institute 1844-1848; Obstetrician to the Pennsylvania Hospital 1849-1854; Professor of *Materia Medica and Therapeutics* at the University of Pennsylvania 1850-1876, and Emeritus Professor 1876, after his resignation from ill-health. Dr. Carson was very much interested in the American Philosophical Society and the Academy of Natural Sciences, holding offices in both institutions. He published a good many dissertations on medical subjects but his best remembered book was the *History of the Medical Department of the University of Pennsylvania*. He also came prominently before the medical profession from 1836 to 1850 as Editor of the *Journal of Pharmacy*. He died December 30, 1876.

SHARSWOOD, George, 1810-1883.

Professor of Law 1850-1868, Trustee 1872-1883.

Born in Philadelphia, 1810; graduated Univ. of Pa., 1828; admitted to the Philadelphia Bar, 1831; member of the Pa. Legislature, 1837-38, and 1842-43; Judge of Dist. Court of Philadelphia, 1845-48; Pres. Judge, 1848-67; Prof. of Law at the University, 1850-52; Prof. of the Institutes of Law, 1852-68; Justice of the Pa. Supreme Court, 1867-78; Trustee of the University, 1872-83; Chief-Justice of the Pa. Supreme Court, 1878-82; LL.D. Columbia, 1856; died 1883.

GEORGE SHARSWOOD, LL.D., Chief-Justice of the Supreme Court of Pennsylvania, was born in Philadelphia, July 7, 1810, the son of George and Hester (Dunn) Sharswood. His father dying before his birth, he was educated by his grandfather, Captain James Sharswood, a prominent citizen of Philadelphia. He entered the University in 1825, graduating in 1828. He studied law in the office of Joseph R. Ingersoll and was admitted to the Bar in 1831. He did not meet with great success in practice, indeed he did not seem to care much for the active practice of his profession, but continued his law studies with the utmost diligence. In 1837-1838 he served in the State Legislature and again in 1842-1843. In 1845 the Governor commissioned him Judge of the District Court of Philadelphia. In 1848 he became its President, holding the position until 1867, when he was elected Justice of the Supreme Court of Pennsylvania. Justice Sharswood became Chief-Justice in 1878, retiring in 1882 at the expiration of his term. He was very active in the service of the University of Pennsylvania. The Law Department especially owes much to him. To him is due in large measure, its revival in 1850, after the suspension of its courses. He himself offered his services as Professor of Law and continued as such until 1852. In 1852 he became Professor of the Institutes of Law, continuing in that chair until 1868. Four years later he was elected a Trustee and held that office until his death. His association with the Law Academy of Philadelphia lasted almost a half century. He became its President in 1836, its Vice-Provost in 1838, and its Provost in 1855, holding the last office for the remainder of his life. Justice Sharswood was President of the Alumni Society of the College Department, and a member of the Pennsylvania Historical Society and the American Philosophical Society. He published a number of law works, prominent among which are Sharswood's Blackstone's Commentaries, 1859; Professional

Ethics, 1854; Popular Lectures on Common Law, 1856, and Lectures on Commercial Law, 1856. He was a Doctor of Laws of two institutions, the University of the City of New York, 1856, and Columbia College, 1856. He was perhaps the most popular of Pennsylvania jurists as he was certainly among the most distinguished. He married Mary V., daughter of Dr. W. C. Chambers of Philadelphia. Justice Sharswood died in Philadelphia, May 28, 1883.

[Portrait on page 115.]

WOOD, George Bacon, 1797-1879.

Professor of Medicine 1850-1860, Trustee 1863-1879.

Born in Greenwich, N. J., 1797; A.B. Univ. of Pa., 1815, and M.D., 1818; Prof. Chem. Philadelphia College of Pharmacy, 1822-31, and of *Materia Medica*, 1831-35; Prof. *Materia Medica* Univ. of Pa., 1835-50, and of the Theory and Practice of Medicine, 1850-60; Trustee of the University, 1863-79; endowed Auxiliary Dept. of Medicine in the University, 1865; LL.D. Princeton, 1858; died 1879.

GEORGE BACON WOOD, M.D., LL.D., was born in Greenwich, Cumberland county, New Jersey, March 13, 1797, the son of Richard and Elizabeth (Bacon) Wood. After receiving his early education in New York City he went to the University of Pennsylvania in 1812 and graduated in 1815. Entering the Medical School at once he secured the degree of Doctor of Medicine in 1818. In 1822 he became Professor of Chemistry in the Philadelphia College of Pharmacy, holding that chair until 1831, when he changed it for that of *Materia Medica*. He was Attendant Physician at the Pennsylvania Institute for the Deaf and Dumb 1822-1844, Fellow of the College of Physicians 1827, and its President 1848-1879. Becoming a member of the American Philosophical Society in 1829, he was chosen its President in 1859, holding the position until his death. From 1835 to 1859 he was Attendant Physician of the Pennsylvania Hospital. He was President of the American Medical Association 1855-1856. He was for years very active in University affairs. In 1835 he left the College of Pharmacy to accept the Chair of *Materia Medica* in the University, and in 1850 he was transferred to the Chair of the Theory and Practice of Medicine, from which he retired in 1860, becoming Emeritus Professor. He became a Trustee in 1863, holding the position until his death. In 1865 Dr. Wood endowed an auxiliary Faculty of Medicine composed of five chairs,—Zoölogy and Comparative Anatomy; Botany; Mineralogy

and Geology; Hygiene, and Medical Jurisprudence and Toxicology. By will he endowed the Peter Hahn Ward of the University Hospital in memory of Peter Hahn, whose daughter Catherine he had married. Princeton bestowed the degree of Doctor of Laws upon him in 1858. Dr. Wood wrote a History of the University of Pennsylvania, 1827, several memoirs and a number of medical dissertations. His most famous book was the Dispensatory of the United States, published with Dr. Franklin Bache in 1833; of this work one hundred and fifty thousand copies were sold during Dr. Wood's lifetime, the royalties to the authors being over \$150,000. Among his other works are A Treatise on the Practice of Medicine, 1847; A Treatise on Therapeutics, 1856, and Introductory Lectures and Addresses on Medical Subjects, 1859. Dr. Wood died in Philadelphia, March 30, 1879.

[Portrait on page 118.]

PATTON, John Woodbridge, 1843-

Professor of Law 1897-

Born in Philadelphia, 1843; studied one year in College Dept. Univ. of Pa.; graduated College of New Jersey, 1863; studied law, and entered practice in Philadelphia; member Common Council of Philadelphia five years; Prof. of Law at the University since 1897.

JOHN WOODBRIDGE PATTON was born in Philadelphia, in 1843, son of John and Mindwell Gould Patton. He entered the College Department of the University of Pennsylvania in 1859, but left at the close of the Freshman year to attend the College of New Jersey, where he graduated Bachelor of Arts in 1863, receiving the degree of Master of Arts in course. Subsequently he studied law and took up the practice of that profession in Philadelphia, in which city he was, for five years, a member of the Common Council, and for some time President of the Mortgage Trust Company of Pennsylvania. Since September 1897 he has been Professor of Law at the University.

MILLER, Elihu Spencer, 1817-1879.

Professor Law 1852-72, Dean Law School.

Born in Princeton, N. J., 1817; graduated Princeton, 1836; practising lawyer in Baltimore and Philadelphia; Prof. Real Estate and Equity Jurisprudence, Univ. of Pa., 1852-72; Dean of Law School, 1868-72; Vice-Provost Law Acad.; died 1879.

ELIHU SPENCER MILLER was born in Princeton, New Jersey, September 3, 1817. He was the fifth son of the Rev. Samuel Miller, D.D.,

LL.D., a minister of the Presbyterian Church, who was graduated from the University of Pennsylvania in 1789, and who was one of the founders of the Theological Seminary in Princeton, New Jersey, in 1812, and for a term of thirty-seven years Professor of Ecclesiastical History and Church Government in that institution. His mother was Sarah, daughter of the Hon. Jonathan Dickinson Sergeant who was a member of the Continental Congress in 1776 from New Jersey, and who became later Attorney General of Pennsylvania. Elihu Spencer Miller was graduated from the College of New Jersey in 1836. He studied law first in the office of Hon. James S. Green in Princeton, afterwards with the Hon. Reverdy Johnson in Baltimore where he was admitted to the Bar. Subsequently, in 1843, he was admitted to practice in Philadelphia where he followed his profession during the remainder of his life. As a lawyer he attained a high standing. He was distinguished for his integrity, intrepidity, legal erudition and skill and for his faithfulness and untiring industry. He was a close thinker on all subjects, a deliberate and careful speaker, and to these characteristics he added a pungent and refined wit. When it was determined in 1852 to re-establish a Faculty of Law in the University of Pennsylvania, Mr. Miller was chosen for the Chair of Real Estate and Equity Jurisprudence. He filled this position for twenty years. When the proposition was made to locate the Law School in West Philadelphia he strenuously opposed the plan, his constant belief being that the ideal of the Law School was purely professional, and that its home should, therefore, be in the midst of law offices. He advocated the use of the old building owned by the University in Fifth Street above Walnut. The claims of his practice at this time were such as to lead him, when the removal was determined on, to relinquish his Professorship. From the date of Judge Sharswood's resignation of the office of Dean of the Law School Mr. Miller had held that post. For many years he was a member of the Board of Censors of the Law Association where he always upheld a high code of honor at the Bar. He was also Vice-Provost of the Law Academy for many years. In 1847 he published A Treatise on the Law of Partition by Writ in Pennsylvania, and in 1856 edited the second edition of Sergeant's Treatise on the Lien of Mechanics and Material Men in Pennsylvania. He had little taste for politics, but twice served as a member of the City Councils, and through public interest was

led to use his influence as a citizen and professionally, when occasion demanded, for municipal reform and against unwise or corrupt legislation. He was associated with the Hon. William M. Evarts about the year 1865 in trying the constitutionality of the Income Tax. During the war for the integrity of the Union he trained and took into the field thrice an artillery company in state defence. While on duty in one of these terms he was appointed Provost-Marshal of Hagerstown, Maryland. In 1849 he published "Caprices" a collection of short poems. He died suddenly in his office, March 6, 1879. For a year or more previously his physical activity, naturally great, had been seriously impaired by a disorder difficult to determine. Its sudden culmination was entirely unexpected.

FRALEY, Frederick, 1804-

Trustee 1853-

Born in Philadelphia, 1804; studied law and engaged in business in Philadelphia; member City Council, 1834-37; State Senator, 1837; director of Girard College 1847, and later Pres.; Pres. of National Board of Trade since 1868; Treas. Centennial Board of Finance, 1876; Trustee Univ. of Pa., since 1853; Pres. Amer. Phil. Soc. since 1880; LL.D. Univ. of Pa., 1880.

FREDERICK FRALEY, LL.D., was born in Philadelphia, May 28, 1804. He supplemented the education received in the schools of his native city by law study, which, however, he pursued only for the intellectual training, without any intention of leading a professional life. He entered business as a merchant in Philadelphia at an early age and has won a notable success in his commercial endeavors and a place of prominence in public life. He was elected to the Philadelphia City Council in 1834 and while serving as Chairman of the Finance Committee in 1837 he suggested a measure involving the issuing of certificates of debt in small denominations, thus preserving the threatened solvency of the city. In 1837 he was the successful candidate of the Whig party for State Senator, and during his term of service in the Senate he came prominently before the public notice as the author of an address descriptive of the "Buckshot War" trouble. From the founding of Girard College in 1847, Mr Fraley was an enthusiastic promoter of its interests, preparing the plan of organization and management which was finally employed, serving as the head Director and at one time occupying the President's chair for a brief period. He became a Trustee of the

University of Pennsylvania in 1853, and has so continued since that date, having been longer in office than any other member of the Board. Mr. Fraley participated in the movement which in 1854 led to the consolidation of all the out-lying districts of the county with the city. In 1868 he was a delegate from Philadelphia assisting in the founding of the National Board of Trade, and being elected to the Presidency, has continued in that office by successive re-elections to the present time. His activity in the work of developing the plans for the Centennial Exhibition was exerted as Treasurer of



FREDERICK FRALEY

the Centennial Board of Finance. He was a founder of the Union Club and of the succeeding Union League Club, and since 1880 has been President of the American Philosophical Society. In 1880 the University conferred upon him the degree of Doctor of Laws.

BIDDLE, Caldwell Keppeler, 1829-1862.

Secretary-Treasurer of Trustees 1853-1862.

Born in Philadelphia, 1829; graduated, Univ. of Pa., 1846; LL.B. 1853; lawyer, and Sec.-Treas. Board of Trustees, 1853-62; died 1862.

CALDWELL KEPPELE BIDDLE, A.M., was born in Philadelphia, January 22, 1829, the son of James Cornell and Sarah (Keppeler) Bid-

dle. He entered the College Department of the University of Pennsylvania in 1842 and was particularly interested in public speaking and oratory, being Moderator of the Philomathean Society and Valedictorian of his class. He studied law after graduation, was admitted to the Philadelphia Bar and practised in that city. He was Secretary and Treasurer of the Board of Trustees of the University of Pennsylvania from 1853 to his death. He married Elizabeth Meade Ricketts of Philadelphia, and died February 26, 1862.

LEIDY, Joseph, 1823-1891.

Prof. Anatomy 1853-91, Zoölogy and Comp. Anatomy 1884-91.

Born in Philadelphia, 1823; graduated Med. Dept. Univ. of Pa., 1844; Prosector in Anatomy at the University, 1844-53; Demonstrator of Anatomy, Franklin Medical College, 1846; Pathologist to St. Joseph's Hosp.; Prof. Anatomy at the University, 1853-91; Surgeon to Satterlee Military Hosp. during Civil War; Prof. Natural History, Swarthmore College, 1871; President Academy of Natural Sciences, 1871-91; Prof. Zoölogy and Comparative Anatomy, Biological Dept., Univ. of Pa., 1884-91; Pres. Wagner Free Institute of Science, 1885-91; LL.D. Harvard, 1886; recipient of numerous honors from foreign societies and author of eight hundred articles on scientific subjects; died 1891.

JOSEPH LEIDY, M.D., LL.D., one of the best beloved sons of the University and one of the most prominent scientists of his time, was born in Philadelphia, September 9, 1823, the son of Philip and Catherine (Melick) Leidy. He obtained his early education at private schools and at the age of sixteen he left school with the intention of becoming an artist. He had, however, been in the habit of attending a drug store in the neighborhood and this turned his attention in the direction of medicine. He entered the University of Pennsylvania and graduated from the Medical Department in 1844. Shortly after his graduation he obtained the position of Prosector to the Chair of Anatomy, then held by Dr. Horner, and soon determined to abandon active practice and devote himself entirely to the scientific side of his profession. In 1846 he was elected Demonstrator of Anatomy in the Franklin Medical College but soon returned to the University, and in 1848 travelled in Europe with Dr. Horner. He began lecturing on Histology on his return but on account of ill health gave this up and accompanied Dr. George B. Wood on a second visit to Europe. Returning to the Univer-

sity he resumed his duties as Prosector. In 1851 he was elected a Fellow of the College of Physicians and the next year he became Pathologist to St. Joseph's Hospital. In 1853 he succeeded Dr. Horner as Professor of Anatomy at the University of Pennsylvania and held this chair for nearly forty years. During this long service he attained the unquestioned place as the foremost anatomist of America if not of the world. During the Civil war he served as Surgeon to the Satterlee Military Hospital. In 1864 Dr. Leidy married Anna, daughter of Robert Harden. In 1871 he was elected Professor of Natural History in Swarthmore College, and in 1871 President of the Academy of Natural Sciences, of which he had been a member since its foundation in 1863. When the Biological Department of the University of Pennsylvania was founded in 1884 Dr. Leidy was made Professor of Zoölogy and Comparative Anatomy. In 1885 he was chosen President of the Wagner Free Institute of Science and in 1886 Harvard University conferred upon him the degree of Doctor of Laws. Among other honors awarded to Dr. Leidy may be mentioned the Walker Prize of \$500, which was given him by the Boston Society of Natural History in 1880, and which was doubled on this occasion as a special tribute to his services in science. He was also awarded a prize by the Royal Microscopical Society in 1879, and was given the Lyell Medal in 1884 by the Geological Society of London, and the Cuvier Medal by the Academy of Sciences of Paris in 1888. Dr. Leidy was a member, active or honorary, of over forty native and foreign societies, and published over eight hundred articles on scientific subjects. Among these were the splendid monograph on Fresh Water Rhizopods of North America, the result of years of research, and a Flora and Fauna Within Living Animals (1853) which contained in brief the Theory of Natural Selection developed by Darwin five years later. At the time of his death Dr. Leidy had obtained an enviable reputation as a mineralogist and botanist, stood among the very highest authorities upon Comparative Anatomy and Zoölogy, was one of the most distinguished helminthologists living and the equal of any palæontologist at home or abroad. Yet with all this, he was one of the most modest of men, ever ready to learn, and as was instanced more than once, ever ready to yield the first claims of his opponents. Dr. Leidy died, April 30, 1891, in Philadelphia.

[Portrait on page 107.]

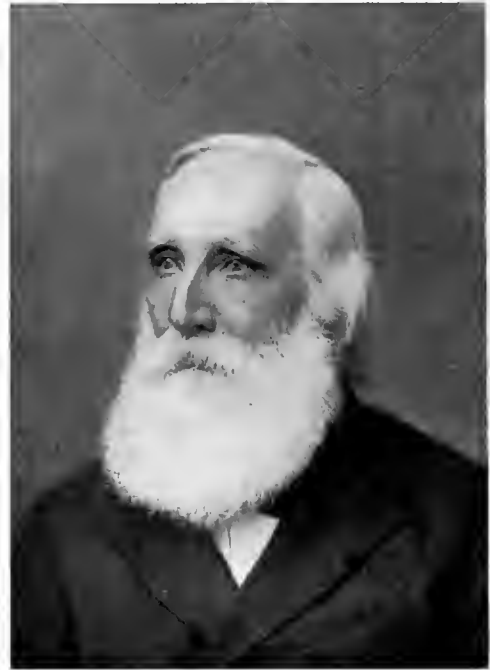
STILLÉ, Alfred, 1813-

Professor Medicine 1854-84, Emeritus since 1884.

Born in Philadelphia, 1813; graduated Univ. of Pa. 1832; M.D. 1836; Resident Physician Phila. Hospital, 1836 and 1865-71; Pa. Hospital, 1839-41; Lecturer before Pa. Association for Medical Instruction, 1845-51; Physician St. Joseph's Hospital, 1849-77; Prof. Medical Dept. Univ. of Pa., 1854-59 and 1864-84, Emeritus since 1884; member of numerous medical and scientific societies and author of professional works; LL.D. Pa. College and Univ. of Pa.

ALFRÉD STILLÉ, M.D., LL.D., was born in Philadelphia, October 30, 1813, the son of John and Maria (Wagner) Stillé. He prepared for College in Philadelphia schools and entered Yale in 1828, leaving at the end of his Sophomore year for the purpose of finishing his course at the University of Pennsylvania. In 1850 Yale enrolled him on her list of graduates as of the Class of 1832, with which he would have been graduated, conferring upon him at the same time the degree of Master of Arts, *gratiae causa*. He entered the Class of 1832 in the University of Pennsylvania at the opening of its Junior year and completed the academic course with honor, attaining the Phi Beta Kappa and being chosen President of the Zelosophic Society. Following his graduation, he pursued a course of study in the Medical Department of the University, receiving the degree of Doctor of Medicine in 1836 and being elected Resident Physician of the Philadelphia Hospital. He held this position but a short time, carrying out his intention of pursuing higher medical studies abroad, which he did by a residence of two years in Paris and other scientific centres of Europe. On his return, in 1839, he accepted and held for two years the post of Resident Physician in the Pennsylvania Hospital, and in 1845 began to lecture on medicine before the Philadelphia Association for Medical Instruction, continuing his courses in that school for six years, when again, in 1851, he resumed professional study and investigation abroad, residing at Vienna. Dr. Stillé returned to his work in this country in 1854 as Professor of the Theory and Practice of Medicine in the Pennsylvania Medical College in Philadelphia, filling that chair until 1859, and in 1864 he was appointed to the Professorship of the same branch, with that of Clinical Medicine added, in the University of Pennsylvania. This position he occupied for twenty years, retiring from active work in 1884 and retaining his connection thereafter with the University as Professor Emeritus. Outside of his University duties, Dr. Stillé served as Physician to St. Joseph's Hospital

1849-1877, Surgeon in the United States Army at the Satterlee Hospital, during the Civil War 1862-1863, and Physician to the Philadelphia Hospital 1865-1871. He is a member of the American Philosophical Society, the Historical Society of Pennsylvania and numerous medical societies, including La Société Médicale d'Observation de Paris and has been President of the Philadelphia County Medical Society, the American Medical Association and the College of Physicians of Philadelphia. He was Vice-President of the Centennial Medical Commission and President of the Medical



ALFRÉD STILLÉ

section of the International Medical Congress. Dr. Stillé has contributed largely to the literature of the profession in standard works, beside his writings in medical periodicals. Among his published books are: Medical Instruction in the United States; Therapeutics and Materia Medica; War as an Instrument of Civilization; Epidemic Meningitis; and in association with John M. Maisch, Ph.D., The National Dispensatory. He also edited the second edition of the Treatise on Medical Jurisprudence, originally written by his brother, Moreton Stillé, with Francis Wharton. Dr. Stillé received the degree of Doctor of Laws from Pennsylvania College, Gettysburg, in 1859, and from University of Pennsylvania in 1889.

HUNT, William, 1825-1896.

Demonstrator Anatomy 1854-1864, Trustee 1879-1895.

Born in Philadelphia, 1825; graduated in Medicine, Univ. of Pa., 1849; Resident Physician Pa. Hosp., 1849-51; Demonstrator of Anatomy at the University, 1854-64; Surgeon to Episcopal Hosp., 1853-63; to Wills' Eye Hosp., 1857-63; to Pa. Hosp., 1863-93; Pres. Philadelphia Academy of Surgery, 1891-95; Trustee of the University, 1879-95; Acting Asst. Surgeon U. S. Army, 1862-63; Special Inspector of Hospitals U. S. A., 1862; Editor Annual of the Universal Medical Sciences, and author of a number of monographs and articles on medical subjects; died 1896.

WILLIAM HUNT, M.D., was born September 26, 1825, in Philadelphia, the son of Uriah and Elizabeth Shreve Hunt. He received his early education at the Friends' Select School, and after one year in mercantile life he entered the Medical Department of the University of Pennsylvania, where he graduated in the Class of 1849. For two years he was Resident Physician at the Pennsylvania Hospital, then was appointed Assistant Demonstrator of Anatomy at the University of Pennsylvania and in 1854 succeeded Dr. Joseph Leidy as Demonstrator, holding that position for ten years. Meantime in 1853 he had been elected to the Surgical Staff of the Episcopal Hospital, and from 1857 to 1863 he was also attached to the Wills' Eye Hospital. He resigned from these two positions in 1863 when elected Surgeon to the Pennsylvania Hospital, where he served continuously for thirty years. He was also Consulting Surgeon to the Pennsylvania Institution for the Deaf and Dumb, and Attending Surgeon to the Orthopedic Hospital from which position he resigned in 1889. Dr. Hunt became a member of the American Medical Association in 1852 and a Fellow of the College of Physicians in 1854. He was a Fellow of the Philadelphia Academy of Surgery and President from 1891 to 1895. He was also a member of the Historical Society, the Academy of Natural Sciences, the Society of the Sons of the Revolution, the Biological Club and the Surgical Club, and was elected an honorary member of the American Surgical Association in 1882. He was a Trustee of the University of Pennsylvania from 1879 to 1895. Dr. Hunt was appointed an Acting Assistant Surgeon of the United States Army, May 16, 1862, and served until October 31, 1863. During a portion of this period he was detailed as a Special Inspector of the General Hospitals of the Army, and made a tour through the principal hospitals of the East. For a number of years he was one of the Editors of the Annual of the Universal Medi-

cal Sciences and was a contributor to the American Journal of the Medical Sciences. He also edited the Pennsylvania Hospital Reports, contributed articles to the International Encyclopedia of Surgery and assisted in preparing the American edition of Holmes' System of Surgery. His last work was a pamphlet entitled Health Gymnastics at Baden-Baden 1888. He died in Philadelphia, April 17, 1896, of the results of an injury sustained several years previous.

KENDALL, Ezra Otis, 1816-1899.

Professor 1855-1896, Emeritus 1896-1899, Vice-Provost 1883-1894.

Born in Wilmington, Mass., 1816; Prof. Math. in Philadelphia High School, 1838; Prof. Math. and Astronomy, Univ. of Pa., 1855; Thomas A. Scott Prof. of Math., 1881-96; Vice-Provost, 1883-94; Flower Prof. of Astronomy, 1892-96; received LL.D. from the University, 1888; Emeritus Prof., 1896-99; died 1899.

EZRA OTIS KENDALL, LL.D., was born in Wilmington, Massachusetts, May 15, 1816, a descendant of the oldest Puritan stock. He received his early education at the academy of the neighboring town of Woburn. When he was nineteen he moved to Philadelphia for the purpose of studying Mathematics with his half-brother Sears C. Walker, who then ranked among the foremost mathematicians and astronomers in America. In 1838 he was appointed Professor of Theoretic Mathematics and Astronomy in the Philadelphia Central High School, which was opened in September of that year. Here, with the assistance of Mr. Walker, he organized the astronomical laboratory which was soon known as the most thoroughly equipped working observatory connected with any educational institution in this country. While at the High School Professor Kendall not only laid the basis of his reputation as a mathematician and astronomer but won for himself an affectionate loyalty from the students such as falls to the lot of few teachers. He passed to the University of Pennsylvania in 1855 as Professor of Mathematics and Astronomy and here again he won the respect and love of all the students. He was Dean of the College Faculty from 1883 to 1889 and Vice-Provost from 1883 to 1894, when he resigned because of advancing age. He had been made Thomas A. Scott Professor of Mathematics on the foundation of that chair in 1881, and Flower Professor of Astronomy in 1892. In 1896 he was made Emeritus Professor and though he was thereafter able to take little active concern in University

affairs, his interest in the College remained unflagging up to the time of his death on January 5, 1899. Though Professor Kendall always gave his best efforts to his students he found time for original work. He was not an infrequent contributor to mathematical and astronomical journals and he published several books, among them, a work on Uranography, with an atlas of the constellations. He made a systematic series of observations for longitudes for the United States Coast Survey. In 1851 at the request of the Editors of the United States Ephemeris and Nautical Almanac he took charge of the computation of the ephemerides of Jupiter and his satellites and Neptune, and he is responsible for all that relates to these bodies in the annual issues of the Nautical Almanac from 1855 to 1882 inclusive, embracing about thirty pages of each volume. But it was not by his scientific work that Professor Kendall rendered his greatest service to the University but by his devotion to the various interests of the students. His services to the cause of education were recognized by the Trustees of the University by their bestowal of the degree of Doctor of Laws upon him in 1888. He died in Philadelphia in 1899.

COPPÉE, Henry, 1821-1895.

Prof. Belles-Lettres and English Literature 1855-66.

Born in Savannah, Ga., 1821; studied at Yale, 1835-37; graduated U. S. Military Acad., 1845; served during Mexican War and brevetted Capt. for gallantry; Instr. Eng. and Ethics U. S. Naval Acad., 1845-55; Prof. Belles-Lettres and Eng. Lit. Univ. of Pa., 1855-66; Pres. Lehigh Univ., 1866-1880 and 1893-95; and Prof. Eng. Lit. Internat. and Constit. Law and Phil. of Hist., 1866-1895; author of numerous works; died 1895.

HENRY COPPÉE, LL.D., the first President of Lehigh University, was born in Savannah, Georgia, October 13, 1821, of French descent, his ancestors having been refugees during the French Revolution. He attended Yale for two years in the Class of 1839 and then studied Civil Engineering, being employed in the preliminary survey and construction of the Georgia Central Railroad. In 1841 he entered the United States Military Academy at West Point and graduating in 1845 was sent to active service in Mexico. Here he distinguished himself for gallantry and was brevetted a Captain for meritorious services at Contreras and Churubusco. He then taught English and Ethics at the United States Naval Academy until 1855 when he

resigned from the service to become Professor of Belles-Lettres and English Literature at the University of Pennsylvania. Here he remained until April 1, 1866, when he was chosen to be the first President of Lehigh University and occupied the Chair of English Literature, International and Constitutional Law and Philosophy of History. He remained President until 1880 when he resigned and confined his attention to the duties of his chair. In 1874 he was elected by Congress a Regent of the Smithsonian Institution in Washington, and was re-elected until his death. Twice he served as



HENRY COPPÉE

a member of the Assay Commission of the United States Mint. After the death of Dr. Robert A. Lamberton in 1893, he acted as President of Lehigh University until the election of Dr. Drown in 1895. Dr. Coppée was a voluminous writer on English and military subjects, among his works being: *Elements of Rhetoric*, 1859; *Manual of Battalion Drill*, 1862; *Grant, a Military Biography*; *Manual of English Literature*, 1872. He also translated Marmont's *Esprit des Institutions Militaires*, and edited two volumes of *La Guerre Civile en Amérique*, by Le Comte de Paris. He was a member of many learned societies and was granted the honorary degree of Master of Arts from the University of Georgia in 1848 and of Doctor of

Laws from the University of Pennsylvania and from Union College in 1866. He died in Bethlehem, Pennsylvania, March 22, 1895.

FRAZER, John Fries, 1812-1872.

Prof. Natural Phil. and Chem. 1844-72, Vice-Provost 1855-68.

Born in Philadelphia, 1812; graduated Univ. of Pa., 1830; first Asst. Geologist, Geol. Surv. of Pa., 1836; Prof. in Philadelphia High School, 1836-44; Prof. Nat. Phil. and Chem. in the University, 1844-72; Vice-Provost, 1855-68; Ph.D. Univ. of Lewisburg, 1854; LL.D. Harvard 1857; died 1872.

JOHN FRIES FRAZER was born in Philadelphia, July 8, 1812, the son of Robert and Elizabeth (Fries) Frazer. Like his father, who was of the Class of 1789, Professor Frazer studied at the University of Pennsylvania, graduating as Valedictorian of the Class of 1830. While pursuing his College course, he acted as Assistant in the laboratory of Alexander D. Bache, Professor of Natural Philosophy and Chemistry, whom he was destined to succeed. Professor Frazer studied medicine at the University after graduation from the College, but he was never examined for the medical degree. Then he turned his attention to the law and was admitted to the Bar. He never practised, however. During the religious riots in Philadelphia he served in the First Troop Philadelphia City Cavalry. In 1836 in the first Geological Survey of Pennsylvania he served almost a year in the field under Henry D. Rogers. Late in this year Professor Frazer accepted a position in the Philadelphia High School, remaining there until 1844, when he went to the University of Pennsylvania as Professor Bache's successor in the Chair of Natural Philosophy and Chemistry. He received the degree of Doctor of Philosophy from the University of Lewisburg (Bucknell) in 1854 and that of Doctor of Laws from Harvard in 1857. In 1855 Professor Frazer was made Vice-Provost of the University, holding the office until 1868. He was prominent not only in the University circles but at the Franklin Institute, in the American Philosophical Society, and in the Academy of Natural Sciences, of which he was one of the founders. He published much valuable original matter in the Franklin Institute Journal which he edited from 1850 to 1866. Professor Frazer in the midst of his scientific studies never lost his early taste for the classics, reading Latin and Greek with ease years after he had given up their study, nor did he fail to keep up with current literature, French as well as English. His home in Philadelphia was the

meeting place of artists, litterateurs and scientists. Professor Frazer's wife was Charlotte, daughter of Thomas Cave. He was married in 1838. He died suddenly in the physical laboratory of the University on the day in which the new buildings in West Philadelphia were first thrown open to the inspection of the public October 12, 1872.

BINNEY, Horace, Jr., 1809-1870.

Trustee 1856-1870.

Born in Philadelphia, 1809; graduated Yale, 1828; admitted to the Bar, 1831; Trustee of the Univ. of Pa., 1856-70; died 1870.

HORACE BINNEY, JR., was born in Philadelphia, January 21, 1809, the eldest son of the distinguished lawyer Horace Binney. He received his early education at the school of Mr. James Ross, where he had as fellow students Professors Henry Reed and Charles Chauncey. In 1824 he entered Yale, graduating in 1828 in the famous class that included among its members the Hon. William Strong, Justice of the Supreme Court of the United States, and Dr. Barnard, President of Columbia College. Upon leaving College Mr. Binney had serious thoughts of entering the ministry but the influence of his father turned him to the law and he was admitted to the Bar in 1831. He never attained the brilliant success of his father although he was a prominent figure at the Bar. His early predilection toward the ministry kept with him through life. He was a Trustee of the Protestant Episcopal Academy for nearly forty years and was much interested in the general work of the church. He became a Trustee of the University of Pennsylvania in 1856 just twenty years after his father had resigned as Trustee, and he remained in the office up to the time of his death. Mr. Binney was a staunch Union man during the war. He was one of the founders of the Union League Club of Philadelphia, and helped to build up the United States Sanitary Commission. Throughout his life Mr. Binney was known for his love of culture as well as for his legal attainments and philanthropic interests. He died May 6, 1870, five years before his father.

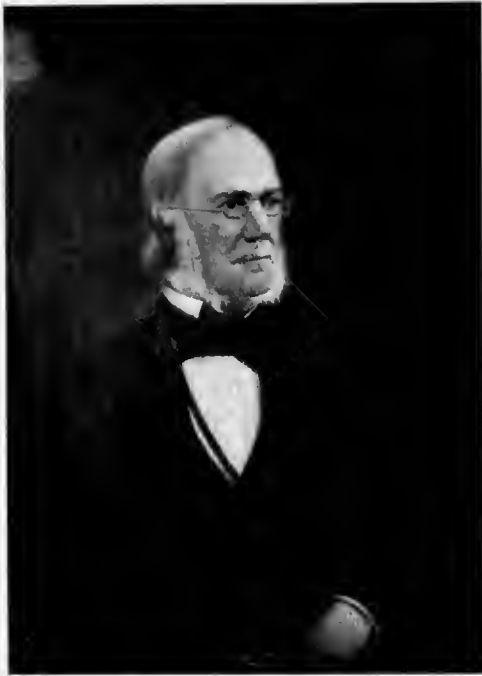
COLWELL, Stephen, 1800-1872.

Benefactor - Trustee 1856-1872.

Born in Brooke Co., W. Va., 1800; graduated Jefferson College, Canonsburg, Pa., 1819; admitted to the

Bar, 1821; practiced until 1828 in Steubenville, Ohio; practiced in Pittsburg, 1828-36; iron manufacturer, 1836-72; Trustee Univ. of Pa., 1856-72; died 1872.

STEPHEN COLWELL was born in Brooke county, West Virginia, March 25, 1800. He received his classical education at Jefferson College, Canonsburg, Washington county, Pennsylvania, where he graduated in 1819. He studied law under the direction of Judge Halleck in Steubenville, Ohio, and was admitted to the Bar in 1821. He practiced his profession for the next seven years in Steubenville and then moved to Pittsburg where



STEPHEN COLWELL

From canvas in University Library

he continued to practice until 1836. Along with his legal study Mr. Colwell combined religious and scientific study and later he devoted a great deal of time to economics. In 1836 he gave up the law for the manufacture of iron. He was established first at Weymouth, Atlantic county, New Jersey, and afterwards at Conshohocken, Montgomery county, Pennsylvania. He continued in this business up to the end of his life, and was interested not only in his own plants but in all phases of iron manufacture and the economic situations arising therefrom. He was a working member of the American Iron and Steel Association from its origin until his death. Outside iron manufacture he had extensive

interests, in economics generally and in education. He became a Trustee of the University of Pennsylvania in 1856 and retained the position until his death, January 15, 1872. Mr. Colwell was very active in University affairs and left his valuable economic library to the University. "Anxious to make the gift more effective," writes Henry C. Carey in his memoir of Mr. Colwell, "he coupled the grant, in his deed of trust, with a condition that required the endowment of a Chair of Social Science; but his family, knowing his intention that the donation should in no event prove a failure, has waived the present performance of the condition in the well warranted expectation that in good time it will be carried out."

NORRIS, George Washington, 1808-1875.

Professor Clinical Surgery 1848-1857, Trustee 1856-1875.

Born in Philadelphia, 1808; graduated Univ. of Pa., 1827; M.D. 1830; Resident Phys. Pa. Hosp., 1830-33; Surgeon Pa. Hosp., 1836-63; Prof. Clinical Surgery at the University, 1848-57; Trustee of the University, 1856-75; Consulting Surgeon to Orthopædic Hosp. and to Children's Hosp.; Vice.-Pres. College of Physicians; Director of Philadelphia Library, of Mutual Fire Insurance Co. and of Philadelphia Savings Fund Society; author of numerous articles on medical subjects; died 1875.

GEORGE WASHINGTON NORRIS, M.D., was born in Philadelphia, November 6, 1808, the son of Joseph Parker and Elizabeth (Fox) Norris. He entered the University of Pennsylvania, being the Moderator of the Philomathean Society and taking the Bachelor of Arts degree in 1827. He then studied in the Medical Department, having Dr. Joseph Parrish as his preceptor, and taking the medical degree in 1830. Immediately upon graduation he became one of the Resident Physicians at the Pennsylvania Hospital, where he remained three years. In 1833 he went to Europe, spending most of his time in Paris studying under Dupuytren, Velpeau, Roux and Magendie. During his stay in Paris he became a member of the Société Médicale d'Observation. In October 1835 he returned to Philadelphia and the next year was elected one of the Surgeons to the Pennsylvania Hospital, where he served until 1863. Dr. Norris was elected to the Chair of Clinical Surgery in the University of Pennsylvania in 1848 and occupied it until 1857 when he resigned, having been elected a Trustee in 1856, in which office he remained until his death. He was also Consulting Surgeon to the Orthopædic Hospital and to the Children's Hospital, and Presi-

dent of the Board of Managers of the latter. He was a Fellow of the College of Physicians from 1839 and its Vice-President 1864-1875. He was also a member of the Academy of Natural Sciences, the American Philosophical Society, the Philadelphia County Medical Society, the American Medical Association, and the Medical Society of the State of Pennsylvania, and was Vice-President of the Historical Society of Pennsylvania, and the Philadelphia Medical Society. He was a Director of the Philadelphia Library, the Mutual Fire Insurance Company and the Philadelphia Savings Fund Society. Dr. Norris was the author of over twenty articles on medical subjects, nearly all of which appeared in the American Journal of the Medical Sciences, and the first of which is an account of Fracture and Dislocation of the Astragalus. Several of these articles were collected by him and published in a volume entitled Contributions to Practical Surgery. On February 7, 1838, Dr. Norris married Mary Pleasants Fisher. He died March 4, 1875.

BORIE, Adolphe Edward, 1809-1880.

Trustee 1858-1880.

Born Philadelphia, 1809; graduated Univ. of Pa., 1825; merchant; Sec. of the Navy, 1869; Trustee of the University, 1858-80; died 1880.

ADOLPHE EDWARD BORIE was born in Philadelphia, November 25, 1809. He entered the College in 1822 and graduated in 1825, having been a member of the Philomathean Society and the English Salutatorian of his class. After graduation he went to France to continue his studies and returned in 1828. He had intended to pursue the legal profession, but gave this up on account of ill health, and entered the counting house of his father, John Joseph Borie. He was for many years a member of the firm of McKean, Borie & Company, and acquired a large fortune in the East India trade. In 1848 he was elected President of the Bank of Commerce, which office he held till 1860. He was also one of the founders of the Union Club which became in 1862 the Union League, of which he was the first Vice-President. He contributed largely to the funds for the relief of the troops engaged in the Civil War. In 1858 he was elected a Trustee of the University of Pennsylvania which position he held till his death. In 1869 President Grant offered him the portfolio of Secretary of the Navy which

he accepted March 5, 1869. He, however, resigned this office on June 25 of the same year owing to press of private business. He accompanied General Grant on his tour around the world in 1877 to 1878. He married Elizabeth



A. E. BORIE

McKean of Philadelphia. He was a member of the American Philosophical Society from 1872. He died February 5, 1880.

HARE, John Innes Clark, 1816-

Professor Law 1868-89, Emeritus since 1889, Trustee 1858-68.

Born in Philadelphia, 1816; graduated Univ. of Pa., 1834; A.M. in course, and LL.D., 1868; lawyer; Vice-Provost Law Acad. of Philadelphia, 1862-83 and Provost since 1883; Prof. of Institutional Law at the University, 1868-89, and Emeritus Prof. since 1889; Judge of Dist. Court, Philadelphia, 1851-67, and President Judge, 1867-74; President Judge Court of Common Pleas, No. 2, since 1875; author and editor of law works; Trustee, 1858-68.

JOHAN INNES CLARK HARE, LL.D., Jurist, was born in Philadelphia, October 17, 1816, son of Dr. Robert Hare, who was for many years Professor of Chemistry at the University of Pennsylvania. He graduated at the University of Pennsylvania in 1834, and later studied Chemistry and was severely injured by an explosion of perchloric ether, which he had discovered. He became

a member of the American Philosophical Society in 1842, and received the Master's degree in 1837, and that of Doctor of Laws from the University in 1868. He was admitted to the Philadelphia Bar in 1841, practiced in that city, and became a Judge of the District Court of Philadelphia in 1851. He was Vice-Provost of the Philadelphia Law Academy 1862-1883, and has been Provost since 1883. He was also Professor in the Law School of the University of Pennsylvania 1868-1889, being now Emeritus Professor. He was a Trustee of the University 1858-1868, and Associate Judge of the District Court of Philadelphia 1851-1867, President Judge 1867-1874, and President Judge of the Court of Common Pleas No. 2 and Judge of Oyer and Terminer 1875. He has published (in conjunction with Horace B. Wallace) *American Leading Cases in Law* (2 vols., 1847); edited *Smith's Leading Cases in Law* (2 vols., 1852); *White and Tudor's leading Cases in Equity* (3 vols., 1852) and is the author of *Hare on Contracts* (1887) and *Constitutional Law*, (1889). He resigned his seat on the Bench in December 1896, being in his eighty-first year. Dr. Hare was a founder and Director of the Union League of Philadelphia, 1862-1863, which was followed by the organization of similar associations in New York and other cities.

McCALL, Peter, 1809-1880.

Law Professor, and Trustee 1861-1880.

Born in Trenton, N. J., 1809; graduated College of N. J., 1826; lawyer; member Philadelphia City Councils; Mayor of Philadelphia, 1844-45; Prof. of Pleading and Practice Univ. of Pa.; Trustee of the University, 1861-80; author of several addresses on legal subjects; died 1880.

PETER McCALL, Lawyer and Mayor of Philadelphia, was born in Trenton, New Jersey, August 31, 1809, the son of Peter and Sarah (Gibson) McCall. He graduated at the College of New Jersey, in 1826, and then studied law in Philadelphia with Joseph R. Ingersoll, where he was admitted to the Bar in 1831. He soon attained eminence in his profession being noted for the extreme care which he exercised in the preparation of his cases. Public attention was attracted to him and he was called to serve in both branches of the City Councils of Philadelphia. In 1844 he was elected Mayor of the city and upon his retirement from office he received through the press of the city a testimonial from the citizens of Philadelphia to the impartiality and fidelity with which he

had discharged his duties. For many years he was Professor of Pleading and Practice in the Law School of the University of Pennsylvania, and from 1861 until his death served upon the Board of Trustees. From 1873 until his death he was Chancellor of the Law Association of Philadelphia and for fifty years was a member of the Historical Society of Pennsylvania, on whose Executive Council he served from 1831 to 1842. Among his published addresses are: *Progress and Influence of the Society of Friends in Philadelphia*, *Rise and Progress of Civil Society and History of Pennsylvania Law and Equity*. He died in Philadelphia, October 30, 1880.

[Portrait on page 116.]

SCHAEFFER, Charles William, 1813-1896.

Trustee 1858-1896.

Born in Hagerstown, Md., 1813; graduated A.B. Univ. of Pa., 1832; educated for the ministry at Gettysburg Theol. Sem.; ordained, 1836; Clergyman of the Lutheran Church; Prof. of Ecclesiastical Hist. and Practical Theology at Lutheran Theol. Sem., Philadelphia, 1864-96; Trustee of the University, 1858-1896; and received D.D., 1879, LL.D. Thiel College Pa., 1887; author and editor; died 1896.

CHARLES WILLIAM SCHAEFFER, D.D., LL.D., Clergyman, and Trustee of the University many years, was born in Hagerstown, Maryland, May 5, 1813, son of Rev. Solomon Frederick and Eliza (Crever) Schaeffer. He graduated in Arts at the University of Pennsylvania in 1832, receiving the Master's degree in course, and entering the Gettysburg Theological Seminary completed there his preparation for the ministry in 1835. Licensed to preach in 1835, and ordained to the ministry of the Lutheran Church in 1836, he took charge of a parish in Montgomery county, Pennsylvania, in the latter year, and continued there for five years. His later service as a Pastor was in Harrisburg, Pennsylvania 1841-1849, and in Germantown, Pennsylvania 1849-1875, and in the last named year he retired with the title of Pastor Emeritus. In 1864 he took an active part in the establishing of the Theological Seminary of the Evangelical Lutheran Church in Philadelphia, and was immediately appointed Professor of Ecclesiastical History and Practical Theology, a position which he held until his death. He also figured prominently in the organization of the General Council of the Church in 1867. As one of the leaders of the conservative and confessional party of the Church he occupied many important offices in the administrative councils, and

his thorough knowledge of the development of the Lutheran faith in America has found abundant expression in frequent writings. In 1858 he was called to the Board of Trustees of the University, in which service he continued until his death. In 1879 he was given the honorary degree Doctor of Divinity. He was also made a Doctor of Laws by Thiel College, Greenville, Pennsylvania, in 1887. Besides his industrious work as an author, Dr. Schaeffer was engaged editorially as co-editor of the Lutheran Home Journal and the Philadelphian, Lutheran and Missionary, Editor-in-Chief of the



CHAS. W. SCHAEFFER

Foreign Missionary from 1879, and Editor of the Lutheran Church Review from 1886. His publications include: a Translation of Mann's Explanation of Luther's Small Catechism; Early History of the Lutheran Church in America; Golden Treasury for the Children of God, translated from the German; Family Prayer for Morning and Evening, and the Festivals of the Church Year and a translation of Halle Reports. He died in Germantown, Philadelphia, March 15, 1896.

WELSH, John, 1805-1886.

Trustee 1861-1886.

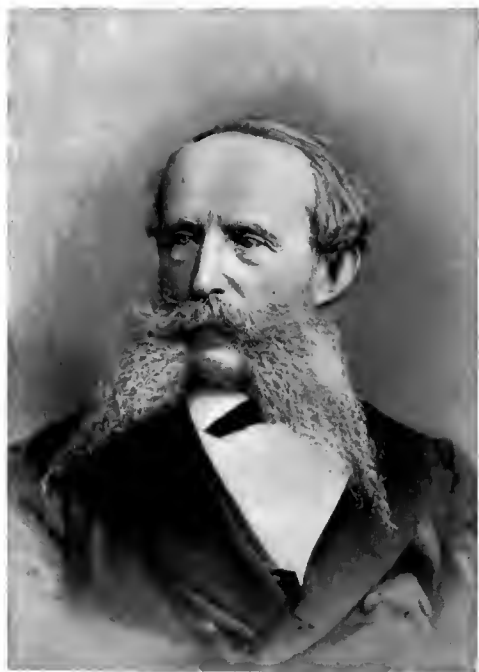
Born in Philadelphia, 1805; at an early age engaged in business in Philadelphia; Chairman Board of

Finance Centennial Exhibition, 1873-77; Minister to England, 1877-79; Trustee of the University, 1861-86; founded Chair of Hist. and Eng. Lit.; LL.D. Univ. of Pa., 1878, and Washington and Lee, 1880; died 1886.

JOHNS WELSH, LL.D., Merchant and Minister to England, was born in Philadelphia, November 9, 1805, son of John Welsh, a prominent merchant of Philadelphia, descended from early Swedish and English settlers of America. His early education was a thorough preparation for College, including a classical course, but at an early age he entered his father's business in which he rapidly rose to wealth and prominence. He formed a partnership with his brothers, Samuel and William Welsh, under the firm name S. & W. Welsh, which later became S. & J. Welsh, developing one of the largest commission enterprises in Philadelphia. John Welsh's history is conspicuous for his important association with public life and charitable affairs. For many years he was a Vestryman of St. Peter's Protestant Episcopal Church, working earnestly in its behalf, giving large sums of money to its various needs and taking active part in the founding of the Episcopal Hospital. He was the founder and President of an association organized to raise and maintain a fund for the aid of merchants who had been unfortunate in business, and during the Civil War he acted as Chairman of the Executive Committee of the Sanitary Fair, which was held in Philadelphia for the purpose of raising money for the soldiers and sailors of the North. He served from Select Council on the Sinking Fund Commission for over twenty years, and was for fifteen years President of the Philadelphia Board of Trade. A particular source of distinction was his noted service as Chairman of the Board of Finance of the Centennial Exhibition from the time of its inauguration in 1873 until the last accounts of the Exhibition had been settled in 1877. In recognition of his able discharge of the duties of that office, Mr. Welsh was voted a gold medal by the Board of Directors, and presented with \$50,000 by prominent citizens of Philadelphia, "in perpetual commemoration of the sincere gratitude of the citizens of Philadelphia." That money he devoted to founding the John Welsh Centennial Professorship of History and English Literature at the University of Pennsylvania, of which institution he was a Trustee from 1861 until his death. He also contributed, during his Trusteeship, \$30,000 to the endowment fund. On October 30, 1877, Mr. Welsh was appointed by President Hayes, Minister to the Court of St. James, and remained in that

office until 1879, winning the esteem and respect of the governments of two nations. It was he who paid \$5,000,000 awarded to the British government by the Halifax Fish Commission. He was a member of the Philadelphia Academy of Sciences, to which he presented \$10,000, and the American Philosophical Society, and was Chancellor of Union College, New York, in 1880. He received the degree of Doctor of Laws, from the University of Pennsylvania in 1878, and from Washington and Lee in 1880. By the King of Sweden he was made a Knight Commander of the Order of St. Olaf; by

dle. He received the degree of Bachelor of Arts from the University of Pennsylvania at graduation in 1856, the Master of Arts degree in course, and the degree of Bachelor of Laws in 1859. He has continuously followed his profession in Philadelphia. From 1862 until 1882 Mr. Biddle served the University in the office of Secretary and Treasurer of the Board of Trustees. Since 1884 he has been General Agent and Secretary to the Pennsylvania State Board of Charities. He is a member of the American Philosophical Society, and the Pennsylvania Sons of the Revolution.



JOHN WELSH

the Emperor of Japan, a Commander of the Order of the Rising Sun; and by the Bey of Tunis, a Grand Officer of the Order of Nizan Iftakan. He died in Philadelphia, April 19, 1886.

BIDDLE, Cadwalader, 1837-

Secretary-Treasurer Board of Trustees 1862-1882.

Born in Philadelphia, 1837; graduated Univ. of Pa., 1856; LL.B., 1859; Sec.-Treas. of Board of Trustees of the Univ., 1862-82; practicing lawyer in Philadelphia; Gen. Agt. and Sec. Pa. Board of Public Charities since 1884.

CADWALADER BIDDLE, Lawyer, was born in Philadelphia, October 28, 1837, son of James Cornell and Sarah Caldwell (Keppel) Bid-

SMITH, Francis Gurney, Jr., 1818-1878.

Professor Institutes of Medicine 1863-1877, Emeritus 1877-78.

Born in Philadelphia, 1818; A.B. Univ. of Pa., 1837; M.D., 1840; Prof. Physiology Pa. Med. College, 1852; Prof. Institutes of Medicine, Univ. of Pa., 1863-77; died 1878.

FRANCIS GURNEY SMITH, Jr., M.D., was born in Philadelphia, March 8, 1818, the son of Francis Gurney and Eliza (Muckie) Smith. He received both his classical and medical education at the University of Pennsylvania, obtaining the Bachelor of Arts degree in 1837 and that of Doctor of Medicine in 1840. Just after graduation from the Medical Department he was elected Resident Physician at the Pennsylvania Hospital in the Department for the Insane, remaining in charge there about a year. He then practiced for a short time as assistant to his brother, Dr. Thomas M. K. Smith, of Brandywine, near Wilmington, Delaware. He returned to Philadelphia in 1842 and was soon afterwards elected Lecturer on Physiology by the Philadelphia Medical Association. From 1842 to 1852 he was busy with this work, with building up his practice, in which he gave special attention to obstetrics and gynaecology, and with translations of and contributions to medical literature. The chief of his translations was that of Barth and Rogers Manual of Auscultation and Percussion. In 1844 he married Catherine Madeleine Dutilh. In this same year he, in conjunction with Dr. Huston, took charge of the Philadelphia Medical Examiner, becoming its sole Editor in 1850. He resigned his Editorship in 1854. In 1852 he was given the Chair of Physiology in the Pennsylvania Medical College, where he remained until he was elected in 1863 Dr. Samuel Jackson's successor in the Professorship of the Institutes of Medicine in the University of Pennsylvania. Failing health compelled

him to resign this position in 1877. He remained Emeritus Professor until his death, April 6, 1878. During the Civil War Dr. Smith served at the Christian Street Military Hospital in Philadelphia



FRANCIS G. SMITH

and made several visits to military hospitals in the field. In 1875 he established the first physiological laboratory in the University of Pennsylvania. Dr. Smith was a member of many medical and scientific associations. He was the first President of the Philadelphia Obstetrical Society 1868-1872. Among his many contributions to medical literature are *Domestic Medicine*, *Surgery and Materia Medica*, and, with Dr. Neill, *Neill and Smith's Compendium of Medicine*.

HENRY, Alexander, 1823-1883.

Trustee 1864-1883.

Born in Philadelphia, 1823; graduated Princeton, 1840; admitted to the Bar, 1844; Councilman 1856-57; Mayor of Philadelphia, 1858-66; Trustee of the University, 1864-83; died 1883.

ALEXANDER HENRY, War Mayor of Philadelphia, was born in Philadelphia, April 14, 1823, the son of John Henry and the grandson of the prominent merchant, Alexander Henry. Mr. Henry, like his grandfather a staunch Presbyterian,

received his collegiate education at Princeton, graduating in the Class of 1840. He at once began the study of law and was admitted to the Bar in 1844. From 1856 to 1857, he served in the City Councils, and in 1858 was elected to the Mayoralty on the ticket of the People's Party — a combination of Whigs and Republicans. By successive re-elections he served as Mayor until 1866, when he declined to run again. His terms covered the period of the Civil War and he administered the affairs of the city during those troublous times with great ability. On the arrival of Lincoln in Philadelphia on February 21, 1861, on his way to Washington to be inaugurated, Mayor Henry gave him welcome and tendered him the hospitality of the city. Of the strongest Union sympathies Mayor Henry would tolerate no manifestations of sympathy with the Confederacy. On April 16, 1861, he issued a proclamation declaring that treason against the state or against the United States would not be suffered within the city. Mr. Henry was very active in the organization of the Philadelphia International Exhibition in 1876, serving first as a



ALEXANDER HENRY

member and afterwards as President of the State Board of Centennial Supervisors. In addition to many other important public offices, Mr. Henry was a Trustee of the University of Pennsylvania

from 1864 to 1883, a member of the Fairmount Park Commission, and an inspector of the Eastern Penitentiary, which post he held for twenty-eight years. He died in Philadelphia, December 6, 1883.

JACKSON, Francis Aristide, 1830-

Adjunct Professor and Professor 1855-

Born in Northumberland, Pa., 1830; graduated Univ. of Pa., 1848; Adjunct Prof. Greek and Latin, 1855-64; Prof. Latin Lang. and Lit. since 1864; author of textbooks.

FRANCIS ARISTIDE JACKSON, LL.D., was born in Northumberland, Pennsylvania, March 20, 1830, son of Dr. Samuel and Elizabeth (Barker) Jackson. He graduated from the Academic Department of the University of Pennsylvania in 1848, receiving the degree of Bachelor of Arts and taking in course the Master's degree. Immediately after graduation he engaged in civil engineering and became an Assistant Master in the Episcopal Academy at Philadelphia in 1849, teaching Mathematics and Chemistry and in 1855 accepted an appointment as Adjunct Professor of Greek and Latin in the University. After nine years he was appointed to his present position of Professor of Latin Language and Literature, being now in the thirty-sixth year of service in that capacity. He received the degree of Doctor of Laws from the University of Indiana in 1883. Professor Jackson has published for the private use of his classes treatises on Latin Syntax and Prosody and on Horatian Metre. He is a member of the Zelosophic Society and the Phi Beta Kappa Fraternity. He married Mary, daughter of William Fishbourne Griffitts, of Philadelphia.

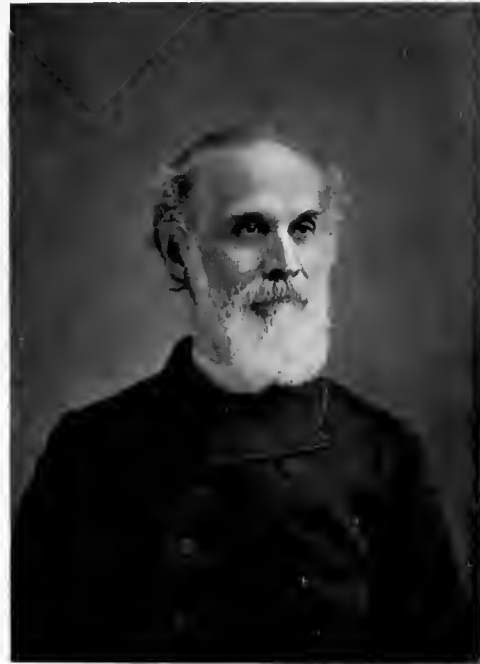
TRUMAN, James, 1826-

Dem. and Prof. Dentistry, since 1864, Sec. and Dean 1883-96.

Born in Philadelphia, 1826; graduated Philadelphia College of Dental Surgery, 1854; Dem. at the College of Dental Surgery, 1864-66; and Prof. of Operative Dentistry and Dental Histology, from 1866 to 1876; Prof. of Dental Pathology, Therapeutics and Materia Medica at the University since 1882; Editor of the International Dental Journal from 1890.

JAMES TRUMAN, D.D.S., was born in Philadelphia, November 22, 1826, son of Dr. George and Catharine H. Truman. The ancestors of his family have lived in Philadelphia since the time of William Penn. In 1854 he graduated from the Philadelphia College of Dental Surgery, the institution which later became the present Pennsylvania College of Dental Surgery and after ten years of suc-

cessful practice he returned to the College as Demonstrator, serving two years, and afterwards holding for ten years the Chair of Operative Dentistry and Dental Histology. From 1865 to 1869 was Editor of The Dental Times, a quarterly dental journal. He was appointed to his present position at the University as Professor of Dental Pathology, Therapeutics and Materia Medica in 1882. In 1883 he was made Secretary of the Department of Dentistry University of Pennsylvania, the title being changed subsequently to Dean, in which capacity he served the University up to 1896. Since 1890 he has been



JAMES TRUMAN

the Editor of the International Dental Journal. He was a contributor to Holmes's System of Surgery and the American System of Dentistry and has written extensively on scientific matters connected with the dental profession. He is a member of many of the leading dental societies of this country and has repeatedly filled the office of President in the local organizations and served in that capacity at the meeting of the American Dental Association in 1897.

ASHHURST, John, 1809-1892.

Trustee 1865-1888.

Born in Philadelphia, 1809; non-graduate of Class of 1826, Univ. of Pa.; banker and merchant; Director of Philadelphia & Reading Railroad, of Farmers & Mechanics National Bank, of the Philadelphia Trust,

Safe Deposit & Insurance Company, of Western Savings Fund Society, etc.; Trustee of the University, 1865-1888; died 1892.

JOHNS ASHHURST, Banker and Merchant, was born in Philadelphia, July 17, 1809, the son of Richard and Elizabeth (Crotto) Ashhurst, widow of Captain Hughes. He entered the Department Arts of the University of Pennsylvania in 1822, and was Moderator of the Philomathean Society, but did not graduate with his class, leaving College to enter his father's firm (Richard Ashhurst & Sons). He became a banker and a merchant, and was during his lifetime connected with a number of the promi-



JOHN ASHHURST

nent institutions of the city. For many years he was a Director of the Philadelphia & Reading Railroad Company, of the Farmers & Mechanics National Bank, of the Philadelphia Trust, Safe Deposit & Insurance Company, of the Western Savings Fund Society, and a Manager of the Episcopal Hospital. During the Rebellion he was identified with the relief movements in Philadelphia, being the Chairman of the Philadelphia Bounty Fund Commission from 1862 to 1865; he was also a Founder of the Union Club, and an Original Member of the Union League. He was a Trustee of the University of Pennsylvania from 1865 to 1888. Mr. Ashhurst married in 1835, Harriet, daughter of Manuel Eyre (Jr.) and died in Philadelphia, February 18, 1892.

HAYDEN, Ferdinand Vanderveer, 1829-1887.

Professor Mineralogy and Geology 1865-1872.

Born in Westfield, Mass., 1829; graduated Oberlin, 1850; M.D. Albany Med. College, 1853; Surgeon of U. S. Vols., 1862-64; Chief Medical Officer of Army of the Shenandoah, 1864-65; Prof. of Mineralogy and Geology, Univ. of Pa., 1865-72; U. S. Geologist, 1867-79; Asst. Geologist, U. S. Geol. Surv., 1879-86; LL.D. Univ. of Pa., 1887; died 1887.

FERDINAND VANDERVEER HAYDEN, M.D., LL.D., was born in Westfield, Massachusetts, September 7, 1829. He moved to Ohio in childhood and received his education there, graduating at Oberlin in 1850. He received the degree of Master of Arts from Oberlin in 1853, and the same year graduated at the Albany Medical College. He did not take up the practice of his profession but accepted a position under James Hall, State Geologist of New York, in an exploring expedition of the Bad Lands of Dakota. Dr. Hayden returned with a large and valuable collection of fossil vertebrates. He went West again in 1854, spending two years in exploring the basin of the upper Missouri, where he again secured a large collection of fossils, part of which he deposited in the St. Louis Academy of Science and part in the Philadelphia Academy of Natural Sciences. His work in the West as revealed in these collections attracted the attention of the authorities of the Smithsonian Institution in Washington and Dr. Hayden was appointed Geologist on the staff of Lieutenant Gouverneur K. Warren, who was then in the Northwest. In 1859 he was appointed Naturalist and Surgeon of the expedition to the Yellowstone and Missouri rivers under Captain Reynolds. In 1862 he gave up this position to become Assistant Surgeon of Volunteers in the United States Army. He was at the Satterlee Hospital in Philadelphia at first, but upon being made full Surgeon he was sent to Beaufort, South Carolina, as Chief Medical Officer. Early in 1864, he became Assistant Medical Inspector of the Department of Washington, and later in this year Chief Medical Officer of the Army of the Shenandoah. He resigned and was made brevet Lieutenant-Colonel in 1865. He was Professor of Mineralogy and Geology in the University of Pennsylvania 1865-1872, resigning because of the press of his survey work which he was conducting at the same time with his College courses. In 1866 he again visited the upper Missouri, this time in the interests of the Philadelphia Academy of Natural Sciences. From 1867 to 1869 he was in direction of the government

survey of Nebraska, and from 1869 to 1872 he conducted a series of geological explorations in Dakota, Wyoming, Utah and Colorado. These explorations were largely instrumental in causing Congress to set apart Yellowstone Park as a National reservation. From 1872 to 1879 Dr. Hayden was in charge of the geographical and geological survey of the territories above named. In 1879 when all the national surveys were consolidated into the United States Geological Survey he was placed in charge of the Montana Division where he remained until ill health



F. V. HAYDEN

caused his resignation in 1886. In 1887, shortly before his death he was honored with the degree of Doctor of Laws by the University of Pennsylvania.

REESE, John James, 1817-1892.

Prof. Med. Jurisprudence and Toxicology 1865-90, Emeritus 1890-92.

Born in Philadelphia, 1817; graduated, A.B., Univ. of Pa., 1836; M.D. Univ. of Pa., 1839; Prof. Med. Chem. Pa. Med. College, 1854-59; Prof. Med. Jurisprudence and Toxicology, Univ. of Pa., 1865-90; Emeritus Prof. 1890-92; died 1892.

JOHN JAMES REESE, M.D., was born in Philadelphia, June 16, 1817, the son of Jacob and Leah (James) Reese. He entered the College Department in 1832 and graduated in 1836. He at once began his medical studies and graduated,

Doctor of Medicine, in 1839. He soon built up a large practice, paying especial attention to the diseases of women and children. He joined the Philadelphia Medical Society in 1841 and in the next year became a Fellow of the College of Physicians. In 1854 he became Professor of Medical Chemistry in the Pennsylvania Medical College, holding the position until 1859. In 1858 he became Physician to the Philadelphia Orphan Asylum, and in 1864 to St. Joseph's Hospital, where he remained until 1884. During the Civil War he was Assistant Surgeon of United States Volunteers, serving for a time as Physician to the Christian Street Hospital. Becoming Professor of Medical Jurisprudence and Toxicology at the University of Pennsylvania in 1865 he held the Chair until failing health compelled him to give it up in 1890, after which until his death he was Emeritus Professor. From 1885 to 1887 he was President of the Philadelphia Medical Jurisprudence Society. Dr. Reese contributed largely to medical literature, publishing, besides many pamphlets: American Medical Formulary; Analysis of Physiology; Manual of Toxicology; Text-book of Medical Jurisprudence and Toxicology. He married Sallie Gibson. He died in Atlantic City, New Jersey, September 4, 1892.

STEVENS, William Bacon, 1815-1887.

Trustee 1865-1887.

Born in Bath, Me., 1815; M.D. Dartmouth College, 1838; Rector Emmanuel Church, Athens, Ga., and Prof. Belles-Lettres and Moral Philosophy, Univ. of Ga., 1844; Rector St. Andrew's Church, Philadelphia, 1848-65; Bishop of Pa., 1865-87; Trustee of the University, 1865-87; died 1887.

WILLIAM BACON STEVENS, M.D., D.D., LL.D., Protestant Episcopal Bishop of Pennsylvania, was born in Bath, Maine, July 13, 1815, of New England ancestry. He was educated at Phillips Academy in Andover, Massachusetts, and had intended to study for the ministry of the Congregational Church but ill health compelled him to take a voyage to the East Indies. Returning in 1836 he entered the Medical Department of Dartmouth College, where he graduated in 1838. He then settled in Savannah, Georgia, as a practitioner, and it was during this time that he became drawn toward the Episcopal Church and after his baptism into that faith he took Holy Orders (1843) and began his labors as a missionary at Athens, Georgia, where a church was soon built. In January 1844 he added to these duties the Professorship of Belles-Lettres,

Oratory and Moral Philosophy, in the University of Georgia. He was also engaged during this time in writing his *History of Georgia*, the first volume of which appeared in 1847. In 1848 he became Rector of St. Andrew's Church in Philadelphia, where he at once became well known as a preacher and Pastor, restoring the congregation to its normal size and removing its debt of \$21,000. He was appointed Assistant Bishop of the Diocese of Pennsylvania in 1861 and on the death of Bishop Potter in 1865 he became Bishop of Pennsylvania. This diocese included at the time the entire state, but so



WILLIAM B. STEVENS

large was the increase in numbers during his administration that it was twice divided, and he finally confined his attention to the Eastern portion, including Philadelphia. In 1865 he was elected a Trustee of the University of Pennsylvania and remained in that office till his death. Besides the *History of Georgia* before mentioned, his literary labors include: *The Undeveloped Powers of the Church*, *The Relations of the Clergy and the Laity* and a number of addresses and discourses. In 1878 he preached at Westminster Abbey and Canterbury Cathedral on the occasion of a Conference of Anglican Bishops in London and in 1885 he delivered the sermon before the Pan-Anglican Council at Lambeth. He died June 11, 1887.

ALLEN, Harrison, 1841-1897.

Professor in Medical Department 1865-1896.

Born in Philadelphia, 1841; graduated Med. Dept. Univ. of Pa., 1861; Asst. Surgeon U. S. A., 1862-65; Prof. Zoölogy and Comp. Anat. Univ. of Pa., 1865-76; Prof. Physiology, 1878-85; Prof. Comp. Anat., 1891-96; Curator of Wistar Institute of Anat., 1891; died 1897.

HARRISON ALLEN, M.D., Laryngologist, Anatomist and Naturalist, was born in Philadelphia, April 17, 1841, the son of Samuel and Elizabeth Justice (Thomas) Allen. The Allens and Walns from whom he was descended figured prominently in the early history of Pennsylvania. As a boy he was interested in natural history and while studying medicine at the University of Pennsylvania he still kept up his investigations in pure science. He would have preferred to devote himself to this, but it was necessary that he earn his living, and after his graduation as Doctor of Medicine in 1861 he stuck to medicine, including chemistry as well, however, in his studies. For a year after graduation he was Resident Physician at the Philadelphia Hospital. Early in 1862 he was appointed Acting Assistant Surgeon in the United States Army, and Assistant Surgeon July 30, 1862, serving in hospitals and in the defenses of Washington until the acceptance of his resignation, December 8, 1865. He then ranked as brevet Major. Before the war Dr. Allen had already become known as a naturalist, printing his first scientific paper in the Proceedings of the Philadelphia Academy of Natural Sciences in July 1861. It treated of certain bats brought from Africa by the explorer Du Chaillu. The Smithsonian Institution printed his monograph on bats in 1864, and again in 1893. Indeed, Dr. Allen may be said to be the American authority on bats; over thirty of his scientific papers are devoted to them. By 1865 Dr. Allen had proved himself a successful practitioner and an eminent investigator. In 1865 he began what was destined to be a long career as a teacher. In that year he became Professor of Zoölogy and Comparative Anatomy in the Medical Department of the University of Pennsylvania, holding the position until 1876. He was Professor of Physiology 1878-1885; Emeritus Professor of Physiology 1885-1891; Professor of Comparative Anatomy and Zoölogy 1891-1896. In 1891 he became Curator of the Wistar Institute of Anatomy at the University, President of the Anthropometric Society, President of the Contemporary Club of Philadelphia, and President of the Association of American Anatomists, holding this last position until June

1894. Besides the papers already mentioned Dr. Allen published in 1869 *Outlines of Comparative Anatomy and Medical Zoölogy*, and in 1884 completed an elaborate treatise on *Human Anatomy*.



HARRISON ALLEN

Dr. Allen's specialty in medicine was, however, laryngology, and on this he published a great many articles. He was President of the American Laryngological Association in 1880. Outside of medicine and natural history Dr. Allen was well informed. In exemplification of his broad culture and sympathies may be quoted the titles of two of his papers: *Discussion of the Life Form in Art, and Poetry and Science*, an address before a Browning society. Dr. Allen married on December 29, 1869, Julia A. Colton. He died in Philadelphia, November 14, 1897.

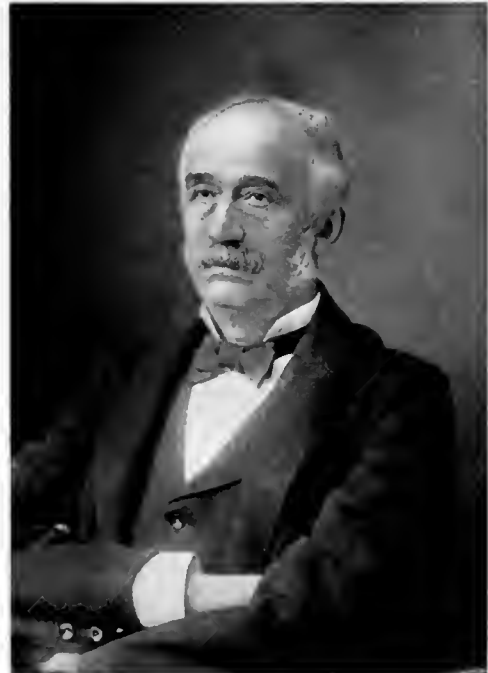
SEIDENSTICKER, Oswald, 1825-1894.

Professor German 1867-1894.

Born in Göttingen, Hanover, 1825; graduated Univ. of Göttingen, 1846; taught in private schools in Boston, Brooklyn and Philadelphia, 1848-67; Prof. German Language and Literature, Univ. of Pa., 1867-94; author of numerous works in German and English; died 1894.

OSWALD SEIDENSTICKER, Ph.D., one of the most prominent Germanists of his day, was born in Göttingen, Hanover, Germany, May 3, 1825, the son of Dr. Georg Friedrich Seidensticker,

a prominent figure in the Thirty Years' War. Oswald Seidensticker was educated at the University of Göttingen, where he received the degree of Doctor of Philosophy in 1846. The year previous his father had sailed for America and upon the completion of his studies Dr. Seidensticker joined the family there. For a time he studied medicine and then abandoning this profession taught for three years in a private school at Jamaica Plain in Massachusetts. From 1852 to 1855 he conducted a private school at Bayridge, near Boston, Massachusetts, and then at Brooklyn, New York, until 1858. In this year he came to Philadelphia and for ten years conducted with success a private school called the Classical Academy. In 1867 he was called to the Chair of German Language and Literature at the University of Pennsylvania, which position he held until his death. His work at the University was distinguished by its thorough scholarship and through his writings he made the German Department well known at home and abroad. In addition his quiet influence and dignified bearing were distinct influences of the greatest value in his rôle of teacher.



OSWALD SEIDENSTICKER

Dr. Seidensticker's writings cover a wide range of subjects connected with German Literature and History. Among his twenty-two published works are *Franz Daniel Pastorius und die Gründung von*

Germantown, Geschichte der deutschen Gesellschaft von Pennsylvanien von 1864-1876, The First Century of German Printing in America, etc. He died January 10, 1894, after a brief illness.

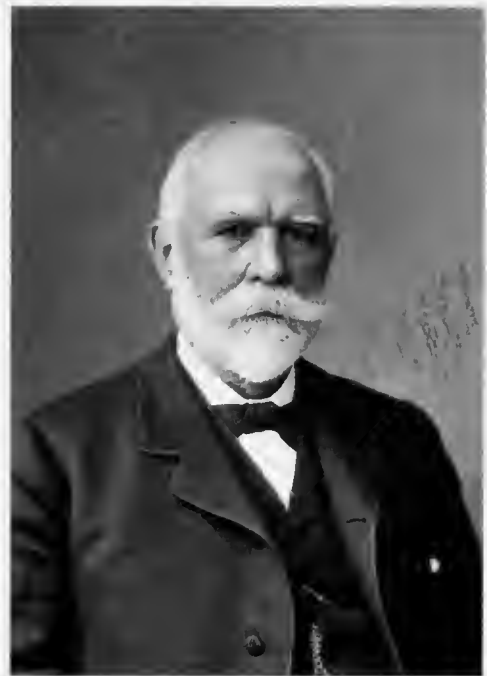
SELLERS, William, 1824-

Trustee 1868.

Born in Delaware Co., Pa., 1824; entered machine business at age of fourteen; in charge of Fairbanks Engine Shops, Providence, R. I., 1845-47; opened independent business in Philadelphia, 1847; now member of William Sellers & Co. Incorp.; Trustee Univ. of Pa. since 1868.

WILLIAM SELLERS was born in Delaware county, Pennsylvania, September 19, 1824, son of John and Elizabeth (Poole) Sellers. Samuel Sellers, the progenitor of the American family, emigrated from Belpre, Derbyshire, in 1682, (married Anne, daughter of Henry and Helen Gibbons of Parevidge, Derbyshire, England, in 1684). In 1690 under patent from William Penn he took up one hundred acres of land in that region which is now Upper Darby, Delaware county, Pennsylvania, and the following year bought one hundred acres lying partly in Philadelphia county. On the land of his first purchase he built the house which for six generations was the home of his direct descendants. The home of the parents of William Sellers, now owned by him, stands on this same land. Mr. Sellers was educated in a school held in a private school-house which was built by his father and two relatives and is now occupied by a public school. In his fourteenth year he was placed in the machine-shop of his uncle, J. Morton Poole, near Wilmington, Delaware, to learn the machinist's trade. There he remained until the age of twenty-one when he removed to Providence, Rhode Island, to assume charge of the steam-engine shops of Fairbanks, Bancroft & Company. After two years, 1847, Mr. Sellers started a business independently at Thirtieth and Chestnut streets in Philadelphia, and in the following year he formed with Mr. Bancroft, his former employer of the Providence firm, who had just opened a commodious shop in Kensington, the firm Bancroft & Sellers, the appliances and tools of both being combined in the plant at Kensington. After a few years the capacity of the Kensington shop was found to be too limited for the increasing business, and the firm purchased the lot of land bounded by Pennsylvania Avenue, Sixteenth, Seventeenth and Hamilton streets. Along the line of the Philadelphia & Reading Railroad,

parallel with Pennsylvania Avenue, the new structure was built. In 1855 Mr. Bancroft died and with John Sellers, a brother who had previously been taken into the business, the firm became William Sellers & Company; in 1886 this firm was incorporated as William Sellers & Company, Incorporated. Since 1868 Mr. Sellers has been a Trustee of the University. He has also held positions as follows: member of Franklin Institute since 1847, President of it, 1864-1867; member of the American Philosophical Society since 1865; Director of the Philadelphia, Wilmington & Baltimore Railroad since



WILLIAM SELLERS

1866; President of the Edge Moor Iron Company since 1868; member of the National Academy of Sciences since 1873; Commissioner of Fairmount Park 1867-1872; President of the Midvale Street Company 1873-1887; Vice-President of the Board of Finance of the Centennial Exposition. He is a correspondent of the Société d'Encouragement pour l'Industrie Nationale; a Chevalier of the Legion d'Honneur; and a member of the Mechanical Engineers' and Mining Engineers' societies of America and of the Mechanical Engineers and Civil Engineers of England, and of the Union League Club, having been a member of the old Union Club the forerunner of the Union League. He is in politics allied with the Republican party. Mr. Sellers married in

1849 Mary Ferris of Wilmington, Delaware, who died in 1870. In 1873 he was again married to Amélie Haasz of Philadelphia. His surviving children are: Katherine, William F., Alexander and Richard Sellers.

HALDEMAN, Samuel Stehman, 1812-1880.

Professor Comparative Philology 1869-1880.

Born in Lancaster Co, Pa., 1812; attended Dickinson College, 1828-30; Assistant to Pa. State Geologist, 1837; Prof. Natural History, Univ. of Pa., 1851-55; Prof. Natural History, Delaware College, 1855-58; Prof. Comparative Philology at the University, 1869-80; LL.D. Univ. of Pa., 1876; died 1880.

SAMUEL STEHMAN HALDEMAN, LL.D., was born at Locust Grove, Lancaster county, Pennsylvania, August 12, 1812, the eldest son of Henry and Frances (Stehman) Haldeman. He developed an interest in natural history in boyhood, collecting fresh-water molluscs, insects, minerals, birds and small mammals. In 1826 he was sent to Dr. Keagy's classical school in Harrisburg and two years later to Dickinson College at Carlisle, where he came under the influence of Professor H. D. Rogers. The College life and courses of study were not to his taste, however, and he left Carlisle in 1830 for his scientific books and shells and insects. His devotion to science and avoidance of ordinary business aroused so much criticism in the community in which he lived on the banks of the Susquehanna that he connected himself with the management of a saw-mill. He was thus ostensibly employed for five years, during which he made a special study of the sounds of the human voice. In 1836 his old preceptor, Professor Rogers, who had been made State Geologist of Pennsylvania, called upon Haldeman to finish up his field work in New Jersey, where he had been previously State Geologist. In 1837 Haldeman was transferred to Pennsylvania, his first work being the sectional study of the Susquehanna River. He was an entitled Assistant of Professor Rogers but one year, but he appears to have retained a connection with the survey for several years longer. He then returned to his home at the junction of Chickies Creek and the Susequehanna, and remained there for the rest of his life save when his professional duties called him away. In 1842-1843 he lectured at the Franklin Institute, Philadelphia, on Zoölogy; from 1851 to 1855 he was Professor of Natural History in the University of Pennsylvania; from 1855 to 1858 he was Professor of Natural History in Delaware College and subsequently lectured there on

Comparative Philology, at the same time filling the Chair of Geology and Chemistry at the Pennsylvania State Agricultural College. From 1869 to 1880 he was Professor of Comparative Philology at the University of Pennsylvania, which honored him with a Doctor of Laws degree in 1876. Professor Haldeman's range in science was wide. He was a prominent entomologist but phonology in later years received his closest study and in it he achieved perhaps his greatest success, carrying off, in 1858, the Trevyllian Prize by his essay on Analytic Orthography. Professor Haldeman contributed over two



SAMUEL S. HALDEMAN

hundred articles to periodical literature, relating to all branches of science: Geology, Mineralogy, Archæology, Paleontology, Astronomy, Chemistry, Conchology, Ornithology, Philology and Phonology. He published also about twenty books. He was a member of the American Philological Society, the National Academy of Sciences and the American Philosophical Society. He was married in 1835 to Mary A. Hugh, of Bainbridge, Pennsylvania. He died at his home at Chickies, September 10, 1880.

MORTON, Henry, 1837-

Professor Chemistry 1869-1870.

Born in New York City, 1837; graduated Univ. of Pa., 1857; Ph.D. Dickinson College and College of N.

J., 1871; law student until 1859; Instr. Chemistry and Physics Acad. P. E. Church, Philadelphia, 1859-61; Prof. Chemistry at Philadelphia Dental College, 1863; Lect. in Chemistry and Sec. Franklin Inst., 1864; Prof. Chemistry at the Univ. of Pa., 1869-70; Pres. Stevens Inst. of Tech., Hoboken, N. J., since 1870; scientific investigator and educator.

HENRY MORTON, Ph.D., Sc.D., LL.D., was born in New York City, December 11, 1837, son of Rev. Henry Jackson and Helen (McFarlan) Morton. Entering the University of Pennsylvania as a Sophomore in 1854 he became Moderator and Annual and Biennial Orator of the Philomathean



HENRY MORTON

Society, and was honorably mentioned at graduation, in 1857, for the excellence of his essay on Egyptian Art, its Origin and Overthrow. Made and published with C. R. Hale (now Bishop of Cairo, Illinois) a translation of the Hieroglyphic and Greek inscriptions on the "Rosetta Stone." He received the degree of Master of Arts in course, and in 1869 the degree of Doctor of Philosophy was conferred by Dickinson College and the same by the College of New Jersey in 1871, also the degree of Doctor of Science from the University of Pennsylvania and of Doctor of Laws from Princeton University in 1897. Until 1859 he was engaged in studying law, and in that year, finding scientific pursuits of greater interest, he took a position as Instructor in

Chemistry and Physics at the Academy of the Protestant Episcopal Church in Philadelphia. In 1861 he was Lecturer on Chemistry at the Franklin Institute, and was appointed Resident Secretary of the Institution in 1864. He became Professor of Chemistry at the Philadelphia Dental College in 1863 and continued in that work until 1869, when he was appointed to assume charge, under the auspices of the United States Nautical Almanac Office, of an expedition to Iowa, to make photographs of the total eclipse of the sun which occurred in the summer of that year, and was called to the University of Pennsylvania to occupy the Chair of Chemistry, which charge he resigned in 1870 to enter his present work as President of the Stevens Institute of Technology in Hoboken, New Jersey. President Morton presented to the Institute a thoroughly equipped work-shop in 1880, established the Morton Scholarship in 1882 and endowed the Chair of Engineering Practice in 1892 and between 1892 and 1900 contributed largely to the Building Fund, making in all about \$80,000. He was a member of a party organized to make observations of the total eclipse of the sun in Rawlins, Wyoming, July 29, 1878, and served as a member of the United States Light House Board from 1878 to 1885. He has written extensively on various scientific subjects as a contributor to journals of science, including the Franklin Institute Journal, of which he was Editor from 1865 to 1870; and the Chemical News of London; among these writings some of especial importance are: On the Fluorescent and Absorption Spectra of the Uranic Salts, Methods of Optical Projection, The Applications of Electricity to Illumination, The Storage of Electricity, Engineering Fallacies, Liquid Air Fallacies. He also wrote the articles on Electricity and on Fluorescence for the American Cyclopaedia of 1878. President Morton is a member of the American Philosophical Society, the National Academy of Science, the American Chemical Society and the American Society of Mechanical Engineers. He married Clara W. Dodge of New York City in 1861.

NEWTON, Richard, 1812-1887.

Trustee 1869-1887.

Born in Liverpool, England, 1812; graduated Univ. of Pa., 1836; graduated General Seminary of P. E. Church, New York City, 1839; Rector Holy Trinity Church, Chester, Pa., 1839-40; Rector St. Paul's, Epiphany and Covenant Churches in Philadelphia,

1840-87; Trustee Univ. of Pa., 1869-87; D.D. Kenyon College, 1851; author of many sermons and other religious works; died 1887.

RICHARD NEWTON, D.D., was born in Liverpool, England, July 26, 1812, the son of Richard and Elizabeth (Cluett) Newton. The family sailed for America when he was twelve years old, and after quite severe struggles to obtain his early education he entered the University of Pennsylvania, graduating in 1836, and having been a member of the Zelosopic Society. He then attended the General Seminary of the Protestant Epis-



RICHARD NEWTON

copal Church in New York City, completing the course in 1839, and being ordained to the Deaconry. In the same year he received a call to the Rectorate of Holy Trinity Church at West Chester, Pennsylvania, and was married to Lydia Greatorex. In 1840 he was called to the Rectorate of St. Paul's Church, Philadelphia, which pulpit he occupied until 1862, when his ministry of eighteen years at the Church of the Epiphany began. He was elected a Trustee of the University of Pennsylvania in 1869 and served till his death. In 1881 he resigned his Rectorship at the Epiphany in consequence of ill-health and for a time devoted himself solely to evangelical work, then in 1882 began his third ministry in Philadelphia as Rector of the Church

of the Covenant. Dr. Newton wrote constantly on religious subjects, the most noted being his: *Life of Christ*, *Rills from the Fountain of Life* and *The King's Highway*. Seventeen volumes of *Children's Sermons* were published by him. During his Rectorate of St. Paul's he was active in revivals and was a decided supporter of the low church party. He was granted the honorary degree of Doctor of Divinity from Kenyon College in 1851. He died in Philadelphia, May 25, 1887.

PAUL, John Rodman, 1802-1877.

Trustee 1869-1877.

Born in Philadelphia, 1802; graduated Arts Dept., Univ. of Pa., 1820; Latin Salutatorian; M.D., 1823; Interne Pa. Hosp., 1825-27; Pres. Board of Managers Wills' Eye Hosp.; member Philadelphia City Councils, 1844-45; Director of Girard College, Bank of Commerce and Philadelphia Savings Bank; Treas. Washington M'fg. Co., 1859-69; Pres. Gloucester Land Co.; Trustee of the University, 1869-77; died 1877.

JOHNS RODMAN PAUL, M.D., was born January 24, 1802, in Philadelphia, the son of James and Elizabeth (Rodman) Paul. He graduated from the Arts Department of the University of Pennsylvania in 1820, being the Moderator of the Philomathean Society and the first honor man of his class, and delivering the Latin Oration at the Commencement. After his graduation he began the study of medicine, having as preceptor Dr. Joseph Parrish, who conducted one of the largest of the private medical schools in the country. He took the degree of Doctor of Medicine from the University in 1823 and then spent two years in Europe studying in the hospitals there, especially in Paris, under Corvisart and Broussais. Returning to Philadelphia in 1825 he was for two years Interne of the Pennsylvania Hospital, and then commenced practice on Third Street below Pine Street. In 1828 he was married to Elizabeth Duffield Neill. In 1844, upon the death of his father, he withdrew from active practice, and devoted himself to the care of the estate. He did not, however, sever his connection entirely with his profession. He was one of the first Managers of Wills' Hospital for Diseases of the Eye and was for thirty years President of the Board. He became Treasurer of the College of Physicians in 1838 and held that position until his death. For one term 1844-1845, he was a member of the City Councils, but finding this sphere of activity uncongenial he never afterward accepted any political office. He was, however, a

Director of Girard College, of the Philadelphia Contributionship, of the Bank of Commerce and of the Philadelphia Savings Bank. From 1859 to 1869 he was Treasurer of the Washington Manufacturing Company and for thirty years President of the Gloucester Land Company. In 1869 he became a Trustee of the University of Pennsylvania. He died October 13, 1877.

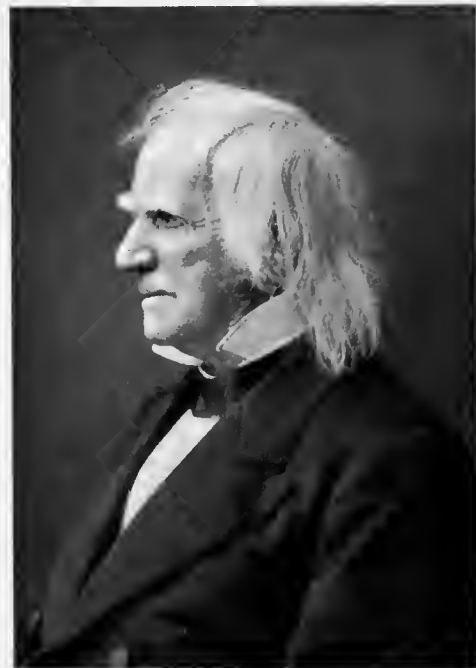
PRICE, Eli K., 1797-1884.

Trustee 1860-1884.

Born in Chester Co., Pa., 1797; admitted to the Bar, 1823; State Senator 1854-56; Trustee of the University, 1860-84; died 1884.

ELI K. PRICE was born in Chester county, Pennsylvania, within a short distance of the field of the Battle of the Brandywine. He was descended from ancestors who came from Wales to Pennsylvania in 1682 and settled in the "Welsh Tract." After leaving Friends school Mr. Price entered the shipping-house of Thomas P. Cope. He soon left this position, however, and, studying law in the office of John Sergeant, was admitted to the Bar in 1823. Mr. Price quickly attained a very high position in the Philadelphia courts, and up to the time of his death he ranked as one of Philadelphia's foremost lawyers. He early made a specialty of the law of real estate and gradually worked his way to the position of an authority in this branch of law. His knowledge of this subject is recorded in his work entitled *Law of Limitation and Liens against Real Estate*. An Act of Assembly of 1853, largely framed by him and put through chiefly through his efforts, is known as the Price Act. Technically it is called *An Act Relating to the Sale and Conveyance of Real Estate*. Mr. Price did not confine himself to his profession but took an active part in public life. In 1845 and 1848 he represented Philadelphia on the State Revenue Board, and from 1854 to 1856 was a member of the State Senate, to which he was elected as an Independent. The Consolidation Act of 1854 was chiefly due to his energy. At that time the City of Philadelphia was still embraced within the limits laid out by Penn, and around it had grown up a number of boroughs, townships and districts, most of them contiguous to the city, yet with their own local governments and officials. Mr. Price sought election to the Senate on a platform that declared it to be desirable that all these outlying districts should be incorporated with the city. He was elected on

this platform and put through the Consolidation Act. Mr. Price, as Trustee, from 1860 up to the time of his death, was active in University affairs, but his interest in education and science was not confined to the University. He read many papers before the American Philosophical Society, of which he was for a time Vice-President, and he was equally prominent in the Numismatic and Antiquarian Society. A member of the Fairmount Park Commission from its formation in 1867, he was instrumental in securing for the Park some of its most beautiful parts. Among his published writings are: *History*



ELI K. PRICE

of the Consolidation of Philadelphia; *Trial by Jury*; *The Family as an Element of Government*; *Some Phases of Modern Philosophy*; *The Glacial Epochs*; *Sylviculture*, etc. He died November 16, 1884, after a service at the Bar continuing more than sixty years.

AGNEW, David Hayes, 1818-1892.

Professor Surgery 1870-1889, Emeritus 1889.

Born in Lancaster Co., Pa., 1818; graduated Univ. of Pa., M.D., 1838; Surgeon to Philadelphia Hosp., 1854; Demonstrator of Anatomy and Asst. Lec. of Clinical Surgery at the University, 1863; Surgeon to Wills Hosp., 1863; Orthopædic Hosp., 1867; Prof. Surgery at the University, 1870-89; Emeritus Prof., 1889; LL.D.

College of N. J., 1876; published about one hundred articles on medical subjects; died 1892.

DAVID HAYES AGNEW, M.D., LL.D., was born in Lancaster county, Pennsylvania, November 24, 1818, the son of Dr. Robert and Agnes (Noble) Agnew. He received his early education at Moscow Academy, in Chester county, at Jefferson College, Canonsburg, and at Newark College, Delaware. He graduated from the Medical Department of the University of Pennsylvania in 1838 and engaged in the practice of his profession in Chester county. After an unsuccessful venture in the iron business he came to Philadelphia in 1848 and resumed the practice of medicine. In 1852 he began teaching Practical Anatomy and Operative Surgery in the Philadelphia School of Anatomy, and in 1854 he was elected Surgeon to the Philadelphia Hospital. About this time he founded the Pathological Museum and was instrumental in restoring to public teaching the unusual wealth of material therein contained. He became Demonstrator of Anatomy and Assistant Lecturer in Clinical Surgery to the University of Pennsylvania in 1863. In the same year he was elected Surgeon to the Wills Eye Hospital, in 1865 Surgeon to the Pennsylvania Hospital and in 1867 Surgeon to the Orthopædic Hospital. He resigned his position in the Pennsylvania Hospital on account of the stand he took against the teaching of Anatomy to mixed classes, but returned a few years later with the distinct understanding that he should not be compelled to lecture to women. During the War of the Rebellion he was connected with the Mower Hospital in Chestnut Hill and the Military Hospital at Hestonville. In 1870 he became Professor of Operative Surgery in the University and in 1871 accepted the John Rhea Barton Chair of the Principles and Practice of Surgery. These he held till he resigned all public positions in 1889, when he was elected Emeritus Professor at the University and Honorary Professor to the University Hospital. He was justly renowned as one of the foremost surgeons of his day, but more especially as a teacher and as an influence which redounded greatly to the name and credit of the University. As a teacher he was remarkable for his faculty of explaining clearly the most abstruse portions of his subject, as a consultant and practitioner his most noteworthy quality was the soundness of his judgment. In his operative work he was quick and yet precise. His works embrace a number of miscellaneous articles, but the great work associated with his

name is his Treatise on the Principles and Practice of Surgery, the three successive volumes of which appeared in 1878, 1881 and 1883. A second edition appeared in 1889. In 1841 he married Margaret C. Irwin. He leaves no children. He was elected President of the Philadelphia County Medical Society in 1872, of the Pennsylvania State Society in 1877, of the Philadelphia Academy of Surgery and of the American Surgical Association in 1888 and of the Philadelphia College of Physicians in 1890. In 1891 he was elected Honorary Surgeon to the Presbyterian Hospital, being the only one on whom this title has ever been conferred. He visited Europe in 1872. He died March 22, 1892.

[Portrait on page 170.]

MERRICK, John Vaughan, 1828-

Trustee 1870-

Born in Philadelphia, 1828; graduated Central High School, 1843; member firm of Merrick & Sons, builders of machinery; designer of marine engines for U. S. Gov't; member Board of Experts, Navy Dept. 1862; Vice-Pres. Zoölogical Gardens 1886-; Expert on Water Supply of Philadelphia 1883; Warden St. Timothy's Episcopal Church and Delegate to General Convention; founder St. Timothy's Hospital; Manager Episcopal Hospital; Trustee Univ. of Pa. 1870-; Trustee of Episcopal Academy and Wagner Free Institute of Science; President Franklin Institute.

JOHAN VAUGHAN MERRICK was born in Philadelphia, August 30, 1828, the son of Samuel Vaughan and Sarah (Thomas) Merrick. His father, who came of English and Welsh ancestry, was an eminent engineer of Philadelphia, founder of the Franklin Institute and first President of the Pennsylvania Railroad. J. Vaughan Merrick was educated at the Central High School of Philadelphia, graduating in 1843, thus being the youngest, with one exception, of the pupils admitted. After some time spent in the Southwark Foundry, he became a member of the firm of Merrick & Sons, builders of machinery and marine engines. Mr. Merrick had charge of the designing of the marine and other machinery and designed that used in a number of the government vessels during the Civil War. In 1860 he became the head of the firm, on the retirement of his father, and continued in this position till 1870 when on account of ill health he retired. In 1862 he was appointed a member of a Board of Experts under the Navy Department to report on Naval machinery. He was one of the reorganizers of the Zoölogical

Society and Chairman of the Committee which laid out the present gardens in 1872. Since then he has been a Manager and has served as Vice-President since 1886. In 1883 he was appointed by



JOHN V. MERRICK

the City of Philadelphia a member of a Board of Experts to report on improvements of Water Supply. Mr. Merrick has been a prominent member of St. Timothy's Protestant Episcopal Church in Roxborough and has been a Warden and a delegate to the Convention of the Diocese of Pennsylvania since 1861. Since 1883 he has been one of the four lay Deputies to the Triennial General Convention. He was one of the founders of the Free and Open Church Association and has been its President since its commencement in 1873. In connection with his wife, Mr. Merrick is the founder of St. Timothy's Hospital at Roxborough. In April 1890, they gave in trust to St. Timothy's parish, forever, the present Hospital Building with the land adjoining and a partial endowment fund, dedicating the whole to the memory of their parents. Mr. Merrick became a manager of the Episcopal Hospital in 1876 and was Chairman of its Building Committee for twenty-five years, also of its Administration Committee. Mr. Merrick was elected a Trustee of the University of Pennsylvania in 1870 and has served for some time as Chairman of the Committee on

the College. He has also been a Trustee of the Episcopal Academy, of the Wagner Free Institute of Science, and was President of the Franklin Institute for two years. He was married in October 1855, to Mary Sophia Wagner of Philadelphia, and has two sons, J. Vaughan, Jr., Master at the Episcopal Academy, Philadelphia, and James Hartley Merrick, Assistant Secretary of the Board of Trustees of the University, and two daughters, Emilie Duval, married in 1878 to George A. Bostwick of New York and Mary Vaughan, married in 1888 to David E. Williams of Philadelphia.

BARTON, John Rhea, 1796-1871.

Benefactor.

Born in Lancaster, Pa., 1796; graduated in Medicine, Univ. of Pa., 1818; Surgeon to Philadelphia Almshouse, 1818; Surgeon to Pa. Hosp., 1823-36; author of articles on medical subjects; died 1871.

JOHAN RHEA BARTON, M.D., was born in Lancaster, Pennsylvania, April 1796, the son of Judge William Barton (Hon. A.M. University of Pennsylvania). His education was received at the University of Pennsylvania, the degree of Doctor



JOHN RHEA BARTON

of Medicine being granted him in 1818. Before taking his degree he had served as a medical apprentice at the Pennsylvania Hospital, and in 1818 he was elected one of the Surgeons to the

Philadelphia Almshouse. Upon the resignation of Dr. Price in 1823 Dr. Barton was appointed to the surgical staff of the Pennsylvania Hospital. He at once commenced to make improvements in the science of surgery, to him being due the invention of the "figure of eight bandage of the head," which did away with the then prevailing clumsy devices for the treatment of fractures of the inferior maxillary bone. He also introduced into practice the "bran dressing," now generally adopted in the hospitals of the United States, and used to prevent the copious and annoying discharges arising from compound fractures. As an operator his friend, Dr. D. Hayes Agnew, said of him, "He was cool, decided, elegant and full of resource. Using either hand with equal facility, he seldom changed his position when engaged in any surgical procedure. The roller with him was like plastic clay in the hand of the potter; indeed there was an unstudied grace in every movement of the man." Dr. Barton was the author of a paper on Treatment of Ankylosis by the Formation of Artificial Joints in the North American Medical and Surgical Journal in 1827, and in 1838 he published his paper entitled Views and Treatment of an Important Injury of the Wrist. Dr. Barton died January 1, 1871, of pneumonia. His widow, Susan R. Barton, has contributed a sum of \$50,000 for the endowment of the Professorship of the Principles and Practice of Surgery in the University of Pennsylvania, as a memorial to him.

ROGERS, Fairman, 1833-1900

Prof. Civil Engineering 1856-71, Trustee 1871-86, Benefactor.

Born in Philadelphia, 1833; graduated Univ. of Pa., 1853; civil engineer; Lecturer at Franklin Institute, 1853-64; Prof. Civil Engineering at the University, 1855-64; Trustee, 1871-86; presented Engineering Library; officer in 1st Troop Philadelphia City Cav., 1861; on U. S. Coast and Geodetic Surv., 1862; author; founder Philadelphia Coaching Club; died 1900.

FAIRMAN ROGERS was born in Philadelphia, November 15, 1833, son of Evans and Caroline Augusta (Fairman) Rogers. He graduated in Arts at the University of Pennsylvania in 1853, taking the Master's degree in course and two years after graduation became Professor of Civil Engineering, continuing to occupy that chair until 1864, when he also terminated a service of eleven years as Lecturer on Mechanics at the Franklin Institute. He was further identified with the University as Trustee from 1871 to 1886, and as the donor of a valuable collection of books on Engineering. During the Civil War Pro-

fessor Rogers was in service as First Sergeant in the First Troop of Philadelphia City Cavalry and later as Engineer officer. In 1862 he was engaged in surveys on the Potomac River for the United States Coast and Geodetic Survey. He was the author of: Magnetism of Iron Vessels; Combinations of Mechanism Representing Mental Processes; Grant's Difference Engine; and various reports and pamphlets on engineering topics. A conspicuous feature of his life was his wide fame in riding and driving matters. He was the first to drive a four-in-hand in Philadelphia, and was the founder of the Philadelphia Coaching Club. His Manual of Coaching, published in 1900, has been accepted as authoritative. A daring rider to hounds, he helped to organize the Rose Tree Hunt; he was also one of the first promoters of polo in the United States. Professor Rogers was a member of the National Academy of Science, the American Philosophical Society, the American Society of Civil Engineers and many local organizations, both scientific and social. He married Rebecca H., daughter of John F. Gilpin of Philadelphia. His death occurred in Vienna, August 22, 1900.

ESSIG, Charles James.

Professor Dental Department since 1871, Dean 1878-1882.

Born in Philadelphia; M.D. Jefferson Medical College, 1876; D.D.S. Philadelphia Dental College, 1871; Dem. at Philadelphia Dental College, 1869-71; Prof. Mechanical Dentistry and Metallurgy at Pa. College of Dental Surg. until 1878; first Dean of the Dental Dept. of the University, 1878-82; Prof. of Mechanical Dentistry and Metallurgy since 1878.

CHARLES JAMES ESSIG, M.D., D.D.S., was born in Philadelphia, first son of C. S. and Matilda A. Essig. In 1876 he graduated from the Jefferson Medical College with the degree of Doctor of Medicine, and in 1871 the degree of Doctor of Dental Surgery was conferred upon him by the Philadelphia Dental College, where he was afterwards a Demonstrator. Later he became Professor of Mechanical Dentistry and Metallurgy at the Pennsylvania College of Dental Surgery, and was Dean of that Institution when in 1878 its Faculty was approached with a plan to make the College of Dental Surgery a Department of the University. The opposition of certain members of the Faculty rendered the execution of the plan impossible, but the advantages of a Dental Department in the University were so apparent to Dr. Essig and others who had assented that they withdrew from the

College of Dental Surgery and set about the work of organizing the University of Pennsylvania Dental Department. Of the newly organized Faculty Dr. Essig became Dean and was appointed to the



CHARLES J. ESSIG

Chair of Mechanical Dentistry and Metallurgy which he has held ever since. The Dental Department thus organized in 1878 under his leadership has steadily developed and extended its work until now it is not only self supporting but yields a larger financial revenue than any other department of the University. In 1888 Dr. Essig was forced by the demands of his increasing practice to resign the Deanship, but he continues his work as Professor. Among his writings are two important contributions to dental science: one, a work on Dental Metallurgy, which has been translated into several languages for use in foreign Colleges, and the American Text-book of Prosthetic Dentistry. Dr. Essig organized in 1878 the Odontological Society of Philadelphia and was for several terms its President; he is now a member of the National Dental Association and the Pennsylvania State Dental Society.

DEWEES, William Potts, 1768-1841.

Professor Diseases Women and Children 1834.

Born in Pottsgrove, Pa., 1768; M.D. Univ. of Pa.; in practice in Abington and Philadelphia, 1789-1812;

engaged in agriculture, 1812-1817; resumed practice in Philadelphia, 1817; Adjunct Prof. Obstetrics and Diseases of Women and Children, 1826-34; Prof., 1834; author of medical works; died 1841.

WILLIAM POTTS DEWEES, M.D., was born in Pottsgrove, Pennsylvania, May 5, 1768. At an early age he entered the Medical Department of the University of Pennsylvania and in 1789 commenced practice in Abington, Pennsylvania, before receiving his degree, which was, however, conferred upon him soon after. In 1793, when the number of physicians in Philadelphia had been reduced by the epidemic of yellow fever, Dr. Dewees removed thither and soon won a conspicuous success, particularly in the practice of Obstetrics. For five years he was obliged on account of ill-health to abandon his professional work, and as a means of recuperation he devoted himself to agriculture in the town of Phillipsburg, Pennsylvania. In 1817 he resumed practice in Philadelphia, and in 1826 was called to the University as Adjunct Professor of Obstetrics and Diseases of Women and Children. It was after less than a year from the time of being



WILLIAM P. DEWEES

advanced to the full Professorship, that his health again failed, necessitating resignation. Dr. Dewees died in Philadelphia, May 18, 1841. His published writings are: Medical Essays, Philadelphia, 1823;

Treatise on the Physical and Medical Treatment of Children, 1825 and 1854; System of Midwifery, 1825 and 1854; Treatise on the Diseases of Females, 1826 and 1854; and Practice of Medicine, 1830.

GIBSON, William, 1788-1868.

Professor Surgery 1819-

Born in Baltimore, Md., 1788; graduated in Medicine Univ. of Edinburgh, 1809; entered practice in Baltimore, and Prof. Surgery in Univ. of Md.; visited Europe, 1814; participated in Battle of Waterloo; Prof. Surgery Univ. of Pa., 1819-1854; author; died 1868.

WILLIAM GIBSON, M.D., was born in Baltimore, Maryland, in 1788. At an early age he entered the University of Edinburgh



WILLIAM GIBSON

as a student of medicine, and after being associated in study and practice with Sir Charles Bell, the famous Scotch Surgeon, he received the Doctor's degree from that institution in 1809. Returning to the United States soon after graduation he began practice in his native city, where he was chosen as one of the earliest Professors of Surgery in the University of Maryland. His name is mentioned in connection with valuable service in quieting the riots in Baltimore in 1812. In 1814 he again visited Europe and participated in the Battle of Waterloo, fighting on the side of the allied forces and

receiving a slight wound during the engagement. While abroad he became intimately acquainted with the surgeons, Sir Astley Cooper, Velpeau, Abernethy, Hastings and Halford, and with the poet Lord Byron. Dr. Gibson in 1819, was appointed Professor of Surgery in the University of Pennsylvania, succeeding Dr. Physick, and in that position he continued for more than thirty years. He retired from all professional work in 1858 and from that date until his death he lived in Newport, Rhode Island, in the enjoyment of a fortune acquired in practice. He died in Savannah, Georgia, March 2, 1868. His bibliography includes: Principles and Practice of Surgery, Philadelphia, 1824; Rambles in Europe, containing sketches of famous surgeons, 1839; and Lecture on Eminent Belgian Surgeons and Physicians, New York, 1841.

THOMPSON, Robert Ellis, 1844-

Instructor, Asst. Prof. and Professor 1868-1893.

Born in County Down, Ireland, 1844; graduated Univ. of Pa., 1865; Presb. Clergyman; Instr. Math., 1868-71; and Asst. Prof., 1871-74; Prof. Social Science, 1874-83; John Welsh Centennial Prof. of Hist. and Eng. Lit., 1883-93; Lectured at Harvard and Yale, 1884-87; Editor Penn Monthly, 1870-80, and the American since 1880; edited first two vols. Encyclopaedia Americana, 1883-85; Ph.D. Hamilton College, 1879, and D.D. Univ. of Pa., 1887.

ROBERT ELLIS THOMPSON, Ph.D., D.D., was born near Lurgan, Ireland, April 5, 1844, son of Samuel and Catherine (Ellis) Thompson. Coming to America when at the age of thirteen, he lived with his parents in Philadelphia, and graduated in Arts at the University of Pennsylvania in 1865, taking the Master of Arts degree in course. Two years later he was licensed to preach by the Reformed Presbytery of Philadelphia, but in 1868 accepted a position as Instructor in Mathematics at the University. He was elevated to the rank of Assistant Professor in 1871, and in 1874 to the full Professorship of Social Science. Professor Thompson was appointed to the John Welsh Centennial Chair of History and English Literature in 1883, and continued in that position for ten years. He delivered a series of lectures at Harvard on Tariff Protection in 1884-1885, and two similar series at Yale in 1886-1887. An important feature of Professor Thompson's active career has been the important and extensive literary work with which he has been connected. In 1870 he became the Editor of the Penn Monthly, then newly established, and so con-

tinued until 1880, when he instituted a weekly supplement relating to current events, which was the nucleus of *The American*, which appeared the following October, being devoted to literature, science, the arts and public affairs of current interest. He was also the Editor of the first two volumes of the *Encyclopaedia Americana*, a supplement to the Ninth Edition of the *Encyclopaedia Britannica*. He is the author of *Social Science and National Economy*, later re-written as *Elements of Political Economy*; *Ireland and Free Trade*; *Concerning Trusts*; *Protection to Home Industry* (his Harvard



ROBERT ELLIS THOMPSON

Lecture Series); *De Civitate Dei*, or the Divine Order of Human Society, lecture delivered in Princeton Theological Seminary on the Stone Foundation; *A History of the Presbyterian Churches of America* for the series of the Christian Literature Society; *Political Economy for High Schools and Academies*; and many shorter writings contributed to various periodicals. Professor Thompson was made a Doctor of Philosophy by Hamilton College in 1879 and Doctor of Divinity by the University of Pennsylvania in 1887. While his public utterances and writings have always impartially presented all sides of economic questions, he is widely known as an advocate of protection to home industry. He married Mary, daughter of Robert Neely of Philadelphia.

WILLIAMSON, Isaiah Vansant, 1803-1889.

Benefactor 1889.

Born in Falsington, Pa., 1803; entered business life in Falsington, 1816; went into mercantile business in Philadelphia, 1825; retired from active business as merchant, 1837; gave \$2,000,000 for the Williamson Free School of Mechanical Trades, 1888; made gifts to the University; died 1889.

ISAIAH VANSANT WILLIAMSON, Philanthropist, was born in Falsington, Bucks county, Pennsylvania, February 3, 1803, the son of Mahlon and Charity (Vansant) Williamson. Mr. Williamson's opportunities for education were slight, being confined to those offered by the country school of the district, which was open only during the winter months. His father was a farmer, but he preferred mercantile life and left the farm for the country store when he was only thirteen. After serving his apprenticeship he went to Philadelphia in 1825 and entered into business for himself, opening a retail dry goods store on Second Street near Pine. He soon moved to Second Street and Coombe's Alley, at the same time entering into partnership with William Burton. At the end of a year this partnership was dissolved and Mr. Williamson bought the store of John S. Newlin, No. 9 North Second Street, where he carried on business alone, H. Nelson Borroughs assisting him as clerk. In 1834 he took Mr. Borroughs into partnership, and in 1837 retired from active business as a merchant. During his twelve years of business life he had accumulated a fortune of \$200,000, and this he increased by financial operations until his fortune reached \$15,000,000. Of this he gave away to hospitals, schools and homes \$5,000,000 before he died. In 1888 came his greatest benefaction. On December 1 of that year it was announced that he had put into the hands of a Board of Trustees \$2,000,000 to be used for the erection and maintenance of an institution to be known as the Williamson Free School of Mechanical Trades, its purpose being to replace the old system of apprenticeship by instructing deserving boys in trades and maintaining them during the time of study. On his death, which occurred March 7, 1889, it was found that he had left about \$1,000,000 to charities and educational institutions. Among his gifts to the latter was one of \$50,000 to the University of Pennsylvania. He also gave \$50,000 to the University Hospital. Since his death the Williamson School has been established and is now in successful operation, a fitting memorial to its founder and endower.

[Portrait on page 129.]

FRAZER, Persifor, 1844-

Asst. Prof. Natural Philosophy and Chemistry 1871-72,
Prof. Chemistry 1872-74.

Born in Philadelphia, 1844; graduated Univ. of Pa., 1862; served as private in Army and Officer in Navy during Civil War; studied Mineralogy in Freiberg, Germany, 1866-69; Docteur ès Sciences Naturelles, Univ. of France, 1882; Chemist and Geologist; Aide on U. S. Coast and Geodetic Survey, 1862-63; Asst. on U. S. Geol. Surv., 1869; Instr. and Asst. Prof. of Nat. Phil. and Chem. at the University, 1870-72; Prof. of Chem., 1872-74; Asst. on 2nd Geol. Surv. of Pa., 1874-81; Prof. of Chem. in Franklin Inst., 1881-93; Prof. of Chem. in Pa. Horticul. Soc. since 1889; author and Editor.

PERSIFOR FRAZER, Chemist, Geologist and Mining Engineer, was born in Philadelphia, July 24, 1844, son of John Fries Frazer, University of Pennsylvania 1829, and Charlotte (Jeffers) Cave. His father, Professor John Fries Frazer, was a Doctor of Laws of Harvard, Professor of Natural Philosophy and Chemistry in the University of Pennsylvania and long Vice-Provost of the University. Professor J. F. Frazer's father was Robert Frazer, a lawyer and a graduate of the University of Pennsylvania. Robert Frazer's father (Persifor), a great-grandfather of the subject of this sketch, was an iron manufacturer in Pennsylvania who served the American cause in the Revolutionary War as Captain Company A Fourth Pennsylvania Battalion and Lieutenant-Colonel Fifth Pennsylvania line, under Anthony Wayne. Later he attained the rank of Brigadier-General in the Pennsylvania State Militia. The subject of this sketch graduated at the University of Pennsylvania in 1862, receiving the Master of Arts degree in course, while in College being a member of the Philomathean Society, and Speaker at the Junior and Senior exhibitions and at Commencement. From 1866 to 1869 he studied at the Saxon Mining Academy, in Freiberg, Germany, passing with distinction the examination in Mineralogy. The University of France awarded him after public examination the degree of Docteur ès Sciences Naturelles in 1882, this being the first instance of a foreigner receiving this degree in France and the one hundred ninety-sixth award in all since its foundation in 1811. He also received the decoration of the Golden Palms of the Academy (Officier de l'instruction publique) from the French Government in July 1890. Returning to America in 1869 Professor Frazer was appointed Assistant on the United States Geological Survey, and wrote the report on Mining and Mineralogy of Colorado and Wyoming for that year. The fol-

lowing year, 1870, he was called to the University as Instructor in Natural Philosophy and Chemistry, being promoted in 1871 to the position of Assistant Professor of those subjects. From 1872 to 1874 he was Professor of Chemistry, and in the latter year accepted an appointment as Assistant on the Second Geological Survey of Pennsylvania, his service continuing for eight years. From 1891 to 1893 he occupied the Chair of Chemistry at the Franklin Institute of Philadelphia, and in 1889 was appointed to his present position of Professor of Chemistry in the Pennsylvania Horticultural Society to succeed James



PERSIFOR FRAZER

Booth deceased. In 1863 he entered the Army service as a private in the First Troop of Philadelphia City Cavalry, and later as Acting Ensign entered the Navy service. Assigned to duty in the Mississippi Squadron he was first attached to the Blackhawk, and later as Executive Officer on the Benton took possession of the Confederate ram Missouri when she was captured by the Benton in June 1865. He also recorded soundings in Charleston Harbor, in preparation for the attack. He was finally in command of the Hastings in Mound City, Illinois, and was honorably discharged in October 1865. He has published Tables for the Determination of Minerals after Weisbach's Method; four volumes of the Pennsylvania State Geological

Reports of the Second Geological Survey; Biographical Catalogue of the Matriculates of the University Pennsylvania, 1749-1893; Bibliotics or Study of Documents (3 editions, one in French); Geological Section from Moscow to Siberia and Return; Cross Reference Catalogue of the Works of the Late E. D. Cope and Geological Sections of the Great Caucasus. He wrote also the Report on the Archean Group of America, and edited the Reports of the other groups and the general report of the American Committee to the International Geological Congress of London, in 1888. He was one of the Editors of the Franklin Institute Journal (1881-1892) and of the American Geologist, of which latter he was one of the original founders and proprietors. In addition to this literary work he has written many papers, memoirs and articles in scientific journals, reports of transactions of societies and the daily press. He is a life member or fellow of the following organizations: The American Philosophical Society, the Pennsylvania Historical Society, the Academy of Natural Sciences of Philadelphia, the American Institute of Mining Engineers, the American Association for the Advancement of Science, the Society of American Geologists, of which he is a fellow and one of the founders, the Order of the Loyal Legion, the Sons of the Revolution, the Society of the War of 1812, the Society of Colonial Wars of Pennsylvania, the British Association for the Advancement of Science, the New York Academy of Science, the Reichsanstalt of Vienna, Société géologique du Nord (France), Société géol. de Belgique, Society of American Authors, and the Society of Cientifica Antonio Alzate of Mexico, the Cincinnati Society of New Jersey (Hereditary Member.) He was also Secretary of the American Committee to the International Congress of Geologists held in Berlin in 1885, and Vice-President, representing the United States in the International Congresses of Geologists of London (1888) and St. Petersburg (1897). Professor Frazer married Isabella Nevins, daughter of Edward Siddons Whelen of Philadelphia.

KRAUTH, Charles Porterfield, 1823-1883.

Professor 1868-1883, Vice-Provost 1873-1883.

Born in Martinsburg, Va., 1823; graduated Pa. College, Gettysburg, 1839; entered Lutheran ministry, 1841; Pastor St. Mark's Church, Philadelphia, 1859-61; Editor of the Lutheran and Missionary, 1861-67; Prof. Systematic Theology in Lutheran Theol. Sem., Philadelphia, 1864-83; Prof. Mental and Moral Science in

the University, 1868-83; Vice-Provost, 1873-83; D.D. Pa. College 1856, and LL.D. 1873; died 1883.

CHARLES PORTERFIELD KRAUTH, D.D., LL.D., was born in Martinsburg, Virginia, March 17, 1823, the son of Dr. Charles Philip Krauth, a well-known Lutheran clergyman. He graduated at Pennsylvania College, Gettysburg, in 1839, and at the Theological Seminary at the same place, and entered the Lutheran ministry. In 1859 he went to Philadelphia as Pastor of St. Mark's Church. From 1861 to 1867 he was Editor of the Lutheran and Missionary, and Professor of System-



CHARLES P. KRAUTH

atic Theology in the Lutheran Theological Seminary from 1864 until 1883. In 1868, Dr. Krauth, after three years' service as a Trustee, became Professor of Mental and Moral Science in the University of Pennsylvania and held that position until his death. In 1873 he was chosen Vice-Provost. He refused to become Provost on the retirement of Dr. Stillé, continuing as Vice-Provost until his death. The honorary degree of Doctor of Divinity was conferred on him by Pennsylvania College, Gettysburg, in 1856, and that of Doctor of Laws by the same institution in 1873. Dr. Krauth was by common consent the most accomplished scholar and theologian in the Lutheran Church in America during the third quarter of the century. He was Chairman of the

Old Testament Company of the American Bible Revision Committee, and very active in the work. In the controversy in the Lutheran Church, which resulted in the division of 1866 and in the establishment of the General Council in 1867, he was very prominent. Dr. Krauth's publications were very numerous, amounting to over a hundred. Perhaps the best-known of these is the *Conservative Reformation and its Theology*, 1872, although his *Life of Luther* which he left unfinished at the time of his death promised to be even more important. Dr. Krauth's extensive researches in liturgies qualified him to take an active part in the preparation of the church-book for General Council churches, and the principles underlying the order of worship adopted in 1865, were made the basis of a common order of worship for all English speaking Lutherans in the United States. He died January 2, 1883.

LESLEY, J. Peter, 1819-

Prof. Mining 1853-72, Geol. and Mining 1872-83, Emeritus 1883-

Born in Philadelphia, 1819; graduated Univ. of Pa., 1838; Asst. State Geol. Pa., 1839-41; graduated Princeton Theol. Sem., 1844; studied at Univ. of Halle, Germany, 1844-45; Colporteur Am. Tract Soc. in Pa., 1845-47; Pastor Cong. Church, Milton, Mass., 1848-51; resumed Geol., 1851; Prof. of Mining at the University, 1859-72; Prof. Geol. and Mining, 1872-83; Emeritus Prof. since 1883; Dean of Dept. of Science, 1872-75; Dean of Towne Scientific School, 1875-83; State Geologist of Pa. since 1874; author; LL.D. Trinity College, Dublin, 1878.

J. PETER LESLEY, LL.D., Emeritus Professor of Geology and Mining, was born in Philadelphia, September 17, 1819, son of Peter and Elizabeth Oswald (Allen) Lesley. He graduated at the University of Pennsylvania with the Class of 1838, receiving the Master's degree in course. After two years as Assistant State Geologist of Pennsylvania he decided to enter the ministry, and in preparation for that career became a student at the Princeton Theological Seminary where he graduated in 1844. The following year was spent in study at the University of Halle in Germany, and upon his return to America in 1845 he was, for two years, engaged as Colporteur of the American Tract Society in Pennsylvania. The year 1847-1848 he devoted to further geological work in company with Professor Henry D. Rogers, after which he returned to Church work accepting an appointment as Pastor of the Congregational Church in Milton, Massachusetts. Here he remained for two years and in 1851 he resumed the profession of Geology, and finally devoted him-

self to that pursuit. For more than forty years he has been connected with the University holding many offices of trust and importance previous to receiving in 1883 the position of Emeritus Professor of Geology and Mining. He was Professor of Mining from 1859 to 1872, Professor of Geology and Mining from 1872 to 1883, Dean of the Department of Science from 1872 to 1875, and Dean of the Towne Scientific School from 1875 to 1883. From 1874 to 1890 Professor Lesley was State Geologist of Pennsylvania. He was Secretary of the American Iron Association from 1854 to 1858, Secretary and



J. PETER LESLEY

Librarian of the American Philosophical Society from 1859 to 1885, and its Vice-President in 1886, and compiler of the catalogue of the society's library, President of the American Association for the Advancement of Science in 1876, a life member of the Academy of Natural Sciences of Philadelphia, and a member of the Boston Natural History Society, the London Geological Society, the Natural History Society of Emden, the Academy of Natural Sciences of Neufchatel and the Academy of Natural Sciences of Lille. Conspicuous among numerous scientific writings may be mentioned: *Manual of Coal*; *Iron Manufacturer's Guide*; *Man's Origin and Destiny*; and a *History of the First Geological Survey of Pennsylvania*, and the *Final Report of the Second*

Geological Survey of Pennsylvania. Professor Lesley married Susan Inches, daughter of Judge Joseph Lyman of Northampton, Massachusetts. He received the honorary degree of Doctor of Laws from Trinity College, Dublin, in 1878.

BARKER, George Frederick, 1835-

Professor Physics 1872-

Born in Charlestown, Mass., 1835; graduated Sheffield Scientific School, Yale, 1858; Asst. in Chem. Harvard Medical School, 1859-61; Prof. Nat. Sciences Wheaton College, Ill., 1861-62; Acting Prof. Chem. Albany Medical College, 1862; M.D. Albany, 1863; Prof. Natural Sciences Western Univ. of Pa., 1864; Prof. of Chem. Yale Medical School, 1865; Prof. Physics Univ. of Pa. since 1872; author and editor.

GEORGE FREDERICK BARKER, M.D., Sc.D., LL.D., was born in Charlestown, Massachusetts, July 14, 1835. In 1858 he graduated from the Sheffield Scientific School of Yale, during his final year there having acted as the Assistant of Professor Silliman in the courses in Chemistry. Following graduation he was, during the winters of 1858-1859 and 1860-1861, Assistant to Dr. John Bacon, Professor of Chemistry in the Harvard Medical School, and in 1861 he entered the Professorship of Natural Sciences at Wheaton (Illinois) College. After a year he was called to the Albany Medical College, accepting a position as Acting Professor of Chemistry and so continuing for two years, during which time he also pursued the course of medicine and took the degree Doctor of Medicine in 1863. His next change was to the Chair of Natural Sciences in the Western University of Pennsylvania, and in 1865 he became Professor of Physiological Chemistry and Toxicology in the Yale Medical School. He was elected Professor of Physics at the University of Pennsylvania in 1872 and has since continued to occupy that position. As a physicist and as an authority on chemical and toxicological matters, Dr. Barker is recognized as one of the leading authorities living. He has frequently been called upon for expert testimony in important law cases. The evidence rendered by him in the Lydia Sherman poisoning case in 1872 is to be found in Wharton and Stillé's Medical Jurisprudence where it was inserted as a typical case for reference as a precedent. He was also one of the experts on the government side in the suit brought by the Department of Justice against the American Bell Telephone Company. In 1884 by Presidential appointment he became a

member of the United States Electrical Commission. He has been for many years an Editor of the American Journal of Science, and for many years he edited the record of progress in physics published annually in the Smithsonian Institution reports; he was also Editor of the Journal of the Franklin Institute in 1874. His published writings include: Lecture on the Forces of Nature; Lecture on the Correlation of Vital and Physical Forces; his two Presidential addresses before the American Association for the Advancement of Science; Text-Book of Elementary Chemistry, New Haven, 1870; Physic, New York, 1892; and numerous articles in the American Journal of Science and Arts, the American Chemist and the Proceedings of the American Philosophical Society. Dr. Barker received in 1881 from the French Government the decorations of the Legion of Honor with the rank of Commander. He is a fellow of the American Association for the Advancement of Science, of which he was Vice-President in 1872 and President in 1879, and the National Academy of Sciences. He is also an honorary member of the Royal Institution of Great Britain and a corresponding member of the British Association, a life member of the German Chemical Society of Berlin, of the Institute of Electrical Engineers of London, and of the Société Internationale des Electriciens, Paris. In 1890 he was President of the American Chemical Society and for the past two years he has been one of the Vice-Presidents of the American Philosophical Society. In 1898 he received from the University of Pennsylvania the degree of Doctor of Science *honoris causa* and from Allegheny College, Meadville, the degree of Doctor of Laws. In 1900 McGill University, Montreal, also conferred upon him the honorary degree of Doctor of Laws.

RISLEY, Samuel Doty, 1845-

Professor Ophthalmology, and Manager Univ. Hospital since 1896.

Born in Cincinnati, O., 1845; early education in schools of Ohio and Iowa; served through Civil War with 20th Reg. Iowa Volunteers; graduated M.D. Univ. of Pa., 1870; Chief of Eye Clinic, Univ. Hospital, 1872-90; Lect. on Ophthalmoscopy, and Asst. Ophthalmic Surgeon; Prof. Astronomy at Wagner's Free Inst. of Science, 1871-74; Ph.D. Wagner's Inst., 1874; Visiting Surgeon Dispensary Staff of Protestant Episcopal Hospital, 1873-76; Out-Door Physician to Northern Dispensary, 1871-74; Ophthalmologist and Otiologist Protestant Episcopal Hospital, 1877-83; A.M. Univ. of Iowa, 1883; Prof. Ophthalmology Philadelphia Polyclinic and College for Graduates in Medicine

and Alumni Manager Univ. Hospital since 1896; holds many professional offices.

SAMUEL DOTY RISLEY, A.M., M.D., Ph.D., was born in Cincinnati, Ohio, January 17, 1845, descended from a very old English family whose name was originally written Wriothesley. It was corrupted in this country to Wrisley and Risley. An ancestor, Richard Risley, arrived in America with Cotton and Hooker in 1633, locating in the Connecticut valley, where land was purchased from the Nauback Indians; he was one of Hooker's party of thirty-two who originally settled in that valley, their names being commemorated on a shaft which stands in the Central Presbyterian Churchyard in Hartford. Dr. Risley was educated in the public schools of Cincinnati and later at Davenport, Iowa, whither his parents had emigrated in 1857. When but seventeen years of age, stirred by the patriotic impulses of the period, he enlisted with the Twentieth Regiment of Iowa Volunteers, serving his country until the close of the Civil War. In the autumn of 1865 he entered the Iowa State University, at Iowa City, but broke off his College course in April 1867, in order to take up medical studies in the office of Dr. Lucius French at Davenport. Here he remained until the following year, matriculating in 1868 in the Medical Department at the University of Pennsylvania. He graduated as Doctor of Medicine in 1870, and remained in Philadelphia making himself a specialist on eye diseases. In 1871 he was appointed Clinical Assistant at the Wills Eye Hospital, and in the following year was made Chief of the Eye Clinic at the Hospital of the University of Pennsylvania, a position which he held until 1890. He early became a Lecturer on Ophthalmoscopy in the University and Assistant Ophthalmic Surgeon to the University Hospital. At the present time he is an Alumni Manager of the University Hospital. Dr. Risley's outside interests as a medical practitioner have been very large. For three years he was Visiting Surgeon on the Dispensary Staff of the Protestant Episcopal Hospital and later served as Ophthalmologist and Otologist to that Hospital. He is now Attending Surgeon at the Wills Eye Hospital, Ophthalmic Surgeon to the Training School for the Feeble Minded at Vineland, New Jersey, and Ophthalmologist on the Medical Board of the Pennsylvania Training School for the Feeble Minded until elected to the Board of Managers in 1897. He is also Professor of Diseases of the Eye at the Philadelphia Polyclinic and Fellow of the College of

Physicians. Dr. Risley has several times gone abroad for study and observation and was a Member of the International Ophthalmic Congress at Edinburgh in 1894 and at Utrecht in 1899. He is a member of the American Ophthalmological Society, the American Otological Society, the Climatological Society, the American Academy of Medicine of which he was elected President in 1900, and the American Medical Association, and was Chairman of the Section in Ophthalmology of the last named society in 1893. For a few years in his younger life Dr. Risley was Professor of



SAML. D. RISLEY.

Astronomy in Wagner's Free Institute of Science in Philadelphia, this teaching body having conferred upon him the degree of Doctor of Philosophy in 1874. In 1883 he received a Master of Arts degree from the University of Iowa where he had been a student in his youth. From early life Dr. Risley has been active in religious and philanthropic work, his interest in the Young Men's Christian Association having been continuous for many years. For a long time he was Chairman of the Executive Committee of the Alumni Society of the Medical Department of the University of Pennsylvania and is at present Vice-President of the society, and he has been the Alumni Manager of the University Hospital from 1896 to this date. Dr. Risley is a

member of the Art Club, the Union League and the University Club of Philadelphia. He was married in 1870 to Emma D. Thompson and resides at 1824 Chestnut Street, Philadelphia, having a country house at Media, Delaware county, Pennsylvania. For years Dr. Risley has been a frequent and industrious contributor to the literature of his special branch of medical science. His publications number upwards of one hundred papers and articles. The work upon which he personally sets the most value is that relating to the hygiene of vision in the schools. This is a subject to which he has given his uninterrupted study since 1878 and his investigations have been productive of much good in improving the hygienic conditions in our public and private schools. He was the first to point out the relation existing between certain congenital defects in the eyes of the children and the increasing percentage of near sight in the schools — hence the necessity for an examination of the children's eyes as a preliminary to their admission to the schools.

GENTH, Frederick Augustus, 1820-1888. (?)

Professor Chemistry 1874-1888.

Born in Waechtersbach, Hesse Cassel, 1820; studied at Heidelberg and Giessen; Ph.D. Univ. of Marburg, 1846; came to U. S., 1849; Prof. Chem. in the University, 1874-88; Chemist to Pa. Geol. Surv. and to State Board of Agriculture; died 1888. (?)

FREDERICK AUGUSTUS GENTH, Ph.D., was born in Waechtersbach, Hesse Cassel, Germany, May 17, 1820. He was first educated in the Gymnasium in Hanan, and later studied at Heidelberg University, under Liebig at the University of Giessen and under Bunsen at the University of Marburg, where he received the degree Doctor of Philosophy in 1846. He remained at Marburg as the Assistant of Professor Bunsen until 1849, and in that year came to the United States where he remained in the practice of his profession as a chemist until his death. He was appointed to the Chair of Chemistry at the University of Pennsylvania in 1874 and continued in that position with notable success until 1888. Professor Benjamin Silliman, Jr., in writing of him said that he had "no superior in this country as an analytical chemist." Professor Genth at one time served as Chemist on the Geological Survey of Pennsylvania and was likewise engaged on the State Board of Agriculture. His writings, particularly those treating of the subject of mineralogy, form an important contribution to scientific literature; they include nearly one

hundred papers, besides the following longer works: *Tabellarische Übersicht der wichtigsten Reactionen welche Basen in Salzen zeigen*, Marburg, 1845; also the same in relation to Acids, 1845; *Minerals of North Carolina*, Raleigh, 1875; *First and Second Preliminary Reports on the Mineralogy of Pennsylvania*, Harrisburg, 1875-76; and *Minerals and Mineral Localities of North Carolina*, Raleigh, 1881. In 1846 Professor Genth discovered the ammonia-cobalt bases, and later in association with Dr. Wolcott Gibbs he published in the *Smithsonian Contributions to Knowledge* the valuable monograph



FREDERICK A. GENTH

Researches on the Ammonia-Cobalt Bases, Washington, 1856. Professor Genth was a member of many leading scientific organizations, including the National Academy of Sciences. He died in 1888. (?)

MITCHELL, Edward Coppée, 1836-1886.

Law Professor 1873-1886, Dean of Law School 1875-1886.

Born in Savannah, Ga., 1836; graduated Univ. of Pa., 1855; lawyer; Prof. Real Estate Law, Conveyancing and Equity Jurisprudence in the University, 1873-86; Dean of the Law Department, 1873-86; Vice-Provost Law Academy of Philadelphia, 1877-86; LL.D. Hobart, 1876; author of works on Real Estate Law; died 1886.

EDWARD COPPÉE MITCHELL, LL.D., Lawyer, was born in Savannah, Georgia, July 24, 1836, the son of Dr. John James and

Eliza (Coppée) Mitchell. He entered Trinity College in 1851, and leaving the next year, entered the University of Pennsylvania, graduating in the Class of 1855. He was a member of the Zeta Psi Fraternity. After graduation he studied law and was admitted to the Bar of Philadelphia in 1858. In 1873 he was elected to the Chair of Law of Real Estate, Conveyancing and Equity Jurisprudence in the University of Pennsylvania and served in that position until his death, discharging in addition the duties of Dean of the Law Department after 1875. He was also Vice-Provost of the Law Academy from 1877 to 1886, a member of the Pennsylvania State Board of Public Charities and of the Fairmount Park Commission, 1884-1886. Hobart College conferred upon him the degree of Doctor of Laws in 1876. Dr. Mitchell was the author of many legal works, particularly upon the subject of Real Estate Law, upon which he was one of the leading authorities in the country. Among his works are: *Separate Use in Pennsylvania*; *Contracts for the Sale of Land in Pennsylvania*; and *the Equitable Relation of the Buyer and Seller of Land under Contract and before conveyance*. He also edited *Tudor's Leading Cases*. He married Eliza, daughter of the Rt. Rev. William Bacon Stevens, and died in Philadelphia, January 25, 1886.

[Portrait on page 127.]

GOODELL, William, 1829-1894.

Clinical Prof. Gynaecology 1874-93.

Born on Island of Malta, 1829; graduated, A.B., Williams College, 1851; M.D. Jefferson Med. College, 1854; practiced in Turkey, 1854-61; practiced in West Chester and Philadelphia, 1861-70; Clinical Prof. Gynaecology Univ. of Pa., 1874-93; died 1894.

WILLIAM GOODELL, M.D., LL.D., was born October 17, 1829, on the Island of Malta, where his father, the Rev. Dr. William Goodell, missionary of the American Board in Beyrout, had been compelled to remove owing to the operations that led finally to the battle of Navarino. He came to America and entered Williams College in 1847, graduating in 1851. Soon after completing his academic studies he became a student of Jefferson Medical College, Philadelphia, receiving the degree of Doctor of Medicine in 1854. He returned to Constantinople, then the scene of his father's labors, remaining thereabouts until 1861, when he came back to the United States. He was married in 1857 to Caroline Darlington, daughter

of Judge Thomas S. Bell of West Chester, Chester county, Pennsylvania. The marriage took place in Smyrna, Asia Minor. On his return in 1861 Dr. Goodell went to his wife's early home, West Chester to practice, but he soon secured the position of Physician to the Preston Retreat. In 1870 Dr. Goodell was appointed Lecturer on the Diseases of Women in the University of Pennsylvania, and in 1874 he became Clinical Professor of Gynaecology, holding the position until 1893 when ill-health compelled him to resign. He gave up his position at the Preston Retreat in 1887. Dr. Goodell was one



WILLIAM GOODELL

of the most prominent gynaecologists and obstetricians in America and as such was frequently honored by medical societies both here and abroad. He was an honored fellow of the Edinburgh Obstetrical Society, corresponding fellow of the London Obstetrical Society, and one of the founders of the American Gynaecological Society. In 1893 Jefferson Medical College bestowed on him the degree of Doctor of Laws. He wrote over a hundred articles on medical subjects, most of them on his specialty, but he published only one book, *Lessons in Gynaecology*, which passed through three editions in his lifetime, the first being issued in 1879. Dr. Goodell died in Philadelphia, October 27, 1894.

PARSONS, James, 1835-1900.

Professor of Law 1874-1897, Emeritus 1899-1900.

Born in Georgia, 1835; educated at Amherst and Yale and in Germany; studied law in Ohio; appointed Prof. of Personal Relations and Real Property in the University, 1874, and lectured in the Law Dept. until 1897; Prof. Emeritus; published work on Partnership; died 1900.

JAMES PARSONS, M.A., was born in Georgia in 1835, connected with old families of Massachusetts and Virginia. His advanced education was at first received in study at Amherst and Yale, and later he attended foreign Universities and prepared himself in law in Ohio. Coming to the University as Professor of Personal Relations and Real Property in 1874, he lectured continuously to classes in the Law Department until 1897, when he resigned. In recognition of this long term of valuable service the University bestowed its high honor, the title Professor Emeritus, in 1899, and he occupied that position at the time of his death, which occurred March 21, 1900. Through an unusual knowledge of languages Professor Parsons was enabled to maintain an extensive correspondence with legal authorities in foreign countries, and this practice together with his natural ability as a legal student and educator made him a singularly gifted man. As a legal authority he was recognized both in this country and in Europe. Some evidence of his deep erudition in his profession appears in his notable work on Partnership, published in 1889 and again in 1899, a book which has attained great popularity throughout the country, particularly as a text-book for use in law schools. In 1877 Yale conferred upon him the honorary degree of Master of Arts.

SADTLER, Samuel Philip, 1847-

Professor Chemistry 1874-1891.

Born in Pine Grove, Schuylkill Co., Pa., 1847; graduated, A.B., Pennsylvania College, Gettysburg, 1867; S.B. Harvard, 1870; Ph.D. Goettingen, 1871; Prof. Chemistry and Physics in Pennsylvania College, 1871-74; Prof. General and Organic Chemistry at the University, 1874-87; Prof. Organic and Industrial Chemistry, 1887-91; resigned to become Consulting Industrial Chemist; Prof. Chemistry in Philadelphia College of Pharmacy since 1878, and at Franklin Inst. since 1895; author of text books on chemical subjects.

SAMUEL PHILIP SADTLER Ph.D., Consulting Chemist and Professor of Chemistry, was born in Pine Grove, Schuylkill county, Pennsylvania, July 18, 1847. A son of Rev.

Benjamin Sadtler, D.D., and Caroline Elizabeth (Schmucker) Sadtler, he is descended from some very distinguished clergymen in the Lutheran Church. His paternal grandfather, Philip B. Sadtler, came to this country from Homburg, Hesse, Germany, in 1799 and settled in Baltimore, Maryland. His maternal grandfather, Rev. Samuel S. Schmucker, D.D., was a graduate of the University of Pennsylvania in the Class of 1819 and afterward in 1826 founded the Lutheran Theological Seminary at Gettysburg, Pennsylvania, remaining in that institution as Professor of Theology until his



SAMUEL P. SADTLER

retirement from active duty in 1864. He was also instrumental while in Gettysburg in founding the Pennsylvania College at that place. Professor Samuel P. Sadtler received his preparatory education at the High School in Easton, Pennsylvania, where his father was residing at the time. Entering the Pennsylvania College at Gettysburg he graduated there as Bachelor of Arts in 1867. For one year he pursued post-graduate study at Lehigh University and then went to Harvard for a course of Science in the Lawrence Scientific School, graduating with the degree of Bachelor of Science, in 1870. Going abroad to continue his studies in chemistry he was graduated a Doctor of Philosophy at the University of Goettingen in Germany in

January 1871. For three years from 1871 he served as Professor of Chemistry and Physics in the Pennsylvania College at Gettysburg, and in 1874 he was elected to teach General and Organic Chemistry in the University of Pennsylvania with the rank of Assistant Professor of Chemistry. He continued to hold this position until 1887, when he was made Professor of Organic and Industrial Chemistry. His connection with the University of Pennsylvania was severed in 1891 after a service in the Faculty covering a period of seventeen years. He resigned his Professorship to begin practice as a Consulting Chemical Expert in the field of industrial technology and to devote a larger share of attention to his work as Professor of Chemistry in the Philadelphia College of Pharmacy, a position which he has held from 1878 to date. Since the year 1895 he has also been the honorary Professor of Chemistry in the Franklin Institute of Philadelphia. Professor Sadtler is a member of nearly all the prominent American, English and German Chemical Societies, including the Society of Chemical Industry. Since 1898 he has been Secretary of the American Philosophical Society. He has contributed many writings to scientific journals and is the author of a Hand-book of Chemical Experimentation, a Hand-book of Industrial Organic Chemistry, now in its third edition, and a Text-book of Pharmaceutical and Medical Chemistry, a work in two volumes now in its second edition. With Dr. H. C. Wood and Professor J. P. Remington, he is the joint author of the 15th, 16th, 17th and 18th editions of the United States Dispensatory. Professor Sadtler was married in 1872 to Mary Julia Bridges of Baltimore, Maryland. He has two sons and two daughters.

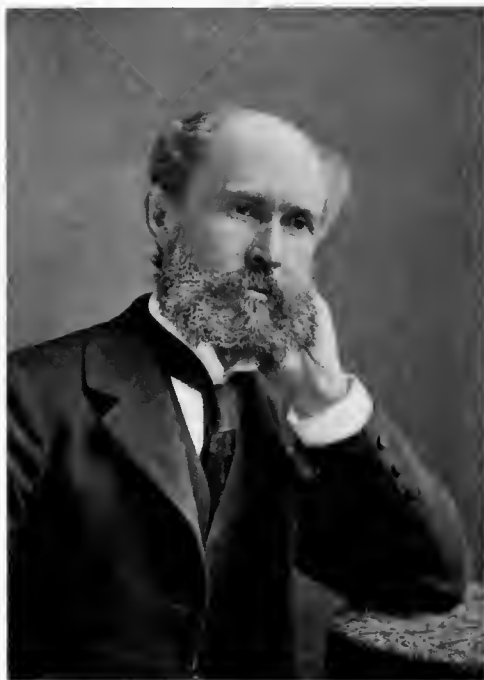
HAUPT, Lewis Muhlenberg, 1844-

Asst. Prof. and Prof. Civil Engineering 1872-1892.

Born in Gettysburg, Pa., 1844; studied at Univ. of Pa. and Lawrence Scientific School of Harvard; graduated U. S. Military Acad., West Point, 1867; Lieut. in the Engineer Corps U. S. A., 1869-72; Engr. Fairmount Park, Philadelphia, and Asst. Examiner U. S. Patent Office, 1872; Asst. Prof. Civil Engineering at the University of Pa., 1872-73; Prof. Civil Engineering, 1873-92; received A.M. gratiae causa, 1883; Editor of Engineering, Specifications and Contracts, etc.; author and Consulting Civil Engineer.

LEWIS MUHLENBERG HAUPT, Civil Engineer, was born in Gettysburg, Pennsylvania, March 21, 1844, son of Herman and Ann Cecilia (Keller) Haupt. He entered the Univer-

sity of Pennsylvania in 1861, but left at the close of the Freshman year to attend the Lawrence Scientific School of Harvard. In 1867 he graduated at the United States Military Academy at West Point and until 1869 served as Lieutenant in the Engineer Corps of the Army, resigning from the service then and being honorably discharged. Until 1872 he was engaged as Engineer of Fairmount Park in Philadelphia and as Assistant Examiner in the United States Patent Office in Washington. He was then called to the University to fill the position of Assistant Professor of Civil Engineering, from



LEWIS M. HAUPT

which he was elevated to the Professorship of Civil Engineering one year later. In 1892 Professor Haupt terminated a term of twenty years of honorable and capable service to the University and devoted himself to the literary and scientific work which was already claiming much of his attention. He is the author of Engineering Specifications and Contracts; Working Drawings and How to Make and Use Them; The Topographer — His Methods and Instruments, and other valuable scientific works; he was a member of the Nicaragua Canal Commission of 1898 and is now a member of the Isthmian Canal Commission. He was also the President of the Cauca-Colombia Arbitration Commissary in 1897. In 1883 the University conferred upon him

the degree of Master of Arts, *gratiae causa*. Professor Haupt married Isabella Christiana, daughter of James J. Cromwell of Philadelphia.

CLARKE, Hugh Archibald, 1839-

Professor Music since 1875.

Born in Canada, 1839; studied music with his father; Prof. of Music in the University since 1875; received degree Doctor of Music from Univ. of Pa. in 1886, in recognition of his services in connection with the presentation of a Greek play.

HUGH ARCHIBALD CLARKE, Mus. Doc., is of Scotch ancestry. He was born in Canada in 1839, the son of James Peyton and



HUGH A. CLARKE

Helen (Fullerton) Clarke. His early schooling was received at Knox Academy at Toronto. His father being Professor of Music in the University of Upper Canada, and a Doctor of Music of Oxford University, the son's native talent was early trained along this line. Mr. Clarke came to the University of Pennsylvania as Professor of Music in 1875 and he has been there constantly ever since, conducting courses in music which are open to men and women alike and which now extend over a period of four years. Professor Clarke has taken a prominent part in many of the musical functions at the University. His most notable services in this line,

perhaps, were in connection with the Greek play which the students presented at the Academy of Music in Philadelphia in 1885. It was a production of Aristophanes' *Acharnians*. The musical settings were entirely the work of Professor Clarke who received the honorary degree of Doctor of Music from the University in 1886 in recognition of the prominent part he had taken in this interesting revival of Greek drama. Associated with Dr. Clarke in the direction of this play were Professor Easton of the University, and Dr. Klapp, Head Master of the Episcopal Academy. He was married in 1859 to Jane M. Searle; they have one daughter who resides in Boston.

MITCHELL, Silas Weir, 1830-

Trustee 1875-

Born in Philadelphia, 1829; attended Univ. of Pa., 1844-48; M.D. Jefferson Med. College, 1850, and Univ. of Bologna, *honoris causa*, 1888; LL.D. Harvard, 1886, also from Edinburgh-Princeton; Phys. to Southern Dispen., 1856; St. Joseph's Hosp., 1858; Pa. Inst. for Instruction of Blind, 1861-67; Presb. Hosp., 1872; Orthopaedic Hosp. and Infirmary for Nervous Diseases, 1872; Consulting Phys. to State Lying-in Hosp. and Infirmary, 1872; Insane Dept. Philadelphia Hosp., 1884; Trustee of the University since 1875; Pres. Philadelphia College of Physicians, 1886 and again 1890; author of many scientific and literary works.

SILAS WEIR MITCHELL, M.D., LL.D., was born in Philadelphia, February 15, 1830, son of John Kearsley and Sarah Matilda (Henry) Mitchell. His father was a prominent physician of Philadelphia, and for many years Professor of the Theory and Practice of Medicine in Jefferson Medical College. He received academic training in the College Department of the University of Pennsylvania as a member of the Class of 1848, but left during his Senior year on account of illness. In 1850 he graduated at Jefferson Medical College; he also received the degree of Doctor of Medicine, *honoris causa*, from the University of Bologna in 1888. The history of his professional career in Philadelphia shows an extensive hospital service, including the office of Physician to the Southern Hospital in 1856, to St. Joseph's Hospital in 1858, to the Pennsylvania Institute for the Instruction of the Blind, 1861-1867, to the Presbyterian Hospital in 1872 and again in 1897 and to the Orthopaedic Hospital and Infirmary for Nervous Diseases in 1872, and to the Insane Department of the Philadelphia Hospital in 1884. During the four years of the Civil War Dr. Mitchell was in the service of the

United States Army in Philadelphia, holding appointments as Sanitary Inspector and Acting Assistant Surgeon, and being assigned to the charge of the army wards for diseases and injuries of the nervous system in Turner's Lanc Hospital. Dr. Mitchell is one of the most conspicuous medical men the country has ever produced, his high reputation having been attained by his researches and writings on physiological subjects and by numerous literary works both in prose fiction and in verse. His first publications were on the venom of serpents, and during his army service he prepared with Drs. Kean



S. WEIR MITCHELL

and Morehouse the valuable paper on Reflex Paralysis, Gunshot Wounds and other Injuries of Nerves, and On Malingering. His later writings treat chiefly of Physiology, Toxicology and Nervous Diseases, on which latter subject he is now generally acknowledged to be a leading authority. He is especially known as the originator of what is known as Rest Treatment in this country and in Europe as the Weir Mitchell treatment. Since 1875 Dr. Mitchell has served on the Board of Trustees of the University, acting as Chairman of the Standing Committee on the Department of Medicine and Allied Schools. He was also twice President of the Philadelphia College of Physicians, to which office he was appointed in 1886, after having been a fellow of the institution.

He has been either an officer or a member of a large number of American and European societies, including: the British Medical Association, the Royal Medical and Chirurgical Society, the Boston Medical Society of Natural History, the Société Académique de la Loire Inférieure, the New York Academy of Medicine, the London Medical Society, the Royal Medical Society of Norway, the American Academy of Arts and Sciences, the National Academy of Science of the United States, the American Medical Association and the American Association of Physicians and Pathologists, besides numerous local organizations. Dr. Mitchell's first literary production was *The Children's Hour*, written during the Civil War, the proceeds of which were devoted to the Sanitary Commission Fair in Philadelphia, and subsequently he wrote short stories for the *Children's Hospital*, and in 1880 published his first long tale, *Hephzibah Guinness* etc. The literary works include *Hephzibah Guinness*; *Thee and You*; *The Hill of Stones* and other Poems; *In War Time*; *Roland Blake*; a *Masque* and other Poems; *Prince Little-boy* and other Tales out of Fairyland; *Characteristics*; *When all the Woods are Green*; *Far in the Forest*; *The Adventures of François*; and *Hugh Wynne, Free Quaker*. He married (1) *Mary Middleton*, daughter of *Alfred Langdon Elwyn*, and (2) *Mary*, daughter of *General Thomas Cadwalader* of the Class of 1795.

WHITNEY, George, 1820-1885.

Benefactor — Trustee 1875-1885.

Born in *Brownsville, N. Y.*, 1820; educated at *Albany Acad.*; civil engineer until 1843; *Baldwin Locomotive Works*, 1843-46; member of firm *A. Whitney & Sons*, 1847-85; Trustee of the University 1875-85; died 1885.

GEORGE WHITNEY, Manufacturer, was born in *Brownsville, New York*, October 17, 1819, the son of *Asa* and *Clarinda (Williams) Whitney*. After completing his education at the *Albany Academy, Albany, New York*, he adopted the profession of civil engineering, his first field work being on the railway between *Hartford* and *Springfield, Connecticut*. After this he was engaged on the survey and construction of the *Genesee Valley Canal* in *New York State*. In 1843 *Mr. Whitney* went to *Philadelphia* to take a position in the *Baldwin Locomotive Works*, his father having just entered into partnership with *M. W. Baldwin*, their founder. This partnership was dissolved in 1846 and *Mr. Whitney* left with his father, with whom in the next

year, 1847, he entered into partnership under the firm title of A. Whitney & Son. They manufactured chilled cast-iron car wheels under patents granted the father, Asa Whitney. Their extensive works,



GEORGE WHITNEY

From canvas in University Chapel

situated between Sixteenth and Seventeenth streets and Callowhill Street and Pennsylvania Avenue, Philadelphia, were for years the largest car-wheel shops in America. Mr. Whitney took an active interest in the welfare of his workmen, knowing most of them personally. To charities he gave freely, and he was prominent as an advocate of civil service and municipal reform. He was a member of the Committee of One Hundred of Philadelphia, an organization of business men formed for the purpose of securing a business administration of Philadelphia local politics. Mr. Whitney was a Trustee of the University of Pennsylvania from 1875 until his death, 1885. He was also a Director in the Insurance Company of North America, the Philadelphia National Bank, the Philadelphia Saving Fund and the Lehigh Coal and Navigation Company. His art gallery was one of the finest in Philadelphia. Mr. Whitney's greatest gift to the University was that of \$50,000, for the establishment of a Chair in the Mechanical Engineering Department, now known as the Whitney Professorship of

Dynamical Engineering. Mr. Whitney married twice. His first wife, whom he married in 1849, was Mary Jerusha Ely. After her death in 1854 Mr. Whitney married Sarah C. Fairman, who survived him, dying in 1887.

DARBY, Edwin Tyler, 1845-

Professor Dentistry 1876-

Born in Binghamton, N. Y., 1845; graduated Pa. College of Dental Surgery, 1865; graduated from Medical Dept. of Univ. of Pa., 1878; Prof. of Operative Dentistry at the Pa. College of Dental Surgery, 1876-78, and at the University since 1878.

EDWIN TYLER DARBY, M.D., D.D.S., was born, August 21, 1845, in Binghamton, New York, son of Chauncey and Mary Ann (Short) Darby, being of English ancestry both on his father's and mother's side. His early education was received near his home in New York State, and with the determination of studying dentistry, he went at an early age to Philadelphia, which was recognized then as now to be one of the leading centres for training in this branch of Surgery. He entered the Pennsyl-



EDWIN T. DARBY

vania College of Dental Surgery, graduating in March 1865, and at once selected Philadelphia as his place of residence. In 1876 he was appointed Professor of Operative Dentistry in the Pennsylvania College

of Dental Surgery from which he had graduated eleven years before, retaining this position for two years. At the same time he pursued a course of study in the Medical School of the University of Pennsylvania, receiving the degree of Doctor of Medicine in 1878, in which year he was appointed Professor of Operative Dentistry and Dental Histology in the Dental Department of the University. In this position he has remained to this date, and has been a leading influence in building up the Dental School to its present position of eminence as a seat of dental education. He is a member of the National Dental Association, the Pennsylvania State Dental Society and the Academy of Stomatology. Dr. Darby is a member of the Union League of Philadelphia and the University Club of the same city. He was married in 1866 to Carolyn B. Thomas. They have four children, the eldest, Dr. George D. B. Darby, being a well known dentist in Philadelphia.

DUHRING, Louis Adolphus, 1845-

Lecturer and Professor in Medical Department, 1871-

Born in Philadelphia, 1845; entered Academic Dept., Univ. of Pa., 1861, but left at end of Junior year; graduated M.D., 1867; studied abroad; Lecturer in Med. Dept., 1871-75; Prof. since 1876; Dermatologist in Philadelphia Hosp., 1878, and Pres. Board of Trustees Philadelphia Dispensary for Skin Diseases; specialist in Dermatology and author of standard works on that subject.

LOUIS ADOLPHUS DUHRING, M.D., Specialist in Dermatology, was born in Philadelphia, December 23, 1845, the son of Henry and Caroline (Oberteuffer) Duhring. His father, a native of Germany, emigrated to the United States in 1818, establishing himself in business in Philadelphia, where he became a successful merchant. The son having received his preparation for College in the schools of that city, entered University of Pennsylvania in 1861 and pursued the academic course with the Class of 1865 through its Junior year, becoming a member of the Philomathean Society and the Phi Kappa Sigma. At the close of his third year he withdrew from the Department of Arts and entered that of Medicine, receiving the degree of Doctor of Medicine on his graduation in 1867. For more than a year following, Dr. Duhring held the position of Resident Physician at the Philadelphia Hospital, then sailing for Europe where for two years he studied and walked the hospitals in London, Paris and Vienna. He directed his attention es-

pecially to acquiring a thorough knowledge of Dermatology, in which he was eminently successful; and when, on his return to this country in 1870, he opened a Dispensary in Philadelphia for skin diseases, he was speedily recognized as an authority in this field of medicine. In 1871, the University of Pennsylvania made him Clinical Lecturer on his specialty, and he continued his courses on this subject until 1875, when he was appointed Clinical Professor of Skin Diseases, holding that Chair to the present time. In addition to the duties of his Professorship, Dr. Duhring has con-



LOUIS A. DUHRING

tinued with the Dispensary which he established on his return from Europe in 1870, giving it his active attention as physician until 1880, and since that time as Consulting Physician and President of its Board of Trustees. In 1878 he was elected Dermatologist to the Philadelphia Hospital, where his intimate knowledge of this branch of medicine has been of great service. In the literature of his profession, particularly that which relates to his own specialty, Dr. Duhring's works hold a prominent place. The literary faculty, indeed, is a family possession, his elder sister, Julia Duhring, having published several volumes of critical essays on social life which have found a permanent place in American literature. The first of these,

Philosophers and Fools, published in 1874, attained a great vogue. As early as 1871, Dr. Duhring was one of the Editors of the Photographic Review of Medicine and Surgery, and he began to publish in 1876. His first book was an Atlas of Skin Diseases, plates and text. This was followed by A Practical Treatise on Diseases of the Skin, which has been translated into French, Italian and Russian, and by Epitome of Skin Diseases, published in 1885. Dr. Duhring's connection with medical and scientific societies is extensive. He is a Fellow of the College of Physicians, Philadelphia, member of the American Medical Association, President of the American Dermatological Association, member of the Medical Society of the State of Pennsylvania and of the Pathological Society, Philadelphia, corresponding member of the New York Dermatological Society, and honorary member of the McLain Society, London.

LIPPINCOTT, Joshua Ballinger, 1813-1886.

Benefactor and Trustee 1876-1885.

Born in New Jersey, 1813; bookseller; founder of the publishing house of J. B. Lippincott & Co.; Director Philadelphia and Reading Railroad, Union League Club and Academy of Fine Arts; Trustee of the University, 1876-85; died 1886.

JOSHUA BALLINGER LIPPINCOTT, Publisher, was born in the neighborhood of Mount Holly, New Jersey, March 18, 1813. His family had been in this country for six generations and were members of the Society of Friends. He came to Philadelphia at an early age, and entered the bookshop of Mr. Clarke. After the failure of his employer he was selected by the creditors of the firm to conduct the business in their interests and although but eighteen years old, he managed affairs entirely to their satisfaction. Five years later he began business on his own account, under the firm name of J. B. Lippincott & Company, at the corner of Fourth and Race streets. The firm began by making a specialty of prayer books and Bibles, and soon acquired a national reputation for the good taste and general excellence of their products. In 1849 Mr. Lippincott purchased the stock of his principal competitors, Grigg, Elliot & Company, and soon was the acknowledged head of the publishing business in Philadelphia. In 1850 he moved to Fourth and Commerce Streets and began to issue those standard works of reference which have made the name of Lippincott famous throughout the literary and scholastic world. Among those

are: Lippincott's Pronouncing Dictionary of Biography, Lippincott's Pronouncing Gazetteer, Chambers' Encyclopedia and Allibone's Dictionary of Authors. In addition the firm became the possessor by purchase of many other valuable properties, such as Prescott's Histories and has for some years had in preparation a complete and scientific revision of Worcester's Dictionary. Lippincott's Magazine, one of the foremost monthlies in America, has been issued by the house since 1868. The firm moved to its present establishment on Market Street in 1861 and in 1871 added to this the manufacturing plant on Filbert Street. Mr. Lippincott, in addition to his duties as a publisher, interested himself greatly in the educational and other public institutions of his city, being for many years a Director of the Philadelphia & Reading Railroad, the Philadelphia Savings Bank, the Union League Club and the Academy of Fine Arts. He was a Trustee of the University of Pennsylvania from 1876 to 1885 and after his death his widow, Josephine Craige Lippincott, gave generously to the Library of that institution, especially to the Department of English Literature, the alcove devoted to that subject being named after him. In 1882 Mr. Lippincott gave \$10,000 to the University for the purpose of establishing a Veterinary Department, and the next year added \$10,000 to his first gift. Since his death which occurred January 5, 1886, his children have generously sustained the department and have given annually at least \$4000 for its support.

[Portrait on page 140.]

McELROY, John George Repplier, 1842-1890.

Professor of Rhetoric 1876-1890.

Born in Philadelphia, 1842; graduated Univ. of Pa., 1862; Asst. Prof. of Greek and History Univ. of Pa., 1869-1876; Prof. of Rhetoric, 1876-90; died 1890.

JOHN GEORGE REPPLIER McELROY, was born in Philadelphia, June 30, 1842, the son of Archibald and Sophia Maria (Repplier) McElroy. He entered the University of Pennsylvania in 1858, in the famous Class of 1862, which numbered among its members Rev. Jesse Y. Burke, Secretary to the Board of Trustees, John Cadwalader, Dr. Persifer Frazier, Provost Harrison, Dr. John Sparhawk Jones and the late Provost Dr. William Pepper. Professor McElroy distinguished himself during his College course by carrying off many prizes. From 1862 to 1866 he taught at the Rit-

tenhouse Academy in Philadelphia. In 1866 he went to Chicago to take a position in the High School there. He returned to the University of Pennsylvania in 1869 as Assistant Professor of Greek and History. This position he held until 1876 when he became Professor of Rhetoric and English Language. He continued in this office until his death. He married Anna, daughter of John Clayton of the Class of 1837. Professor McElroy wrote many articles for literary periodicals as well as several text-books. Among the latter the best known is *The Structure of English Prose*, long used in connection with the courses in rhetoric in colleges and high schools. His other books were *A System of Punctuation and Essential Lessons in English Etymology*. He died November 26, 1890.

TYSON, James, 1841-

Lecturer and Professor Medicine 1868-

Born in Philadelphia, 1841; A.B. Haverford College, 1860; M.D. Univ. of Pa., 1863; A.M. Haverford, 1864; served in Northern hospitals during the Civil War; Lect. at the University, 1868-76; elected Prof. of Pathology 1876, and now occupies the Chair of Medicine; author of many popular medical works.

JAMES TYSON, M.D., was born in Philadelphia, October 26, 1841, being of German and English descent. He is in the fifth generation from Cornelius Teissen, one of the first settlers of Germantown, Pennsylvania. Cornelius Teissen came from Crefeld on the Lower Rhine, and although the exact date of his immigration is in doubt, his arrival here is placed between the years 1683 and 1703. A tombstone to his memory which was erected by Pastorius is still standing in a Germantown churchyard, and it is said to be the oldest existing tombstone over a German grave in Pennsylvania. James Tyson's father, Dr. Henry Tyson, was also a physician, and his mother was Gertrude Haviland (Caswell) Tyson who was of English descent. The subject of this biography received his early education at public and private schools in Reading, Pennsylvania, and at Philadelphia. He then entered Haverford College, graduating as a Bachelor of Arts in 1860. Selecting medicine as his profession he matriculated at the University of Pennsylvania, taking the Doctor's degree in 1863. In 1864 he received the Master's degree from Haverford College. Beginning the practice of Medicine in Philadelphia he served as Resident Physician in the Pennsylvania Hospital from July 1863 to April 1864. His career as a teacher commenced with private

classes of students in the University of Pennsylvania. He was appointed Lecturer on Microscopy there in 1868 and on Urinary Chemistry two years later. When the University's new hospital was organized Dr. Tyson, in 1874, received the appointment as Lecturer on Pathological Anatomy and Histology, and in 1876 he was elected Professor of General Pathology and Morbid Anatomy. In 1889 he was transferred to the Chair of Clinical Medicine, and in 1899 to the Chair of Medicine which he continues to hold. From 1877 to 1888 he was Secretary of the Faculty of Medicine, and from 1888



JAMES TYSON

to 1892 Dean of that Faculty. He is ex-officio one of the Physicians to the Hospital of the University and from 1874 to 1878 was a member of the Board of Managers. He was again made a Manager in 1891. Doctor Tyson's engagements outside the University have been of a very varied character. He was appointed Microscopist to the Philadelphia Hospital in 1866, Pathologist in 1870 and has served as Visiting Physician ever since 1872, with the exception of a brief period from 1890 to 1893. He was President of the Medical Board of the Hospital from 1886 to 1890. Dr. Tyson has always been closely associated with the Management of the Rush Hospital for Consumption which is located in Philadelphia, being one of the incorporators of the

institution in 1890. In 1893 he became a Trustee of the Hospital and is now the Chairman of its Executive Committee. He was appointed Consulting Physician to the Kensington Hospital for Women in 1891, and has held the same position in reference to St. Mary's Hospital since 1897. Dr. Tyson is a prolific writer on subjects pertaining to his science. For a time he assisted in editing the Philadelphia Medical Times and he also has edited four volumes of the Transactions of the Pathological Society of Philadelphia. In addition to his numerous papers and minor writings he has published *The Cell Doctrine, Its History and Present State*; an *Introduction to Practical Histology*; *Practical Examination of the Urine*, which first appeared in 1875, reaching its ninth edition in 1896; *A Treatise on Bright's Disease and Diabetes*; *A Handbook on Physical Diagnosis*, third edition, 1898; and a *Text-book on the Practice of Medicine*, second edition, 1900. Dr. Tyson is connected with numerous medical societies and scientific organizations. In 1866 he became a Fellow of the College of Physicians of Philadelphia. He is a member of the Pathological Society and was for a time its President, having also held various other offices in the society. He is one of the original members of the Obstetrical Society of Philadelphia and a founder of the Association of American Physicians which was organized in 1886, and limited to one hundred and twenty-five members from the United States and Canada. Among other bodies to which he belongs are: the American Medical Association, the Pennsylvania State Medical Society, the Philadelphia County Medical Society, the American Climatological Association and the American Philosophical Society. As a young man during the Civil War Dr. Tyson was engaged in hospital service. From 1863 to 1865 he was Acting Assistant Surgeon, being engaged for the most part in military hospitals in Philadelphia. For a time, however, he was stationed at Harrisburg, Pennsylvania and at Winchester, Virginia. On December 5, 1865 he married Fannie Bosdevea a native of Brussels, Belgium, who died May 8, 1900. Two children a son and daughter were born to them.

ASHHURST, John, Jr., 1839-1900.

Professor Surgery 1877-

Born in Philadelphia, 1839; graduated in the Dept. of Arts of the Univ. of Pennsylvania, 1857; received A.M. and M.D., 1860; LL.D. from Lafayette College, 1895; Prof. of Clinical Surgery in the Univ. since 1877;

Barton Prof. of Surgery since 1888; author and Editor of a large number of medical works; died 1900.

JOHN ASHHURST, JR., M.D., LL.D., the son of John Ashhurst (1809-1892) and Harriet Eyre (born 1816, married 1835, died 1890). He was born in Philadelphia, August 23, 1839. The Ashhursts are an English family emanating from Lancashire. Professor Ashhurst's grandfather was Richard Ashhurst who in 1804 was married to Elizabeth Crotto, her parents being Henry Crotto and Catherine Van Flick. Professor Ashhurst's mother was a daughter of Manuel Eyre (1777-



JOHN ASHHURST, JR.

1845) and Anne Louisa Connelly, the Eyres like the Ashhursts being of English descent. The subject of this sketch was educated under private tutors and was so far advanced in his studies at the early age of fourteen that he entered the Department of Arts of the University of Pennsylvania, from which he was graduated with the Bachelor's degree in the Class of 1857. In his Junior Year he received the average of 14.997, the maximum being 15, his own record being the highest average ever attained by any student in the University. Upon the formation of the Pennsylvania Delta Chapter of Phi Beta Kappa, he was elected an original member. While in College he was Vice-President of his class and a member of the Philomathean Society, of which

he was Treasurer, Second Censor, Secretary and Moderator. Upon graduation he delivered the Greek Oration. After finishing his work in the Department of Arts, he entered the Medical School of the University, from which he was graduated as Doctor of Medicine in 1860. In the same year the University conferred upon him the degree of Master of Arts; and in 1895 he received the honorary degree of Doctor of Laws from Lafayette College. Dr. Ashhurst upon graduating in medicine entered actively into the practice of his profession, becoming attached to the Pennsylvania Hospital as Resident Physician in 1861 and passing to the Chester U. S. A. General Hospital in August (the thirteenth) 1862, where he remained as Surgeon until December 1862. For two years, 1863-1865, he served as Surgeon and Executive Officer to the Cuyler U. S. A. Hospital in Germantown, and from 1863 to 1880 he was Surgeon to the Hospital of the Protestant Episcopal Church in Philadelphia. He was Surgeon to the Children's Hospital from 1870 to 1900, to the University Hospital from 1877, to the Pennsylvania Hospital from 1887, Consulting Surgeon to the Hospital of the Good Shepherd at Radnor, Pennsylvania, from 1874, and to St. Christopher's Hospital from 1875. He held the same position in relation to the Women's Hospital and to the Pennsylvania Institute for the Blind. In addition to these engrossing duties he was for years an eminent teacher of medicine in the University. He was elected Professor of Clinical Surgery in 1877 and from 1888 was John Rhea Barton Professor of Surgery. Dr. Ashhurst in the course of his long career as a Surgeon, Physician and Professor in the University's Medical School had numberless honors shown him by learned societies and institutions. He was a member of the Academy of Natural Sciences of Philadelphia from 1860, and from 1861 of the Pathological Society of Philadelphia, of which Society he was President in 1870-1871. From 1863 he was a Fellow of the College of Physicians of Philadelphia and was its Vice-President for three years, 1895-1898, and its President 1898-1900. He was a member of the Obstetrical Society from 1874, a member of the Philadelphia Academy of Surgery from 1897 and was its Vice-President in 1898-1900. From 1880 he belonged to the American Surgical Association, having been elected its Vice-President in 1896. He was also a member of the Philadelphia County Medical Society, of the Pennsylvania State Medical Society and of the American Medical Association.

During the Centennial Medical Congress in 1875-1876, he held the office of Vice-President of the Surgical Section of the Congress. He was likewise an honorary member of the Muskingum County Medical Society of Ohio, and of the South Carolina Medical Association. Dr. Ashhurst's interests outside his profession, especially in religious work, were always great and intimate. He was a member of the American Philosophical Society, the Historical Society of Pennsylvania, the Christ Church Historical Society, the Evangelical Education Society, the Christian League, of which organization he was a Director for several years, and the Evangelical Alliance of Philadelphia, having been President of the last named body from 1897. He was a Deputy from the Church of the Mediator to the Diocesan Convention from 1868, a member of the Standing Committee of the Diocese of Pennsylvania from 1887, a Manager of the Episcopal Hospital from 1880 and for a term of years an Overseer of the Philadelphia Divinity School and of the Deaconess' Training House. A statement of his connection with benevolent enterprises in Philadelphia would make a long chapter. In addition to his many public and private duties of other kinds, Professor Ashhurst was an industrious writer in his own science. He edited the Transactions of the College of Physicians, volumes I-V, and the Transactions of the International Medical Congress of 1876. He has edited Erichsen's Science and Art of Surgery, making valuable additions to the text, a work which was published in 1869. He was the Editor also of the International Encyclopædia of Surgery in six volumes appearing from 1881 to 1886. A revised edition of this monumental work was issued in 1888. A French edition in seven volumes was published in 1883-1888, and a Supplementary volume in 1895. Dr. Ashhurst was one of the Supervising Editors of the International Medical Magazine from 1894 to 1898. At the time of his death he was a collaborator in the publication of International Clinics, edited by Dr. Henry W. Cattell. Among his other works were: Injuries of the Spine, Principles and Practice of Surgery, which was first published in 1871 reaching its sixth edition in 1893; *De la Laparotomie ou Section Abdominale Comme Moyen de Traitement de l'Intussusception*, translated by Dr. Lutaud. He delivered the address on Surgery Before the Days of Anæsthesia, at the Semi-centennial Anniversary of the Discovery of Ether, in the Massachusetts General Hospital, October 16, 1896. He was one of the collaborators on

Lippincott's Medical Dictionary which appeared in 1897. Professor Ashhurst was married December 8, 1864, to Sarah Stokes, daughter of William Henry and Emma Matilda (Gorgas) Wayne. They had seven children: John Ashhurst, 3rd, born in 1865; Dr. William Wayne, born in 1867, who married in 1892 Ellen Eyre Gaillard; Mary Jane, the wife of Lieutenant E. F. Lieper, United States Navy; Anna Wayne, the wife of Rev. E. J. Perot; Sally Wayne, Astley Paston Cooper and Emma Matilda Ashhurst. He also had seven grandchildren. Professor Ashhurst's Philadelphia residence was in West DeLancey Place and his summer home was the beautiful and historic country seat, the Grange, situated in Haverford Township, Delaware county, Pennsylvania. Dr. Ashhurst was at one time a Trustee of the House of Rest for the Aged and of the Pennsylvania Military College, and a member of the Advisory Board of the Frederick Douglas Memorial Hospital. He died in Philadelphia, July 7, 1900.

WORMLEY, Theodore George, 1826-1897.

Professor Chemistry 1877-1897.

Born in Cumberland Co., Pa., 1826; Dickinson College, 1844-47; graduated Philadelphia College of Medicine, 1849; Prof. Chem. and Nat. Sci. Capitol Univ. of Columbus, 1852-63; Prof. Chem. and Toxicology Starling Med. College, 1854-77; Prof. Chem. Med. Dept. Univ. of Pa., 1877-97; died 1897.

THEODORE GEORGE WORMLEY, M.D., Ph.D., LL.D., was born April 1, 1826, in Wormleysburg, Cumberland county, Pennsylvania, the son of David and Isabella Wormley. His youth was spent in this neighborhood, but removing to Carlisle, he entered Dickinson College in 1844. During his third year in the College he began the study of medicine in the office of Dr. John J. Myers. In 1847 he went to Philadelphia, attending lectures at the Philadelphia College of Medicine. Here he graduated Doctor of Medicine in 1849. Returning to Carlisle he spent a year there, then moved to Chillicothe, Ohio, and in 1850 settled down in Columbus where he remained twenty-seven years and worked his way into the front rank of American chemists. Dr. Wormley intended at first to engage in the ordinary work of a physician, but when the opportunities were offered him to pursue the scientific studies to which he was more strongly attracted; he gradually abandoned the duties of the practitioner, and became known as an original investigator, as a writer and as a most successful teacher of Chemistry.

In 1852 he became Professor of Chemistry and Natural Science in the Capitol University of Columbus, and two years afterwards Professor of Chemistry and Toxicology in the Starling Medical College of the same city. He gave up the former chair in 1863 but retained the latter until his removal to Philadelphia in 1877. Dr. Wormley was State Gas Commissioner of Ohio, 1867-1875, and Chemist of the Geological Survey of the State, 1869-1874. It was during this period of his life that he published the first edition of his Micro-chemistry of Poisons, 1867. A second edition was called for not many



THEODORE G. WORMLEY

years before his death. In 1876 Dr. Wormley went to Philadelphia to deliver the address on Medical Chemistry and Toxicology before the International Medical Congress held in commemoration of the Centennial of National Independence. In 1877 he was elected Professor of Chemistry in the Medical Department of the University of Pennsylvania, holding the position until his death. His teaching here both in lecture-room and in laboratory was of the highest efficiency. Dr. Wormley was a Doctor of Philosophy from both Dickinson College and Pennsylvania College (Gettysburg) and a Doctor of Laws of Marietta College, Ohio. He was a Fellow of the Philadelphia College of Physicians and Surgeons, a member of the American Philosophical Society, a

member and Vice-President of the American Chemical Society and a member of the Chemical Society of London and of numerous other scientific bodies. He married a daughter of John L. Gill of Columbus, Ohio. He died January 3, 1897, in Philadelphia.

MARKS, William Dennis, 1849-

Professor Dynamic Engineering 1877-1887.

Born in St. Louis, Mo., 1849; graduated Yale, 1870; civil, mechanical and electrical engineer; from 1877-87 Whitney Prof. of Dynamic Engineering in the Univ. of Pa.; officer of the Edison Electric Light Co. since 1887.

WILLIAM DENNIS MARKS, Engineer, is of Alsatian parentage on his father's side, while his maternal ancestry is English and Scotch.



WILLIAM D. MARKS

His father was Dennis Marks of St. Louis, Missouri, where the son was born February 26, 1849. His early education was secured at Washington University in St. Louis and at General Russell's School at New Haven, Connecticut. Entering Yale he graduated from that University with the degree of Bachelor of Philosophy in 1870 receiving his technical degree of Civil Engineer from the same institution in 1871. He soon found employment as a civil engineer on the Morris & Essex Railroad, but in a little while returned to the West accepting a

technical position in connection with the Laclede Gas Works at St. Louis. Mr. Marks early turned his attention to mechanical engineering, building a number of blast furnaces and designing and attending to the construction of engines and locomotives. This employment fully occupied him until 1876. In 1877 he received an appointment as Whitney Professor of Dynamic Engineering, in the University of Pennsylvania where he remained in the Faculty of the Scientific School for ten years. He soon developed a high reputation as an investigator chiefly in the electrical field, and was largely influential in organizing and carrying through to a successful result the Franklin Institute's International Electrical Exposition which was held in Philadelphia in 1884. In 1884 Professor Marks returned to active technical employments in connection with the Edison Electric Light Company of Philadelphia. He was Engineer to this company from 1887 to 1892, and President from 1892 to 1896, since which time he has been Consulting Engineer. Some years ago he was made an honorary life member of the Franklin Institute in token of his valuable services in electrical experimentation and discovery. He is also a member of the American Philosophical Society, the American Institute of Electrical Engineers and other learned societies and bodies. Professor Marks was married in 1874, to Jeanette Holmes Colwell of Chattanooga, Tennessee, by whom he has two daughters.

PENROSE, Richard Alexander Fullerton, 1827-

Professor in Medical School 1863-88, Emeritus Prof. 1888-

Born in Carlisle, Pa., 1827; A.B. Dickinson College, 1846; M.D. Univ. of Pa., 1849; Prof. of Obstetrics and Diseases of Women and Children, Univ. of Pa., 1863-88; Emeritus Prof. since 1888.

RICHARD ALEXANDER FULLERTON PENROSE, M.D., LL.D., was born in Carlisle, Pennsylvania, March 24, 1827, the son of Charles Bingham Penrose and Valeria Fullerton Biddle, his wife. He graduated from Dickinson College in 1846 and then entered the Medical Department of the University of Pennsylvania from which he received the degree of Doctor of Medicine in 1849. He was Resident Physician at the Pennsylvania Hospital for three years, and then began the practice of his profession in Philadelphia, where he soon rose to eminence. In 1854, through his efforts, and those of his friends, the wards of

the Philadelphia Hospital were opened to medical instruction, and he was soon after elected to the post of Consulting Surgeon to that institution. He began a series of lectures on the diseases of women and children and soon attracted attention on account of the conciseness and practical character of his teaching. In 1856 he was one of the founders of The Children's Hospital of Philadelphia. He was also some years later one of the founders of The Gynecean Hospital. In 1863 he became Professor of Obstetrics and Diseases of Women and Children



R. A. F. PENROSE

in the University of Pennsylvania, which position he retained until 1888, when he retired from active work with the title of Emeritus Professor.

MOORE, Clara J. Jessup, 1824-1899.

Benefactress 1878.

Born in Philadelphia, 1824; married Bloomfield H. Moore in 1842; published *Miscellaneous Poems*, 1875; *On Dangerous Ground*, 1876; *Sensible Etiquette*, 1878; Foundation of the Bloomfield H. Moore Fund at the University of Pennsylvania to Promote the Higher Education of Women; died 1899.

CLARA J. JESSUP MOORE, Novelist and philanthropist, was born in Philadelphia on February 16, 1824, the daughter of Augustus E. and Lydia (Moseley) Jessup. Mrs. Moore was educated

at home, at the academy in Westfield, Massachusetts, and at the school of Mrs. Merrick at New Haven, Connecticut. On October 27, 1842, she was married to Bloomfield Haines Moore of Philadelphia and soon took a prominent place in the social and literary life of that city. She employed her leisure in writing, contributing to magazines and newspapers under the pseudonym of "Clara Moreton." When the Civil War broke out Mrs. Bloomfield Moore was named as President of the woman's branch of the Pennsylvania Sanitary Commission. She refused the Presidency, but accepting the position of Corresponding Secretary, rendered efficient aid in its organization. She was very active in the great sanitary fair in Philadelphia. Mrs. Bloomfield Moore also projected and aided in founding the Union Temperance Home for Children. After the war she once more turned her attention to literary work, using as a rule her own name. The proceeds of the sales of her many books were spent in aiding philanthropic institutions and individuals who were engaged in literary and scientific work. Among these was John W. Keely, the inventor. Much of Mrs. Moore's life was passed abroad, especially after the death of her husband in 1878. At her home in London, as in Philadelphia, were always to be met artists, musicians, authors and scientists. In 1878 she gave \$10,000 to the University of Pennsylvania to found a fund to be called in memory of her husband the "Bloomfield H. Moore Fund," to promote the higher education of women at the University. By a later gift she increased the fund to \$15,000. After her death her son presented to the University Library a valuable collection of books, paintings and sculptures which she had left on deposit there. Among Mrs. Bloomfield Moore's other writings are: *Miscellaneous Poems*, 1875; a romance *On Dangerous Grounds*, 1876; *Sensible Etiquette*, 1878; *Gondalire's Lessons and Other Poems*, 1881; *The Warden's Tale, San Moritz, Magdalena and Other Poems*, 1883; and *Social Ethics and Social Duties*, 1892. She died in London, England, January 5, 1899.

[Portrait on page 162.]

WILLARD, De Forest, 1846-

Lecturer Orthopaedic Surgery 1877-1889, Clinical Professor 1889-

Born in Newington, Conn., 1846; received degree of M.D. from the Univ. of Pa., 1867; Ph.D., 1871; has served continuously in Anatomical and Surgical Departments of the University from 1867 to date; elected Prof. of Orthopaedic Surgery in 1889; secured the

erection of the Orthopaedic Ward in the University Hospital.

DE FOREST WILLARD, M.A., M.D., Ph.D., is a New Englander by birth, being a native of Newington, Hartford county, Connecticut. He was born March 23, 1846, son of Daniel H. and Sarah Maria (Deming) Willard, both of his parents having been descended from families which were closely identified with the development of America in the Colonial period. Dr. Willard is in the ninth generation from Major Simon Willard the founder of Concord, Massachusetts, (1632) two of whose de-



DE FOREST WILLARD

scendants were Presidents of Harvard College. His preparatory education was received at the Hartford High School and he entered Yale in 1863. The weakness of his eyes, however, prevented his pursuing the course, and soon deciding to study medicine, he entered the Medical Department of the University of Pennsylvania from which institution he took the degree of Doctor of Medicine in 1867. He received the degree of Doctor of Philosophy from the University in 1871. Dr. Willard early selected Surgery as his chosen branch of medical practice and from the time he graduated in 1867 up to this date he has been continuously connected with the Anatomical and Surgical Departments of the University. Prior to his graduation in medicine,

during the Civil War, he served under the auspices of the United States Sanitary Commission at City Point and Petersburg. In spite of his professional engagements he has always found time for much outside work and he is the author of many original articles published in various medical journals. In 1867-1868 he was Resident Physician at the Philadelphia Hospital and has been connected with many institutions. Since 1881 he has served as Surgeon to the Presbyterian Hospital. He is Consulting Surgeon to the Home for Incurables, the Homes for White and Colored Crippled Children, and the State Hospital for the Chronic Insane at South Mountain. In 1877 Dr. Willard was appointed Lecturer on Orthopaedic Surgery in the University, and was elected Clinical Professor of Orthopaedic Surgery in 1889. In this subject his interest has always been most sincere and enthusiastic. It was he who organized this department at the University and who secured the erection of the Orthopaedic Ward in the Agnew Wing of the University Hospital. Dr. Willard has been closely connected with the management of many charitable organizations, and is prominently identified with a large number of medical associations. He was President of the American Orthopaedic Association in 1890, of the Philadelphia County Medical Society in 1893-1894 and of the Philadelphia Academy of Surgery in 1900. He is a Fellow of the Philadelphia College of Physicians and of the American Surgical Association, in which latter Society since 1895 he has held the office of Recorder. He was married in 1881 to Elizabeth M. Porter a daughter of Hon. William A. Porter, a granddaughter of Governor D. R. Porter and a great-granddaughter of General Andrew Porter. They have one son, De Forest Porter Willard.

HUTCHINSON, James Howell, 1834-1889.

Trustee 1878-1889.

Born in Cinta, Portugal, 1834; graduated Univ. of Pa., 1854; M.D. 1858; Resident Phys. Pa. Hosp., 1858; Phys. to Children's Hosp., 1862-89; Phys. to Episcopal Hosp., 1863-68; Asst. Surg., U. S. A., 1862-65; member Medical Staff Pa. Hosp., 1868-89; Pres. Pathological Soc.; Editor Philadelphia Medical Times; Trustee of the University, 1878-89; died 1889.

JAMES HOWELL HUTCHINSON, M.D., was born at Cinta, Portugal, August 3, 1834, while his father was Consul there. He was the son of Israel Pemberton and Margaretta (Hare) Hutchinson. He graduated from the University of Pennsylvania in 1854, being a member of the Phi Kappa

Sigma Fraternity and the Moderator of the Philomathean Society. He visited Europe after graduation and returning to Philadelphia in 1855 entered the Medical Department of the University, receiving



JAMES H. HUTCHINSON

the degree of Doctor of Medicine in 1858. He was then elected Resident Physician of the Pennsylvania Hospital where he served for one year and then spent two years in the hospitals of Vienna and Paris. In 1861 he began the practice of medicine in Philadelphia, and the next year became Physician to the Children's Hospital, which appointment he held till his death. From 1862 to 1865 he was Acting Assistant Surgeon in the United States Army, serving at the Satterlee General Hospital in West Philadelphia. He was Physician to the Hospital of the Protestant Episcopal Church, 1863-1868 and to the Pennsylvania Hospital, 1868-1889. He was also President of the Pathological Society of Philadelphia, Vice-President of the College of Physicians and member of the Philadelphia County Medical Society, the Obstetrical Society of Philadelphia, the Academy of Natural Sciences, the American Philosophical Society and the Association of American Physicians. He was also a Director of the Philadelphia Library Company and of the National Bank of Commerce and a fellow of the College of Physicians of Philadelphia. He was the Editor of two

editions of Bristowe's Practice of Medicine, and contributed articles on typhoid, typhus and simple continued fevers to the System of Medicine of Drs. Pepper and Starr. He was for two years Editor of the Philadelphia Medical Times and was a constant contributor to the medical journals of the country. He was a Trustee of the University of Pennsylvania from 1878 to 1889. In 1862 he married Anna Ingersoll. Dr. Hutchinson died December 26, 1889.

BOARDMAN, George Dana, 1828-

Trustee 1879-

Born in Tavoy, Burmah, 1828; graduated Brown Univ., 1852; studied at Newton Theol. Institution, 1852-55; Pastor of Baptist Church, Barnwell, S. C., 1855; 2nd Church, Rochester, N. Y., 1856-64; Pastor of 1st Baptist Church in Philadelphia, 1864-94; D.D. Brown Univ., 1866; LL.D. Univ. of Pa., 1889; Chaplain of the University, 1892-93; Trustee since 1879.

GEOERGE DANA BOARDMAN, D.D., LL.D., Clergyman, formerly Chaplain of the University, was born in Tavoy, Burmah, August 18, 1828, son of George Dana and Sarah (Hall)



GEORGE DANA BOARDMAN

Boardman. His father was engaged in active missionary work in India from 1825 until his death, which occurred in Burmah in 1831. Dr. Boardman graduated at Brown University with the

Class of 1852, receiving the degree of Bachelor of Arts, and determined to enter the ministry, he took up a course of theological study at the Newton Theological Institution. Here he graduated in 1855, and accepted a call to the Baptist Church of Barnwell, South Carolina. Unable to adjust his views on the slavery question to the Southern attitude, he resigned after a few months, and returning North became Pastor of the Second Church in Rochester, New York, where he remained until called in 1864 to the Pastorate of the First Baptist Church of Philadelphia, where he resigned in 1894 to engage in literary work, becoming Honorary Pastor. He received the degree of Doctor of Divinity from Brown in 1866, and that of Doctor of Laws from the University of Pennsylvania in 1889. Dr. Boardman was Chaplain of the University during the College year of 1892-1893, and has been a member of the Board of Trustees since 1879. He at one time delivered a notable course of Sunday afternoon lectures at the University on the Ten Commandments. These were published soon after they were delivered, and later he gave a second course on the Minor Prophets. Dr. Boardman has also since 1894 lectured in various Universities and Seminaries in different parts of the country. Among numerous other writings, he has published: *Studies in the Creative Week*; *Studies in the Model Prayer*; *Epiphanies of the Risen Lord*; *Studies in the Mountain Instruction*; *The Problem of Jesus*; *The Coronation of Love*; *The Kingdom*.

WHARTON, Henry Redwood, 1853-

Demonstrator of Surgery.

Born in Philadelphia, 1853; graduated College Dept. Univ. of Pa., 1873; M.D., 1876; Demonstrator of Surgery Univ. of Pa.; Surgeon Children's Hosp.; Surgeon to the Presby. Hosp.; Consulting Surgeon Pa. Inst. for Deaf and Dumb.

HENRY REDWOOD WHARTON, M.D., was born in Philadelphia, May 23, 1853, son of Charles Wharton, Class of 1833, and Mary McLanahan (Boggs) Wharton. He graduated from the College Department of the University of Pennsylvania with the Class of 1873, and took the Master of Arts degree in course. At graduation from the Medical School in 1876, he received distinguished merit for his thesis. He has continuously followed his profession in Philadelphia, having performed in addition to his private practice hospital service as Surgeon to the Children's Pres-

byterian and Methodist Hospitals, Assistant Surgeon to the University Hospital and Consulting Surgeon to the Pennsylvania Institute for the Deaf and Dumb. In 1879 Dr. Wharton was appointed Instructor in Clinical Surgery in the University, and in 1885 was advanced to his present office as Demonstrator of Surgery. He has been a fellow of the College of Physicians since 1884, and now holds membership in the Philadelphia County Medical Society, the Pathological Society of Philadelphia, the Medical Society of the State of Pennsylvania, the American Surgical Association and the Pennsylvania



HENRY R. WHARTON

Society of the Sons of the Revolution. Besides numerous articles in leading medical journals, he has written: a Text-book on Minor Surgery and Bandaging; a work on the Practice of Surgery, with Dr. B. F. Curtis of New York; the articles on Pseudo-venereal Affections, etc. in Ashhurst's International Encyclopedia of Surgery; the articles on Tracheotomy and Diseases of the Rectum, in Keating's Cyclopædia of the Diseases of Children; the article on Minor Surgery in the System of Surgery by Dennis; and the article on Tracheology, in the American Text Book on Diseases of Children. A full account of Dr. Wharton's ancestry is to be found in published records of the Wharton and Rodman families. He married Edith Reynolds Booth.

BARKER, Wharton, 1846-

Trustee 1880-

Born in Philadelphia, 1846; graduated Univ. of Pa. 1866; engaged in banking business; organized Finance Co. of Pa. and Investment Co. of Philadelphia; directed important enterprises under the Russian Government, 1878-94; identified with large commercial plans of Chinese Government since 1887; has been active in politics as a leader of the People's Party; now Presidential candidate; Editor and Publisher of *The American*, the *Journal of the People's Party*; Trustee of Univ. of Pa. since 1880, and Treas. of the Board, 1882-90.

WHARTON BARKER, Presidential Candidate of the People's Party, was born in Philadelphia, May 1, 1846, son of Abraham and Sarah (Wharton) Barker. He graduated at the University of Pennsylvania in 1866, receiving the degree of Master of Arts in course. While in College he was President of the Zelosophic Society, Second Lieutenant in the University Light Artillery, and a member of the Phi Kappa Sigma Fraternity. Since 1880 Mr. Barker has served on the University's Board of Trustees, acting as Treasurer of that body from 1882 to 1890. At an early age he entered the banking business in Philadelphia and throughout his career having been identified with matters of finance to an extensive degree he has become a conspicuous figure in the commercial and financial world. He was the organizer of the Finance Company of Pennsylvania and of the Investment Company of Philadelphia, and until 1890 was President of the former and Director of the latter. In 1878 and 1879 he conducted the entire financial business connected with the building of four cruisers for Russia at the Cramps Ship Works, and in the following year he directed surveys of the Donetz coal and iron fields in the south of Russia under the authority of the Grand Duke Constantine and Prince Dolgorouke (?), preparing plans for developments, railroads, and coal and iron mines, iron and steel works, and ship and engine building plants. These plans were set forth at length in reports to the Imperial Russian Government. Mr. Barker again went to Russia in 1892 and 1894 to discuss important government undertakings, and at the present time he is actively interested in the building of two important lines of Russian railroad. In 1887 the Chinese Minister to the United States, Cheng Yen Hoon, opened communications with Mr. Barker with regard to plans for the establishment of a Chinese National Bank in Peking, with branches in all important cities of the Empire. In connection with this business Mr. Barker sent a commissioner

to China in May of that year and in September the Chinese Government sent a "High Commission to America," consisting of three Mandarins of whom the principal was Ma Kiet Chang. Mr. Barker went to China in 1895 at the urgent invitation of Viceroy Li Hung Chang, and in October and November of that year was engaged in the discussion of certain plans looking to the development and strengthening of the power of the Chinese Empire. At the present time it is especially of interest to note that probably no other private individual, either of America or of Europe, has had



WHARTON BARKER

such intimate relations with the great Eastern Empires; and that Mr. Barker's published comments on the Eastern situation are being endorsed by personal letters from Chinese officials. Wharton Barker as an earnest worker in American political affairs and as the candidate for the Presidency under the nomination of the People's Party has attained a position of high prominence and respect. His contention for government control of railroads and for a constant value of money maintained by the adoption of paper, which can be increased or decreased at will by the government to meet the changing demands of trade has been long and trying, beginning while he was of the Republican Party. He organized and led the campaign for

nomination of Garfield for President in 1880, and was concerned in the political movements which put Harrison at the head of the Republican ticket in 1888. His tireless work, and his unflinching and honest devotion to the principles which he believes to be right have recently been recognized in his nomination as People's Candidate for President. Not the least important feature of Mr. Barker's career has been his direction of *The American*, the official organ of his party; of this publication he is now Editor and publisher and a frequent contributor to its pages. The second order of the Cross of St. Stanislaus was conferred upon him in 1879 by Alexander II, Czar of Russia. He is a member of the American Philosophical Society, the Academy of Natural Sciences of Philadelphia and the Historical Society of Pennsylvania.

LEARNED, Marion Dexter, 1857-

Professor Germanic Languages and Literatures 1895-

Born near Dover, Del., 1857; graduated Dickinson College, 1880; Johns Hopkins Univ. graduate student, 1884; studied at Univ. of Leipzig, 1885; Fellow in Modern Languages Johns Hopkins Univ., 1885, and received Ph.D. there, 1887; Instr. and Assoc. Prof. German, Johns Hopkins, 1884-95; Prof. Germanic Lang. and Lit., Univ. of Pa., since 1895.

MARION DEXTER LEARNED, Ph.D., was born near Dover, Delaware, July 10, 1857. His father, Hervey Dexter Learned, came from an old English family which settled in Massachusetts in 1632. Its members were active in the Revolution, the War of 1812 and subsequent American wars. Professor Learned's father is a native of New Hampshire but emigrated at an early age to Delaware where he has since resided. Professor Learned's mother was Mary Elizabeth Griffith, a native of Cambridge, Maryland. His early education was received at schools in Delaware. He was graduated from the Wilmington Conference Academy in Dover in 1876. The next year entered Dickinson College at Carlisle, Pennsylvania, and received the degree of Bachelor of Arts from that institution in 1880. For the four years following his graduation he taught languages at Williamsport Dickinson Seminary, but desiring to further pursue his studies he matriculated in the Graduate Department at Johns Hopkins University in September 1884. The following year was spent in Germany at the University of Leipzig, and upon his return to America he again settled at Johns Hopkins where he received an appointment to a Fellowship in

Modern Languages. He served as Instructor of German in Johns Hopkins University from 1886 to 1889, in the meantime receiving the degree of Doctor of Philosophy from the same University in 1887. In 1889 he was appointed Associate in German at Johns Hopkins and in 1892 was promoted to an Associate Professorship in German, a position which he continued to hold for three years. In 1895 he was elected Professor of Germanic Languages and Literatures at the University of Pennsylvania, to fill a vacancy created by the death of Professor Seidensticker. Professor



MARION DEXTER LEARNED

Learned still holds this important chair. He is connected officially and otherwise with a large number of literary and scientific societies. From 1893 to 1895 he was the Treasurer of the Modern Language Association of America. In 1898 he was the Secretary of the Association of the Teachers of German in Pennsylvania and was the President of the Nationalen Deutsch-Amerikanischen Lehrerbundes for the year 1899-1900. Professor Learned is also the founder and Editor of the Quarterly Journal *Americana Germanica*, "devoted to the comparative study of literary, linguistic and other cultural relations of Germany and America." Is the author of a number of treatises and scientific papers, among which are *The Pennsylvania German*

Dialect, The Saga of Walther of Aquitaine, The German-American Turner Lyric, Ferdinand Freiligrath in America, Pastorius' Beehive, and other papers in Americana Germanica. He was the organizer and first Dean of the Mountain Chautauqua, and lectured at the Peabody Institute of Baltimore. He is a member of the American Philosophical Society, the Pennsylvania Historical Society, the German Society, a corresponding member of the Society for the History of the Germans in Maryland and an honorary member of the Society of American Wars. He belongs also to the Junger Maennerchor, the Contemporary Club and the Faculty Club, all of Philadelphia. Professor Learned married Annie Mosser of New Cumberland, Pennsylvania, June 26, 1890, and they have two children.

ROTHROCK, Joseph Trimble, 1839-

Professor Botany 1877-

Born in McVeytown, Pa., 1839; prepared for College at Pa. Academies; graduated Lawrence Scientific School (Harvard), 1864; M.D. Univ. of Pa., 1868; practicing physician in Wilkesbarre, Pa., 1868-73; Surg. and Botanist to the Wheeler Survey, 1873-75; Prof. of Botany, Univ. of Pa. since 1877; Commr. of Forestry for State of Pa. since 1893.

JOSEPH TRIMBLE ROTHROCK, M.D., Forestry Commissioner, was born in McVeytown, Pennsylvania, April 9, 1839. His parents were Abraham and Phebe Brinton (Trimble) Rothrock. Joseph T. Rothrock received his early education at the public schools. He was prepared for Harvard at Academia, Pennsylvania, and at Freeland Seminary in Montgomery county, Pennsylvania. At Harvard he took the Botanical and Zoölogical courses in the Lawrence Scientific School receiving his degree in 1864. While still at College the dangers confronting his state by reason of the war induced him in 1863 to take his place as Captain at the head of a company in the Twentieth Pennsylvania Cavalry. He had already served a term of enlistment as a private soldier in Company D., 131st Regiment, Pennsylvania Infantry and was wounded in the thigh at Fredericksburg. Soon after the war had closed Professor Rothrock determined to adopt the profession of medicine, and entering the University of Pennsylvania received the degree of Doctor of Medicine from the Medical Department of that institution in 1868. For five years thereafter he practiced medicine in Wilkesbarre, Pennsylvania, during which period he was married in 1869 to

Martha Ellen the only daughter of Addison May of West Chester, Pennsylvania. Always deeply interested in botany, Dr. Rothrock in 1873 abandoned the general practice of medicine to accept a position as Surgeon and Botanist to the Wheeler Survey west of the 100th meridian. In this service he was engaged until the end of 1875. Two years later he was elected Professor of Botany in the University of Pennsylvania, a connection that has been continued up to the present date. In politics Professor Rothrock is a Republican. He was appointed to the responsible post of Commissioner of Forestry for the



J. T. ROTHROCK

State of Pennsylvania in 1893. This position also he still holds, having during his term of office contributed very greatly to the spread of a better sentiment regarding the care and disposition of trees. His earnest recommendations have influenced legislation, and it is directly through his influence in this matter that large areas of forest land have recently been reserved by the state. Scientific forestry in Pennsylvania has found in him an intelligent and vigorous advocate, and the economic welfare of the state is carefully guarded by an officer who loves the trees and would save them from the wanton destruction of the firebrand and the timberman. Professor Rothrock is a member of the Academy of Natural Sciences of Philadelphia and the American Philo-

sophical Society, and is an officer of the Pennsylvania Forestry Association. He has three children, two sons and a daughter. He has resided for many years in West Chester, Pennsylvania.

FURNESS, Horace Howard, 1833-

Trustee 1880-

Born in Philadelphia, 1833; graduated Harvard, 1854; A.M. Harvard, 1858; Ph.D. Univ. of Halle, Germany, 1878; LL.D. Univ. of Pa., 1879; L.H.D. Columbia, 1887; Litt.D. Cambridge, Eng., 1899; studied law, and admitted to the Bar, 1859; Trustee of the University since 1880; Editor of a *Variorum Shakespeare*.

HORACE HOWARD FURNESS, Ph.D., LL.D., L.H.D., Litt. D., was born in Philadelphia, November 2, 1833, son of William Henry



HORACE HOWARD FURNESS

Furness, Harvard 1820, an eminent clergyman and author. After early education in his native city, he entered Harvard at the age of sixteen, and there graduated in 1854. Two years were spent in study in Europe, and then returning to America he studied law and was admitted to the Bar in 1859. Dr. Furness is widely known as one of the most devoted of Shakespearian scholars; an important part of his life has been given to a careful study of the great dramatist. His *Variorum Edition*, in twelve volumes thus far, is probably the first authority now in use.

Dr. Furness was made a Doctor of Laws by the University of Pennsylvania in 1879, and since 1880 he has been a member of the Board of Trustees. The following degrees have been conferred on him: Master of Arts, in course, from Harvard in 1858; Honorary Master of Arts from Harvard, 1877; Doctor of Philosophy from the University of Halle, Germany, in 1878; Doctor of The Humanities from Columbia in 1887; Doctor of Laws from Harvard in 1896; Doctor of Letters from Cambridge, England, 1899.

DICKSON, Samuel, 1837-

Trustee 1881-

Born in Newburgh, N. Y., 1837; graduated A.B. Univ. of Pa., 1855; LL.B. 1859; practicing lawyer in Philadelphia; Trustee of the University since 1881.

SAMUEL DICKSON, Lawyer, was born in Newburgh, New York, February 2, 1837, son of Samuel Dales and Maria (Gillespie) Dickson. He entered the College Department of the University of Pennsylvania with the standing of a Sophomore, and graduated Bachelor of Arts in 1855. The degree Master of Arts was conferred in course. Mr. Dickson's law study in the Law Department was completed in 1859, when he received the degree Bachelor of Laws, being soon after admitted to the Philadelphia Bar. In 1860 he succeeded John William Wallace, afterwards Reporter of the United States Supreme Court, as Librarian of the Philadelphia Law Library, and, in 1863, he became associated with John C. Bullitt in practice, since which time he has been occupied with the duties of his profession. He was President of the Pennsylvania Bar Association during the year 1895-1896, and became Chancellor of the Law Association of Philadelphia in 1899. In 1882 he was elected to the Board of Trustees of the University, which body he has since continuously served, having been for some years, Chairman of the Standing Committee of the Department of Law and Legal Relations. While in College Mr. Dickson joined the Philomathean Society, of which he became Moderator, and the Phi Kappa Sigma and Phi Beta Kappa fraternities, and at graduation was Valedictorian of his class. He served in the Philadelphia Home Guards during the Civil War. He is a member of the American Philosophical Society, the Historical Society of Pennsylvania, the Rittenhouse Club and the University clubs of Philadelphia and New York. He married Fanny Hazard in 1867; their children are Erskine Hazard and Arthur Gillespie Dickson.

SCOTT, Thomas Alexander, 1823-1881.

Founder of Chair of Mathematics 1881.

Born in Franklin Co., Pa., 1823; Gen. Supt. of Pa. R. R., 1858; Vice-Pres., 1860; Pres., 1874-85; Colonel Dist. of Columbia Vols. and Asst. Sec. of War, 1861-62; Pres. Union Pacific R. R., 1871-72; Pres. Texas Pacific R. R.; established the Thomas A. Scott Professorship of Mathematics at the University, 1881; died 1881.

THOMAS ALEXANDER SCOTT, Railroad President, was born in London, Franklin county, Pennsylvania, December 28, 1823, the son Thomas Scott. His first position in the line of life



THOMAS A. SCOTT

in which he afterward became so famous was a very modest one, that of clerk to Major James Patton, Collector of Tolls on the State Road between Columbia and Philadelphia. In 1850 he entered the service of the Pennsylvania Railroad Company, as station agent at Duncansville, and soon after was made Superintendent of the Western Division. His wonderful executive ability soon made itself manifest in this responsible position and in 1858 he became General Superintendent of the road, succeeding William B. Foster as Vice-President in 1860. At the beginning of the Civil War, Governor Curtin appointed Mr. Scott on his staff and entrusted to him the forwarding of State troops to the seat of War. Mr. Scott entered upon his duties at once and soon had lines completed to the Maryland

Border and later, when the Northern Central route was proven unsafe, built a branch by way of Perryville to Annapolis in an almost incredibly short time. He was commissioned Colonel of Volunteers from the District of Columbia in 1861 and later in the same year was made Assistant Secretary of War, being the first to hold that position. During 1862 he was active in directing transportation in the West, and even after his resignation, he was sought by the Government to aid in hurrying troops to the relief of General Rosecrans at Chattanooga. This he accomplished, and then returned to his duties as Vice-President of the Pennsylvania Railroad. In this capacity he directed the movements which secured to the road the control of the Western lines, and in 1874 he became President of the Pennsylvania Railroad, having been for one year, 1871-1872, the President of the Union Pacific Railroad. He also was prominent in the affairs of the Texas Pacific Railroad and was for many years its President. His health failing he resigned the Presidency of the Pennsylvania Railroad. In March 1881 Mr. Scott gave to the Trustees of the University of Pennsylvania \$50,000 for the establishment of a Chair in Mathematics, which has been since known by the name of the Thomas A. Scott Professorship of Mathematics. Mr. Scott died at Darby, Pennsylvania, May 21, 1881.

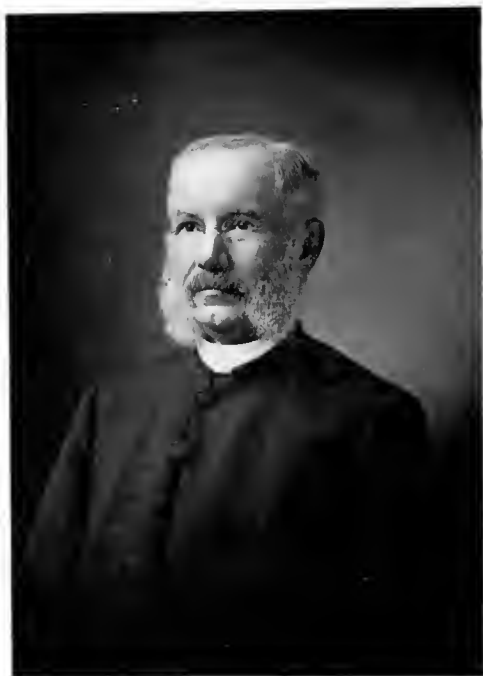
BURK, Jesse Young, 1840-

Secretary Board of Trustees 1882-

Born in Philadelphia, 1840; graduated Univ. of Pa., 1862; A.M. in course; graduated Divinity School of P. E. Church, 1865; Asst. Minister Church of the Evangelists, 1865-66; Rector St. James' Church, Downingtown, Pa., 1866-70; Rector Trinity Church, Southwark, 1870-78; Rector St. Peter's Church, Clarksboro, N. J., since 1878; Sec. Bd. of Trustees, Univ. of Pa., since 1882.

JESSE YOUNG BURK, A.M., was born in Philadelphia, September 15, 1840, the eldest son of Isaac Burk, a well-known botanist whose herbarium is part of the equipment of the University Biological School. His preliminary studies were chiefly in the public schools until he entered the Episcopal Academy to prepare in Classics for the University, which he entered as a Freshman in 1858. He was graduated Bachelor of Arts in 1862, in the class so conspicuous among those of the University for the later official services and munificent gifts of its members. Taking the Master's degree in 1865, he delivered at the Commencement the first of the Master's

orations which were for many subsequent years a feature of these occasions. He pursued a theological course in the Philadelphia Divinity School, graduating in 1865, when he was ordained to the Diaconate, and spent a year as Assistant in the Church of the Evangelists in his native city. Ordained to the Priesthood in 1866, he became Rector of St. James' Church, Downingtown, Pennsylvania, holding that office until 1870 when he was elected Rector of Trinity Church, Southwark. In 1878 he became Rector of St. Peter's Church, Clarksboro, New Jersey, a colonial parish whose first



JESSE YOUNG BURK

Rector, the Rev. Robert Blackwell, became a Trustee of the University nearly a century before Mr. Burk became Secretary. From 1788 to 1882 the offices of Secretary and Treasurer of the University were united in one person, the last incumbent of the offices being Cadwalader Biddle, who succeeded his brother, Caldwell K. Biddle, in 1862, the services of the two covering a period of twenty-nine years. Mr. Biddle resigned on account of impaired health in 1882. Owing to the great increase in administrative business the Board decided to separate the offices, and in 1882 Mr. Burk's classmate, the present Provost, seconded by another classmate, then Provost, nominated him to the newly separated office of Secretary, and he was elected in April of that year

to the office which he continues to hold, while still retaining the Rectorship of the parish in which his classmates "discovered" him. Wharton Barker was at the same time elected to the Treasurership. Mr. Burk is a member of the Phi Beta Kappa Society and the American Philosophical Society. He married Gertrude, daughter of James Evans Helé; and has three sons in the University and one a physician, all graduates of the University.

BOLLES, Albert S., 1845-

Professor Mercantile Law and Banking 1883-1887.

Born in Montville, Conn., 1845; educated especially for the law, and was admitted to the Bar in 1865; Judge of the Court of Probate for the District of Norwich, 1869-75; Editor of the *Norwich Bulletin*, 1875-1880; and of the *Bankers' Magazine*, 1880-1894; Professor of Mercantile Law and Banking at the Univ. of Pa., 1882-1887; Chief of the Bureau of Industrial Statistics in Harrisburg, Pa., 1887-1895; author of the *History of Pennsylvania*, and other works.

ALBERT S. BOLLES, Lawyer and Author, was born in Montville, Connecticut, March 8, 1845, son of Orlando and Ellen E. Bolles. After completing his general education he began the study of law, and was admitted to the Bar in 1865. He entered practice in partnership with John T. Wart, who was one of the leading lawyers of the State. Impelled as much by his own ability as by the prestige of his eminent partner, he rapidly rose in the profession, and at the age of twenty-four became a Judge of the Court of Probate for the District of Norwich, an office which he held until accepting the Editorship of the *Norwich Bulletin*, a daily newspaper, where he might devote his efforts more exclusively to economic questions in which he has always been deeply interested. His next charge was the *Bankers' Magazine*, a publication for which he had frequently written articles, and while in that editorial position he began to write a *Financial History of the United States*, besides contributing articles for the periodicals. Soon after Mr. Wharton endowed the School of Finance and Economy at the University of Pennsylvania the Chair of Mercantile Law and Banking was proffered to Mr. Bolles, and with a firm conviction of the value of such a department to the University, he entered into the work and remained in this position for nearly five years. Meanwhile there had appeared from his pen an *Industrial History of the United States*, also a shorter work entitled *The Conflict between Labor and Capital*, and through the influence of these and other writings he was asked in 1887 to accept an

appointment as Chief of the Bureau of Statistics in Harrisburg, Pennsylvania. In this position he continued for eight years, at the same time studying and writing upon his favorite topics. After a long period of industrious and patient work Mr. Bolles has recently published in many respects his most important work, the History of Pennsylvania, a story



ALBERT S. BOLLES

of colonial life which occupies a unique position on account of the varying character, nationality and faith of the people who have made the state's history.

EASTON, Morton William, 1841-

Professor English and Comparative Philology.

Born in Hartford, Conn., 1841; educated Hartford, Conn., Yale, Columbia and abroad; Professor of Ancient Languages and Comparative Philology at Univ. of Tenn.; appointed Instructor in French at Univ. of Pa., 1880; advanced to Adjunct Professorship of Greek; now Professor of English and Comparative Philology.

MORTON WILLIAM EASTON, Ph.D., was born in Hartford, Connecticut, August 18, 1841, son of Oliver Hastings and Emeline Maria (Brace) Easton. He is descended from Joseph Easton, one of the first settlers of Hartford, and from Stephen Brace, who arrived in that Colony about the year 1660. He attended the public

schools of Hartford graduating from the Classical Department of the High School in 1859, and took his Bachelor's degree at Yale in 1863. Entering the Medical Department of Columbia he was graduated a Doctor of Medicine in 1866. He then went abroad for further study and was for some time a student at the University of Vienna. Instead of adopting the profession of medicine he returned to Yale as a graduate student, taking special courses in Philology, Greek and Sanskrit, receiving the degree of Doctor of Philosophy in 1872. Soon after, he accepted the Chairs of Ancient Languages and, later, of Comparative Philology at the University of Tennessee where he remained until 1880, in which year he was called to the University of Pennsylvania as Instructor in French, was subsequently made Adjunct Professor of Greek and for some years has held the Professorship of English and Comparative Philology. On June 15, 1875, Dr. Easton married Maria Stillé Burton, of Philadelphia. They have had four children, and their first child, Edith Burton, who was born May 10, 1876, died October 3 of the same year. The others are: Burton Scott, born December 4, 1877; William Hastings, born February 22, 1881; and Ethel Stillé Easton, born April 23, 1883.

FULLERTON, George Stuart, 1859-

Professor Philosophy 1887- , Dean of Faculty 1889-

Born in Futtchghur, India, 1859; graduated University of Pennsylvania, 1879; student at Princeton Theological Seminary, 1879-80; Bachelor of Divinity, Yale, 1880-83; Instructor in Philosophy, University of Pennsylvania, 1883-85; Adjunct Professor, 1885-87; Professor since 1887; Dean of the Faculty of Philosophy, 1889-90; Dean of the College and Vice-Provost of the University, 1894-96; Vice-Provost of the University, 1896-98; author of philosophical works.

GEORGE STUART FULLERTON, A.M., Ph.D., was born in Futtchghur, India, August 18, 1859, the son of the Rev. Robert Stewart and Martha (White) Fullerton. His parents were for many years devoted laborers in the missionary field; and his father held a distinguished place in the Christian ministry. The son received his education in this country, and after a preparatory course of study he entered the University of Pennsylvania in 1875. His undergraduate course was not only creditable but brilliant, presenting in some respects a forecast of his later career and showing the early bent of his mind to philosophy and the higher intellectual research. In his Junior year he carried off the Philosophical prize and in the exercises attend-

ing the closing of his course he was chosen as the Class Poet. He was also a member of the Philomathean Society of the University of Pennsylvania. After graduation from the University, he studied divinity at Princeton and Yale, receiving the degree of Bachelor of Divinity from the latter University in 1883. In the same year he was called to fill the post of Instructor in Philosophy in the University of Pennsylvania and in 1885 was made Adjunct Professor in that branch. Holding this position for two years he was appointed, in 1887, Adam Seybert Professor of Intellectual and Moral Philosophy.



GEORGE STUART FULLERTON

He has filled this chair to the present time, and in addition has held the administrative positions of Dean of the Department of Philosophy, Dean of the College, and Vice-Provost of the University. These latter positions, he resigned, as indicated above, that he might have more leisure for scholarly work. Professor Fullerton is a deep and original thinker and has made valuable contributions to philosophy along the lines of independent research. His first literary effort was the treatise entitled *The Conception of the Infinite and the Solution of the Mathematical Antinomies; A Study in Psychological Analysis*. The boldness with which the problem of the absolute is treated in this work compels admiration of the intellect which produced

it. One distinguished authority had said of it: "A somewhat abstruse but important and well-defined problem is carefully examined in good historical light, and the conclusion is reached that, contrary to views more widely current, the Infinite is 'neither contradictory nor beyond the grasp of the human mind.' It is a work that every student of Kant should know, and it is a valuable contribution to an important topic." Among other noted works of Professor Fullerton may be mentioned, *A Plain Argument for God*; a treatise on *Sameness and Identity*; and two volumes on the *Spinozistic Philosophy*. He has been a frequent contributor to scientific and philosophical journals, writing upon psychological, philosophical and educational topics. His writings show not only a profound scholarship but a most active and undaunted originality of thought, together with a felicity of style which renders even the most abstruse topics fascinating in his treatment of them. Not only in the field of pure philosophy, but in the application of psychology to the explanation of other phenomena, Professor Fullerton has distinguished himself. His *Preliminary Report of the Seybert Commission on Spiritualism* is a notable contribution to the literature of that subject. He married (1) in Alexandria, Virginia, January 26, 1884, Rebekah Daingerfield Smith, who died May 5, 1892; and (2) in Philadelphia, March 8, 1897, Julia Winslow Dickerson.

JAMES, Edmund Janes, 1855-

Prof. Administration and Finance 1883-1895.

Born in Jacksonville, Ill., 1855; studied at Northwestern and Harvard Universities; graduated Univ. of Halle, Germany, with degrees A.M. and Ph.D. 1877; Prin. of High Schools in Illinois; Prof. Administration and Finance, Univ. of Pa., 1883-95; Prof. Public Administration and Director Univ. Extension work in the Univ. of Chicago since 1895; Founder and Pres. of Amer. Acad. of Polit. and Social Science Editor *Annals of the Amer. Acad.* 1890-95; author of works on political and economic subjects.

EDMUND JANES JAMES, Ph.D., was born in Jacksonville, Illinois, May 21, 1855. His father was a clergyman, Rev. Colin Dew James, and his mother Amanda Keziah (Casad) James. His grandfather, Dr. William B. James was born in Virginia in 1769. On his mother's side he is a descendant of Colonel Ephraim Martin, a revolutionary soldier who was wounded at Brandywine and spent the weary months at Valley Forge with Washington's army in the winter of 1777-1778.

Professor James' early education was received at the State Normal in Normal, Illinois, from which school he passed to the Northwestern University in Evanston, Illinois, afterward spending some time at Harvard. He did not, however, graduate, interrupting his course to go abroad. He took up the study of politics and economics at Halle in Germany, graduating there with the degrees of Master of Arts and Doctor of Philosophy in 1877. Returning to this country again he actively engaged in public school work. He was Principal of the Public High School at Evanston, Illinois, in 1878-1879 and



EDMUND J. JAMES

Principal of the Model High School in the Illinois Normal University from 1879 until 1882. From this post he moved directly to the University of Pennsylvania where he was appointed Professor of Public Finance and Administration in the Wharton School of Finance and Economy which had just been organized through the generosity of Joseph Wharton. Professor James at once became the chief spirit in directing the policy of this school. Through his indomitable energy and educational zeal it soon won a national and international reputation as the most advanced type, in this country, of a higher school for instruction in economics and politics. Students were attracted from all parts of the Union and the Faculty was rapidly increased in

size. Professor James was one of Provost Pepper's most trusted advisers while the latter remained at the head of the University, and he exerted an important influence in determining the general policy of the University, especially in the organization of the graduate schools. In 1889 Professor James with Professor Simon N. Patten and others organized the American Academy of Political and Social Science, Professor James being elected its President. This position he has held continuously ever since. He was the Editor-in-Chief from 1890 until 1895, of the *Annals*, a large bi-monthly review published by the Academy; since the latter date he has been Associate Editor. While at the University he began to issue Publications of the University of Pennsylvania Political Economy and Public Law Series of which he was the Editor. From 1891 to 1895 he was President of the American Society for the Extension of University Teaching, a form of educational work which Provost Pepper had been instrumental in organizing on English models in this country. The society drew to itself a large staff of lecturers and became the pioneer in University Extension work in the United States. In 1895 Professor James was called to the University of Chicago where he became Professor of Public Administration and Director of University Extension work. There he remains, being an active force in the management of Chicago University. Professor James is a Vice-President of the American Economic Association and Vice-President of the National Municipal League. He is the author of a thorough report on the subject of commercial education in Europe, which embodies the results of an investigation made under the authority of the American Bankers' Association in 1892. Other works are: *Our Legal Tender Decisions*; *The Constitution of Germany*; *The Constitution of Switzerland*, and more than one hundred papers, monographs and addresses on political and economic questions. As a teacher Professor James is forceful and impressive. He endears himself to all his students and while at the University of Pennsylvania made himself a force not likely to be forgotten by those who lived through that time. Through the Wharton School and the American Academy of Political and Social Science Professor James has exercised an important influence in shaping political thought in this country. He and his associates at the University of Pennsylvania in reality established a separate "school" of political opinion. The appeals which they made for a constructive policy in statesmanship and for

stronger government, concentrated in the hands of capable men, are now beginning to bring forth good fruit. Professor James' deep insight into political science and his judicial attitude in regard to public questions have constituted him a remarkable interpreter of political and social tendencies in America. His interest in municipal problems is particularly close and he has recently spent a considerable period abroad, making special researches in the subject of city government in other countries. Professor James was married in 1879 to Anna M. Lange. They have three children, two sons and one daughter.

BISPHAM, George Tucker, 1838-

Professor of Law 1884-

Born in Philadelphia, 1838; graduated Univ. of Pa., A.B., 1858; LL.B., 1862; admitted to Philadelphia Bar, 1861; for twenty years the law partner of Hon. Wayne MacVeagh; one of the solicitors of the Pa., R.R.; Prof. of Practice, Pleading and Evidence in the University, 1884-86; Prof. of Equity Jurisprudence since 1886.

GEORGE TUCKER BISPHAM, Lawyer, was born in Philadelphia, May 24, 1838, son of Joseph and Susan Ridgway (Tucker) Bispham. The Bisphams are an English family, George Tucker Bispham's great-grandfather, Joshua Bispham, having been a resident of Lancashire, England, the family seat, Bispham Hall, being situated near Wigan in that county. In this country, some of the Bisphams settled at Moorestown, New Jersey, and thence Joseph Bispham, George Tucker's father, a native of Moorestown, removed to Philadelphia and became a merchant. His death occurred in that city in 1852 when his son was but a lad. On the maternal side the Tuckers were also of English extraction. Ebenezer Tucker, George Tucker Bispham's grandfather, served in the Revolutionary War and was a member of Congress representing a New Jersey District during the administration of John Quincy Adams. George Tucker Bispham entered the Department of Arts of the University of Pennsylvania with the Sophomore class and graduated with the degree of Bachelor of Arts in 1858 at the head of his class, delivering as was then the custom the Greek Salutatory Oration at the Commencement exercises. In College he was a member of the Delta Psi Fraternity and of the Philomathean Society, being for a time Moderator of the latter. Studying law in the offices of Hon. John Cadwalader and William Henry Rawle, Mr. Bispham was ad-

mitted to the Bar in Philadelphia in 1861. He graduated from the Law Department of the University the next year, and at once engaged actively in the practice of his profession. He was admitted to practice in the Supreme Court of Pennsylvania in 1863, and in the Supreme Court of the United States in 1876. For twenty years, 1875-1895, Mr. Bispham was the law partner of Hon. Wayne MacVeagh, and his practice has brought him into association with many large enterprises. Since 1881 he has been Solicitor of the Philadelphia Saving Fund Society, and since 1886 has been one of the Solici-



GEO. TUCKER BISPHAM

tors of the Pennsylvania Railroad Company. He is counsel for the Girard Trust Company, the Pennsylvania Fire Insurance Company, the Westmoreland Coal Company and other large corporations. Mr. Bispham's connection with the Faculty of the Law Department of the University of Pennsylvania dates from the year 1884, when he was appointed Professor of Practice, Pleading and Evidence. In 1886 he was made Professor of Equity Jurisprudence and this position he continues to hold to this date. Mr. Bispham has been President and a Vice-Provost of the Law Academy, and for the past two years has served as Chancellor of the Law Association of Philadelphia. He declined a re-nomination in December 1899. He has never taken part in poli-

tical life. He is the author of *Principles of Equity*, a work first published in 1874 which is now in its sixth edition, and has at various times contributed to the legal reviews and magazines. He was married in 1872 to Nancy, daughter of E. L. Brinley of Philadelphia, and has two children: Katharine Johnstone, now the wife of Thomas McKean, and George Tucker Bispham, Jr. Mr. Bispham is a member of the Protestant Episcopal Church.

WHITE, James William, 1850-

Physical Director 1884-1888, Prof. Clinical Surgery 1887-1900, Prof. Surgery 1900-

Born in Philadelphia, 1850; graduated Med. Dept. Univ. of Pa., 1871; accompanied Prof. Louis Agassiz on an exploring expedition to So. America; Asst. to Dr. D. Hayes Agnew in the University for many years; Director of Physical Education, 1884-86; Prof. Clinical Surgery, 1887-1900; John Rhea Barton Prof. Surgery since 1900.

JAMES WILLIAM WHITE, M.D., Surgeon, was born in Philadelphia, November 2, 1850, son of James W. and Mary Anne (McClaranan) White. On his father's side he is descended from Henry White who settled in Virginia in the year 1649 and Richard Stockton who came from England to Flushing, Long Island, in 1650. On his mother's side he traces his ancestry from the Griswolds, Hunts, Dowse's and other leading families in Connecticut and Massachusetts. Dr. White's early education was received at public and private schools. Having determined upon a professional career he entered the Medical Department of the University of Pennsylvania from which he received the degree of Doctor of Medicine in 1871. For a time in his youth Dr. White was a member of a scientific and exploring expedition to South America and the Pacific Islands which was under the direction of Professor Louis Agassiz. Useful training for later professional life was secured at the Philadelphia Hospital where for a period he was Resident Physician; he also gained wide experience as the Assistant and associate of Dr. D. Hayes Agnew, one of the most skillful surgeons this country has ever produced. Dr. White's connection with the teaching staff of the University of Pennsylvania began at an early age. His first appointment was as Lecturer on Surgery and he has successively held the appointments of Demonstrator of Surgery, Professor of Genito-Urinary Surgery and Professor of Clinical Surgery, and in May 1900 was elected to the John Rhea Barton Professorship of Surgery.

His outside connections have been as Surgeon, first to the Philadelphia Hospital, then to the German Hospital and then to the University Hospital. Dr. White is prominently identified with a number of scientific bodies. He is a member of the American Association of Genito-Urinary Surgeons, having been for a time the President of the society. He is also a member of the American Surgical Association and the College of Physicians. Among the public positions which have been held by Dr. White are the following: Inspector of the Eastern Penitentiary in Philadelphia, member of the Board



J. WILLIAM WHITE

of Visitors to West Point and Surgeon to the First Troop of Philadelphia City Cavalry. His interest in athletics and physical education at the University has long endeared him to the students who regard him as a particular friend outside no less than inside the classroom. For a long time he was the Director of Physical Education at the University and he has been an active influence for many years in drawing the attention of the University authorities to the value of athletic training for young men. As an advocate of College games he has more than once figured very prominently before the public and his attendance on the athletic field on these occasions has done much to encourage legitimate forms of College sport. As a surgeon Dr. White enjoys

a very high reputation, being deft and certain in his touch, the marvel of the students who assemble to profit from his instruction at the clinics. He is looked upon as the successor to Dr. Agnew in Philadelphia in most forms of surgery. In 1888 Dr. White married Letitia, daughter of Benjamin H. Brown, Esq., of Philadelphia.

GOODSPEED, Arthur Willis, 1860-

Assist. Professor Physics 1889-

Born in Hopkinton, N. H., 1860; attended Boston Latin School; graduated Harvard, 1884; Assistant in Physics at Univ. of Pa., 1884-85; Instr. in Physics, 1885-89; Asst. Prof. since 1889; Ph.D. Univ. of Pa., 1889.

ARTHUR WILLIS GOODSPEED, Ph.D., of old New England ancestry, was born in Hopkinton, New Hampshire, August 8, 1860, son



ARTHUR W. GOODSPEED

of Obed and Helen Bruce (Morse) Goodspeed. Graduating from the Andrew Grammar School in South Boston in 1874 and from the Boston Latin School in 1880, where he received the Franklin Medal. He entered Harvard, and graduated with his Class in 1884, *summa cum laude* receiving "Highest Honors" in Physics and "Second Year Honors" in Mathematics. While still in College from 1882 to 1884, he was Tutor in Physics and

Mathematics for Dr. E. R. Humphreys in Boston. Upon graduation in the latter year he was called to the University of Pennsylvania as Assistant to Professor Barker who had then long occupied the Chair of Physics. In 1885 he was appointed Instructor in Physics, a position which he held for four years, being advanced in 1889 to the rank of Assistant Professor of Physics, a position which he still retains. In 1889 he completed the course at the University for the degree of Doctor of Philosophy, his major subject being Physics and his minors Mathematics and Chemistry. Dr. Goodspeed has made a number of valuable investigations in his own field of science and has especially distinguished himself in his researches concerning the Roentgen Rays with special reference to their practical application to surgery and medicine. He belongs to the Pi Eta Society of Harvard College and the Pennsylvania Chapter of the Society of Sigma Xi. Among the scientific bodies in which he holds membership are: the American Philosophical Society, the American Association for the Advancement of Science of which he is a fellow, the New Hampshire Antiquarian Society, the American Physical Society and the Roentgen Society of the United States. He was married in June 1896 to Annie Howe Bailey.

JAYNE, Horace, 1859-

Professor Zoology and Director Wistar Institute 1894-

Born in Philadelphia, 1859; graduated Univ. of Pa., 1879; and in Medicine, 1882; studied at Univ. of Leipzig, Germany, and at Johns Hopkins Univ., 1882-84; Asst. Instr. in Biology at the University, 1883; Prof. Vertebrate Morphology and Sec. of Faculty of Biology, 1884- ; Dean of College Faculty, 1889-1894; Dean of Faculty of Philosophy, 1892-1894; Prof. of Zoölogy, and Director of the Wistar Inst., since 1894; has published various scientific works; Ph.D. Franklin and Marshall College, Pa., 1893.

HORACE JAYNE, M.D., Ph.D., was born in Philadelphia, March 17, 1859, son of David and Hannah (Fort) Jayne. He graduated in Arts at the University of Pennsylvania in 1879 and in Medicine in 1882. While in College he was Vice-President of the Franklin Scientific Society and Junior Orator of his class, and upon graduation at the Medical School was the recipient of the highest honors of the class and of the Henry C. Lee prize for the best thesis in Medicine and of the Anomaly and Anatomical prizes offered by the Demonstrator of Anatomy equally with Howard A. Kelly of the Class of 1877. During the year

1882-1883 Professor Jayne was engaged in the study of Biology at the University of Leipzig, Germany, and then returning to America he was, for a short time in 1883, Assistant Instructor in Biology at the University, with leave of absence to pursue further study at Johns Hopkins University in Baltimore, Maryland. In 1884 he was elected to occupy the Professorship of Vertebrate Morphology, being also in that year made Secretary of the Faculty of Biology. From 1889 to 1894 he acted as Dean of the College Faculty and since 1894 he has been Professor of Zoölogy in the Faculty of Philosophy and Director of the Wistar Institute of Anatomy and Biology. Professor Jayne is a fellow of the College of Physicians of Philadelphia and of the American Association for the Advancement of Science, and a member of the American Philosophical Society, the Academy of Natural Sciences of Philadelphia, the Society of American Naturalists, the American Entomological Society, the Franklin Institute of Philadelphia and the Zeta Upsilon and Phi Beta Kappa fraternities. In addition to extensive literary work in various lines, including obituary notices, book reviews, etc., he has published a text book on Mammalian Anatomy, Monstrosities in North American Coleoptera, Revision of Dermestidae of North America, Notes on Biological Subjects, Reports of the Biological and College Departments and a Handbook of Information Concerning the School of Biology. The degree of Doctor of Philosophy was conferred upon him in 1893 by Franklin and Marshall College.

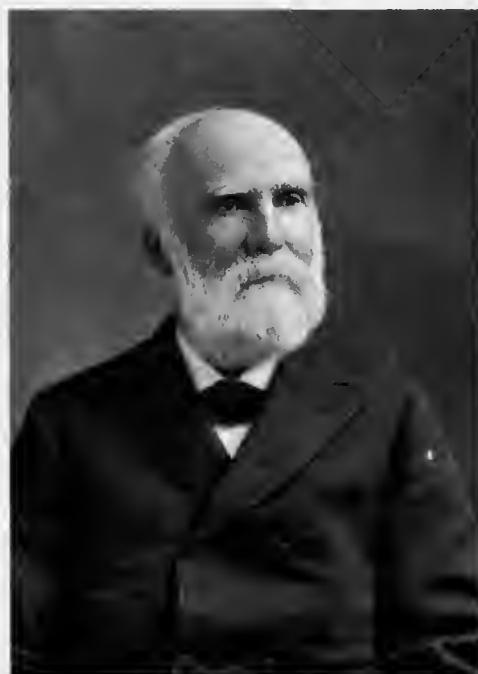
SCOTT, John, 1824-1896.

Trustee 1884-1896.

Born in Alexandria, Huntingdon Co., Pa., 1824; admitted to the Bar, 1846; practiced law in Huntingdon, 1846-75; Asst. Counsel Pa. R. R., 1857-69; U. S. Senator from Pa., 1869-75; in charge of the legal business of the Pa. lines west of Pittsburg, 1875-77; in charge legal dept. Pa. R. R., 1877-95; Trustee of the University, 1884-96; died 1896.

JOHNS SCOTT, United States Senator from Pennsylvania, was born in Alexandria, Huntingdon county, Pennsylvania, July 14, 1824. At fourteen he went to work, assisting his father, a tanner. In 1842 he entered as a student the law-office of Hon. Alexander Thomson, father of the late Frank Thomson, President of the Pennsylvania Railroad. Admitted to the Bar in 1846 he began practice at Huntingdon where he continued to reside until 1875. In 1857 he entered the service of the Penn-

sylvania Railroad Company as Associate Counsel with Cyrus L. Pershing, then Resident Counsel of the company. After this he became the company's special Counsel for the district comprising Cambria, Blair and Huntingdon counties, taking charge, also, of the questions arising out of the transfer of the canals and railroads of the state to the Pennsylvania Railroad Company. He served in this capacity until elected to the United States Senate in 1869 as a Republican to succeed Hon. Charles R. Buckalew. Before the war Mr. Scott had been a Democrat, but as a staunch Union man he remained in the Repub-



JOHN SCOTT

lican ranks after the war was over. At the close of his senatorial term in 1875, declining Grant's offers of the Secretaryship of the Interior, he re-entered the service of the Pennsylvania Railroad Company, and, removing from Huntingdon to Pittsburg, took charge of the legal business of the lines west of Pittsburg. He organized the legal department for those lines in 1875. Upon the resignation of William J. Howard in 1877 Mr. Scott was called to Philadelphia to take charge of the legal department of the Pennsylvania Railroad Company and its allied lines. In 1884 he became a Trustee of the University of Pennsylvania, holding the position until his death. In 1895 he resigned as general Solicitor, because of ill-health, but he was retained as General

Counsel. Mr. Scott, a life long active worker in the Presbyterian Church, was for many years a Trustee of Princeton Theological Seminary. He died November 29, 1896.

JASTROW, Morris, 1861-

Prof. of Semitic Lang. 1892- , Librarian 1898-

Born in Europe, 1861; graduated Univ. of Pa., 1881; pursued study of Language and Philosophy at Univs. of Breden, Berlin, Leipzig, Strasburg and Paris, 1881-85, and received Ph.D. Univ. of Leipzig, 1884; Lect. on Semitic Languages at the University, 1885-86; Prof. Arabic and Rabbinical Lit., 1886-; Prof. Semitic Languages since 1892; Asst. Librarian, 1889-98; Librarian since 1898; author of works on philological subjects.

MORRIS JASTROW, Ph.D., Professor of Semitic Languages and Librarian of the University, was born in Europe, August 13, 1861, son of Rabbi Marcus and Bertha (Wolffsohn) Jastrow. At the age of sixteen he entered the Academic Department of the University of Pennsylvania and graduated in 1881, receiving the degree of Bachelor of Arts in course. During the four years following graduation he pursued extensive studies in language and philosophy at European Universities including Breslau, Leipzig, Strasburg and Paris, in 1884 receiving the degree of Doctor of Philosophy from the University of Leipzig. Upon his return to America in 1885, he became Lecturer on Semitic Languages at the University, and in the following year was appointed Professor of Arabic and Rabbinical Literature, in which position he remained until appointed, in 1892, to his present place of Professor of Semitic Languages. Professor Jastrow was first connected with the University Library in 1889, when he was elected Assistant Librarian, and so notably valuable were his services that his promotion to the full charge of the Library in 1898 was but a natural step. He has published upwards of one hundred papers on Assyriological, Hebrew, Arabic and general Semitic topics among which may be mentioned as especially important: Jewish Grammarians, Assyrian and Samaritan; Ikonomatic Writing in Assyrian; earth dust and ashes as symbols of mourning among the Ancient Hebrews in the Journals of the American Oriental Society; the letters of Abdiheba; The Original Character of the Hebrew Sabbath; Adam and Eve in Babylonian Literature in the American Journal of Semitic Languages and the American Journal of Theology; A Fragment of the Etana Legend in the Beifrage zur Assyriologie and besides numerous papers in the

Zeitschrift für Assyriologie and in the Journal of the Society of Biblical Literature &c., &c. His larger publications include the Arabic Text of the Grammatical Treatises of Abu Zakariyyah Hayyug (Leiden 1897); A fragment of the Dibbarra Epic (Philadelphia 1891); and The Religion of Babylonia and Assyria (Boston 1898) of which a German translation will soon appear. He is the Editor of a Series of Handbooks on the History of Religions and also one of the Editors of the Jewish Encyclopaedia (now in course of publication) having in charge the Department of Biblical Archaeology and Hebrew



MORRIS JASTROW

History to the days of Ezra. In 1897 he was elected a member of the American Philosophical Society, and in 1899 appointed a United States government delegate to the Twelfth International Congress of Orientalists at Rome. In 1893 he married Nellie, daughter of H. F. and Rosina (Leberman) Bachman. In collaboration with his wife he published a volume of translations, of the Selected Essays of James Darmesteter (Boston 1895).

RENNERT, Hugo Albert, 1858-

Professor Romanic Languages and Literature 1892-

Born in Philadelphia, 1858; graduated B.S. Univ. of Pa., 1876; LL.B., 1881; A.M., gratiae causa, 1891; Ph.D. Univ. of Freiburg, Baden, Germany, 1892;

Instr. Modern Languages at the University, 1885-92; Prof. Romanic Languages and Lits. since 1892; author and Editor.

HUGO ALBERT RENNERT, Ph.D., was born in Philadelphia, May 6, 1858, son of John and Margarethe Marie (Jaeger) Rennert. His first degree, Bachelor of Science, was received at the University of Pennsylvania in 1876, and subsequently he graduated at the Law School, 1881, and in 1891 the degree Master of Arts was conferred *gratiae causa*. After advanced study in the University of Göttingen, Germany, and the *École des*



HUGO ALBERT RENNERT

Hautes-Études in Paris, he attended lectures at the University of Freiburg, Germany, where he received in 1892 the degree of Doctor of Philosophy. Though well equipped to follow the legal profession, he continued in practice but a short time, in 1885 accepting an appointment at the University as Instructor in Modern Languages, in which work he continued until 1892 with the exception of time spent in foreign study. In 1892 he was advanced to the Professorship of Romanic Languages and Literatures, and has since continued to occupy that position. Besides contributing various articles in relation to Spanish and Italian literature to *Modern Language Notes*, the *Zeitschrift für Romanische Philologie* and the *Revue Hispanique*, Professor Rennert has published :

The Spanish Pastoral Romances; *Lieder des Juan Rodriguez del Padron*; *Der Spanische Cancionero des Britischen Museums*; *Lope de Vega's comedia Sin Secreto no ay Amor*, edited from the autograph manuscript, with an Introduction and Notes; Some inedited poems of Fernan Perez de Guzman; *Guillen de Castro's comedia Ingratitud por Amore*; *Macias 'O Namorado,' a Galician Trobador*. Dr. Rennert was married in 1897 to Helen Ringgold Rasin, of Baltimore.

BRINTON, Daniel Garrison, 1837-1899.

Professor American Linguistics and Archæology 1886-1889.

Born in Chester Co., Pa., 1837; graduated Yale, 1858; M.D. Jefferson College, 1860; Surgeon U. S. A. during Civil War and Director Eleventh Army Corps; Lieut.-Col., 1865; Editor Philadelphia Medical and Surgical Reporter, 1867-87; Prof. Ethnology at Academy of Natural Science, 1884; Prof. American Linguistics and Archæology at Univ. of Pa., 1886-99; Editor and Publisher of Library of Aboriginal American Literature; author of many articles on scientific subjects; Pres. of Folk Lore Society and American Association for Advancement of Science; died 1899.

DANIEL GARRISON BRINTON, M.D., Sc. D., former Professor of American Linguistics and Archæology, was born in Thornbury, Chester County, Pennsylvania, May 13, 1837, the son of Lewis and Ann Carey (Garrison) Brinton. He graduated from Yale College in 1858, and then studied medicine at Jefferson Medical College in Philadelphia, receiving the degree of Doctor of Medicine in 1860. Dr. Brinton spent the next year in study in Paris and Heidelberg and returning to this country he enlisted as surgeon in the Volunteer Army of the United States. In November 1863 he was appointed Medical Director of the Eleventh Army Corps, and served during the remainder of the war as Superintendent of Hospitals, and was honorably discharged as brevet Lieutenant-Colonel. In 1867 he became Assistant Editor of the Philadelphia Medical and Surgical Reporter and Editor in 1874, which latter position he retained until 1887. He was appointed Professor of Ethnology at the Academy of Natural Sciences in Philadelphia in 1884, and in 1886 became Professor of American Linguistics and Archæology at the University of Pennsylvania. He discharged the duties of these two offices with unqualified success, his work in American Archæology in connection with the unrivalled museums of the University attracting attention from all quarters of the globe. In 1888 he organized the Archæological

Association of the University of Pennsylvania, which has done so much toward the collection and preservation of materials in archæology and to promoting the recent erection of the Free



DANIEL G. BRINTON

Museum of Science and Art. Dr. Brinton's contributions to the literature of science have been extensive. For years he was the Editor and publisher of the library of Aboriginal American literature, for which he was awarded a medal by the Société Américaine de France, the only instance in which it has been given to an American author. In 1859 he published the *Floridian Peninsula, its Literary History, Indian Tribes and Antiquities*, which is still the authority upon that subject. In 1885 he edited the first volume of the *Iconographic Encyclopedia*, and contributed to other volumes of the series. He has also contributed many papers to the *Proceedings of the American Philosophical Society*. Dr. Brinton was President of the Folk Lore Society, of the Numismatic Antiquarian Society of Philadelphia and of the American Association for the Advancement of Science. He was also a member of the Anthropological societies of Berlin and Vienna, the Ethnographical societies of Paris and Florence, the Royal Society of Antiquaries, Copenhagen, and the Royal Academy of History at Madrid. In 1899 Dr. Brinton presented to the

University of Pennsylvania his entire library relating to the aboriginal languages of North and South America, embracing over twenty-two hundred volumes. He was married September 28, 1865, to Sarah Tillson of Quincy, Illinois. He died at Atlantic City, New Jersey, July 31, 1899.

SIMS, John Clark, 1885-

Trustee 1885-

Born in Philadelphia, 1845; graduated A.B. Univ. of Pennsylvania, 1865; studied law, and entered practice in Philadelphia; Secretary Pa. R. R. Co.; Trustee of the University since 1885.

JOHN CLARK SIMS was born in Philadelphia, September 12, 1845, son of John Clark and Emeline Marion (Clark) Sims. As a candidate for the Arts' degree, he entered the Sophomore class at the University of Pennsylvania in 1862, and was graduated in 1865, taking the Master's degree in course. Subsequently studying law, he was admitted to the Bar in October 1868. On January 1, 1876, he entered the service of the Pennsylvania Railroad



J. C. SIMS

Company as Assistant Secretary, which position he held until March 23, 1881, when he was promoted to the Secretaryship. In April 1881 he was elected Secretary of the Junction Railroad Company; on

March 21, 1888, Secretary of the Philadelphia, Wilmington & Baltimore Railroad Company; and of the Philadelphia & Baltimore Central Railroad Company; and June 1, 1898, was appointed Superintendent of the Pennsylvania Railroad Employees' Saving Fund. In 1877 he married Grace Ledlie, daughter of Joseph Patterson, President of the Western National Bank. Since 1885 Mr. Sims has been a member of the Board of University Trustees, and for a number of years he was President and Director of the Athletic Association of the University of Pennsylvania, and is at present the representative of the Board of Trustees upon its University Athletic Committee. He has been for over a quarter of a century a member of the Society of the Cincinnati in the State of New Jersey, and is also a member of the Pennsylvania Society Sons of the Revolution, of the Society of Colonial Wars, of the Philomathean Society, the Phi Kappa Sigma Fraternity, and the Academy of Natural Sciences of Philadelphia. He is Accounting Warden of St. Paul's Episcopal Church, at Chestnut Hill; President of the Chestnut Hill Academy; a Manager of the University Hospital, the University Veterinary Hospital, the Girard Trust Company, the Guarantee Company of North America, and Vice-President of the United States Fireproof Wood Company.

HILPRECHT, Hermann Vollrat, 1859-

Professor Assyrian and Semitic Philology 1886.

Born in Anhalt, Germany, 1859; Ph.D., Univ. of Leipzig, 1883; Prof. Old Test. Theology, Univ. of Erlangen, 1885; Adjunct Prof. Assyrian and Comparative Semitic Philology, Univ. of Pa. since 1886; Curator of Babylonian Antiquities at the University; in charge of the University's Babylonian Expedition, 1898-; author.

HERMANN VOLLRAT HILPRECHT, Ph.D., LL.D., was born in Hoheneisleben, Anhalt, Germany, July 28, 1859. At the age of twenty-four he completed a course of study in Theology, Oriental Languages and Law in the University of Leipzig, receiving the degree Doctor of Philosophy. He was Adjunct Professor of Old Testament Theology in the University of Erlangen under appointment by the Bavarian government in 1885, and the following year came to the United States where he has continued to live. Since 1886 Dr. Hilprecht has been Professor of Assyrian and Comparative Semitic Philology at the University of Pennsylvania, having charge as Curator, of the Babylonian Antiquities.

In 1889 the University commenced its expeditions for investigating the ruins of the ancient Babylonian city of Nippur. The latest of these expeditions, sent out in the fall of 1898 with the object of exhuming the city walls and the four gates mentioned in the inscriptions, is under the personal control of Dr. Hilprecht. The work has proceeded with the most gratifying success, fairly establishing the University's claim to first rank in the Assyriological Departments of American Universities. At latest reports extensive excavations on the site of Nippur had been made, disclosing the features sought for,



HERMANN V. HILPRECHT

and twenty-one thousand tablets bearing cuneiform inscriptions. Dr. Hilprecht's excavations will be of notable value in establishing authentic history as far back as 4500 B.C., the previous date having been 3000 B.C. Before returning to the University Dr. Hilprecht will conduct investigations of the ruins of Nineveh and Cappadocia. His principal literary production is *Freibrief Nebukadnezars I.*, Leipzig, 1883; his bibliography includes also: *The Family and Civil Life of the Egyptians*; *The most Flourishing Period of Egyptian Literature*; *Egypt in the Time of Israel's Sojourn*; contributions to *Luthardt's Theologisches Literaturblatt*; and various writings in other periodicals of both this country and Germany.

DREXEL, Anthony J., 1826-1893.

Benefactor.

Born in Philadelphia, Pa., 1826; entered the banking house of Drexel & Co., 1839; founder of the Drexel Institute, 1891; died 1893.

ANTHONY J. DREXEL, Banker and Philanthropist, was born in Philadelphia in 1826, the son of Francis Martin Drexel, founder of the great banking house of Drexel & Co. In 1839, when but thirteen years old, Mr. Drexel began work for his father's firm, then but two years established. His history is the history of that firm. In 1850 the New York house of Drexel, Morgan & Co. was formed. In 1863 Francis Martin Drexel died, and was succeeded by his sons Anthony J. Drexel and Francis A. Drexel, under whose management the business still further expanded. The Paris house of Drexel, Harjes & Co. was established in 1867. Although Mr. Drexel was for years the head of the firm, the arbiter of its fortunes, he did not give up his time solely to business. Art and music were his relaxation and as he grew older philanthropic work absorbed much of his attention. To the University of Pennsylvania he was a benefactor, giving \$10,000 toward the erection of the Library building, but his chief interest was in the Drexel Institute, to which he gave \$1,500,000. This institution, designed to afford instruction in the practical arts of life at practically nominal rates, is situated at Thirty-second and Chestnut streets, Philadelphia. About \$500,000 was expended on the building of the Institute, while \$1,000,000 was set aside for its endowment. It was opened in 1891, with courses in the various departments of useful arts, in industrial, business and domestic training. The institution was but well under way when its founder died. Early in 1893 he went abroad for his health. The end came on June 30, at Carlsbad, Austria.

PENNYPACKER, Samuel Whitaker, 1843-

Trustee 1886-

Born in Phoenixville, Pa., 1843; early education in Saunders Inst., W. Philadelphia, and Grovemont Seminary, Phoenixville; graduated LL.B., Univ. of Pa., 1866; admitted to Bar of U. S. Supreme Court, 1889; Judge of Court of Common Pleas of Philadelphia since 1887; President Judge since 1896; Trustee of the University since 1886; author of works on law and history; LL.D. Franklin and Marshall College, Pa., 1887.

SAMUEL WHITAKER PENNYPACKER, LL.D., Lawyer and Judge, was born in Phoenixville, Pennsylvania, April 9, 1843, son of Dr. Isaac Anderson Pennypacker, who graduated in

Medicine at the University of Pennsylvania in 1835, and was Professor of the Theory and Practice of Medicine in the Philadelphia College of Medicine from 1854 until his death in February 1856. His mother was Anna Maria (Whitaker) Pennypacker. The descent is traced to Hendrick Pannebecker, an educated Dutch surveyor in the employ of the Penns, the owner of four thousand and twelve acres of land in Pennsylvania, and to Samuel Richardson, an early settler of Philadelphia, who became a Provincial Councillor, a member of the Assembly and a Judge of the Court of Common Pleas. Samuel Richard-



SAMUEL W. PENNYPACKER

son's son, Joseph, married a daughter of John Bevan, also a prominent Judge of Pennsylvania, and thus brought to the family a direct descent, in the male line, from the ancient Princes or Lords of Glamorgan, whose lineage traces back through many generations to the old Cymric Kings of Britain. He is also a descendant of Major Patrick Anderson who commanded a company in the French and Indian War and the Pennsylvania Musketry Battalion in the War of the Revolution. Judge Pennypacker received early education at the famous Saunders Institute in West Philadelphia and at the Grovemont Seminary in Phoenixville, and commenced law study in the office of Hon. Peter McCall of Philadelphia. He graduated from the Law Department of the Univer-

sity of Pennsylvania in 1866, and entering the Bar at Philadelphia he rapidly rose to a conspicuous position in his profession. He was admitted to the Bar of the United States Supreme Court in 1887, and in 1889 by appointment of the Governor of Pennsylvania he became Judge of the Court of Common Pleas of Philadelphia. The same year he was elected for a term of ten years and in 1896 became President Judge, which office he now holds by a subsequent re-election for ten years dating from January 1900. Judge Pennypacker has always retained an enthusiastic interest in the University, and in 1886 he was appointed to his present position on the Board of Trustees. With all the duties of a very active career he has found time for considerable writing on legal and historical subjects, having produced more than fifty publications, including books, papers and addresses. He is author of a Digest of English Common Law Reports, conjointly with E. Greenough Platt and Samuel S. Hollingsworth; a volume of Pennsylvania Colonial Cases; four volumes of Supreme Court Reports, known as Pennypacker's Reports, and among other historical writings the "Settlement of Germantown." Among many marks of honor he received the degree of Doctor of Laws from Franklin and Marshall College in 1887, and the official thanks of Prince Bismarck after his address in Philadelphia in 1883, and at the Bi-Centennial Celebration of the beginning of German emigration to America. He is a member of the American Philosophical Society, President of the Historical Society of Pennsylvania, Vice-Provost of the Law Academy of Philadelphia of which he was President, President of the Philobiblon Club, founder of the Pennsylvania Society of Sons of the Revolution, Vice-President of the Colonial Society of Philadelphia and has been President of the Pennsylvania German Society and of the Netherlands Society of Philadelphia. From 1886 to 1889 he was a member of the Philadelphia Board of Public education. In 1863 he was a private in Company F of the 26th Pennsylvania Emergency Regiment which was the first force to encounter the rebel army at Gettysburg and which has a monument upon that memorable field. He has a library of Americana in some respects unequalled numbering about eight thousand volumes and including two hundred and sixty books and pamphlets printed by Franklin, with the exception of that of the Historical Society of Pennsylvania, the largest collection in existence. Judge Pennypacker married October 20, 1870, Virginia Earl Broomall daughter of Nathan B. Broomall.

PETERS, John Punnett, 1852-

Professor of Hebrew 1885-1893.

Born in New York City, 1852; A.B. Yale, 1873; Ph.D., 1876; studied in German Universities; Prof. of Hebrew in Univ. of Pa., 1885-93; Director of the University's Expedition to Babylonia, 1888-91; author of translations and writings on scriptural subjects; Rector St. Michael's Church, New York City, since 1893.

JOHAN PUNNETT PETERS, Ph.D., Director of the University's Expedition to Babylonia, was born in New York City, December 16, 1852, son



JOHN P. PETERS

of Rev. Thomas McClure and Alice Clarissa (Richmond) Peters. The Peters family settled very early in this country in the middle of the seventeenth century and the first American ancestor, Andrew Peters, was the first Treasurer of the town of Andover, Massachusetts. After some preliminary training and a year at the Hopkins Grammar School in New Haven, Connecticut, Dr. Peters entered Yale where he was graduated with the degree of Bachelor of Arts in 1873. Desiring to continue his studies with a special view of becoming proficient in Sanscrit, Greek, Hebrew, Syriac and Arabic, he took the post-graduate courses at Yale, at the same time studying in the Divinity School. During this period he supported himself entirely, tutoring privately and otherwise exerting himself to

make his way through the University. In 1876 he received the degree of Doctor of Philosophy, and soon after was ordained a Deacon and a little later a Priest in the Protestant Episcopal Church. From 1876 to 1879 he was a Tutor in Greek and Latin in Yale. By this time he was able to gratify his desire to continue his studies abroad, having saved enough to go to Europe in order to spend a few years in the German Universities. From 1879 to 1881 he studied Semitic languages in the University of Berlin. Subsequently for a year or two he was Minister in Charge of St. John's Church in Dresden, and in 1882-1883 returned to University work at Leipzig. In the latter year he came back to America and received an appointment as Assistant in St. Michael's Church, New York City, where he remained for but one year, having received in 1884 the appointment as Professor of Old Testament Languages and Literature in the Protestant Episcopal Divinity School in Philadelphia. He retained this connection until 1891. In 1885 he was made Professor of Hebrew in the University of Pennsylvania. His connection with the University continued until 1893. Dr. Peters' most notable achievement while in Philadelphia was the organization of the University of Pennsylvania Expedition to Babylonia, of which he was the first director, from 1888 to 1891. This expedition has been particularly remarkable for its discovery of the most ancient writings yet discovered anywhere. It was peculiarly fortunate also in the number of the objects discovered, many of which were secured for the University, and are among the treasures of the new museum. In 1893 he was called to St. Michael's Church in New York City to become Rector, a position which he has held ever since. Dr. Peters is a member of the Deutsche Morgenlaendische Gesellschaft, a noted German Oriental society. He is also a member of the American Oriental Society, the Society of Biblical Literature and Exegesis, the American Archæological Institute and the Oriental clubs of Philadelphia and New York, as well as a number of social, literary and reform clubs in New York City and other cities. Dr. Peters has actively allied himself with the interests that are engaged in trying to effect the reform of municipal politics in New York City. His translations and writings are numerous. In 1883 he published a translation from the German of Mueller's Political History of Recent Times. In 1886, in collaboration with the Rev. E. T. Bartlett, D.D., he commenced the publication of a translation and rearrangement of the Scriptures in three

volumes under the title Scriptures, Hebrew and Christian. Dr. Peters' part in this work was a new translation from the Hebrew of the principal portions of the Old Testament, which occupies two of the three volumes. In 1898 this work was published in an English Edition as The Bible for Home and School, with an introduction by Dean Farrar. In 1896 appeared his large, illustrated work, Nippur, or Explorations and Adventures on the Euphrates, an account of the University Expedition to Babylonia, and its discoveries. He appears as one of the collaborators on the title page of The Bible as Literature, along with Professors Moulton and Bruce. He is also the author of several pamphlets, and has contributed numerous reviews and articles to the magazines and periodicals. Dr. Peters was married, in August 1881, to Gabriella Brooke Forman, and they have had seven children, of whom six are living.

POTTS, Joseph D., 1829-1893.

Trustee 1886-1893.

Born in Springton Forge, Chester Co., Pa., 1829; civil engineer on various railroads in Pa., 1852-61; Chief of the Transportation and Telegraph Dept. of Pa., 1861; Gen. Mgr. Philadelphia and Erie Railway, 1862-65; Pres. Empire Transportation Co., 1865-77; Pres. Erie and Western Transportation Co., 1871-81; Trustee of the University, 1886-1893; died 1893.

JOSEPH D. POTTS was born at Springton Forge, Chester county, Pennsylvania, December 4, 1829, the son of David and Rebecca S. (Speakman) Potts. He was a descendant in the sixth generation of the Thomas Potts who was the pioneer iron-master in the Schuylkill Valley. He drifted away from the occupation of his ancestors and became a civil engineer. In 1852 he became connected with the Sunbury & Erie line. Subsequently he was made Vice-President of the Steubenville & Indiana Railroad; Superintendent of the western division of the Pennsylvania Railroad, and President of the Western Transportation Company. Upon the breaking out of the Civil War Governor Curtin appointed him Lieutenant-Colonel upon his active staff and Chief of the Transportation and Telegraph Department of the State. He held this latter position from May to December 1861, when the Department was transferred by the State to the Federal Government. While serving in 1862 with the Pennsylvania militia, called out in consequence of Lec's Antietam expedition, he was detailed by General Reynolds as Military Superintendent of the Franklin Railroad. From late in 1862 to 1865 he

served as General Manager of the Philadelphia and Erie Railway for its lessee, the Pennsylvania Railroad Company. He was President of the Empire Transportation Company, 1865-1877. On February 20, 1871, he also became President of the Erie and Western Transportation Company, holding the office until 1881. In 1874 Colonel Potts became Managing Director of the National Storage Company, and in 1879 President of the National Docks Railway Company, resigning both offices in 1884. He was also President of the Enterprise Transit Company. For some years prior to 1885 he was



JOSEPH D. POTTS

President of the Girard Point Storage Company and he remained a director after giving up the Presidency. He was also a director of the International Navigation Company. He had an interest in Potts Brothers Iron Company, Limited, of Pottstown, and he bought back the Isabella Furnace in Chester county, which had belonged to his father. In 1890 he purchased the Chester Pipe & Tube Works. In 1886 he became a Trustee of the University of Pennsylvania holding the position until his death. In 1854 he married Mary McCleery, of Milton, Pennsylvania. Mr. Potts will long be remembered as a leader in the railway, transportation, and general commercial interests of Pennsylvania. He died December 3, 1893.

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RYDER, John Adam, 1852-1895.

Professor Comparative Embryology 1886-1895.

Born in Loudon, Pa., 1852; early study at the Academy and Normal School, Millersville, Pa.; studied at Academy of Nat. Sciences, Philadelphia, 1874-80; made investigations for U. S. Fish Comms'n., 1880-86; Prof. Comp. Embryology, Univ. of Pa., 1886-95; Ph.D. Univ. of Pa., 1886; died 1895.

JOHAN ADAM RYDER, Ph.D., was born near Loudon, Franklin county, Pennsylvania, February 29, 1852, son of Benjamin Longenecker and Anna (Frick) Ryder. The progenitor of the American family of Ryders came from England with three sons, settling in the vicinity of Cape Cod, Massachusetts; one of those sons, Michael Ryder, removed from Massachusetts to Pennsylvania, and his descendants have since lived in the latter State. The paternal grandmother, Elizabeth (Longenecker) Ryder, was of German descent. On the maternal side Dr. Ryder was descended from Swiss and Scotch lines of ancestry, his mother having been a great grandchild of William, Earl of Kelso, who at the time of the persecution of the Presbyterians, under the reign of Charles II., was compelled to escape from Scotland. Soon after, James, a brother of William, was captured and executed in London. Dr. Ryder's father was a farmer and horticulturist, at one time owning a large nursery, and it was in the midst of agricultural scenes and pursuits that the future biologist developed the first taste for Natural History. Until the age of fifteen he attended the country schools in the neighborhood, and then studied at two institutions in Millersville—the Academy and the Normal School. He appears to have chafed under the routine of class work and the necessity of pursuing studies in which he had but slight interest, for he twice ran away to escape the restraint of school, and at a more mature age he insisted upon spending his time in scientific studies, followed according to his own taste in the available libraries. For three years he was a successful teacher in the schools of his native county. In his twenty-second year, determined to devote his life to scientific work, he made application, at the Academy of Natural Sciences of Philadelphia, for aid from the Jessup Fund, which had been established for the benefit of students of Natural History. After one unsuccessful attempt his application was finally granted, and from 1874 he remained for six years at the Academy. It is told of him that during this life at the Academy he was accustomed to examine the oyster shells at his restaurant, and that in this way he discovered the

sponge *Camaraphysema*. His work was pursued under serious difficulties, especially the inadequacy of his early education and the constant embarrassment from a lack of money; but his energy was unremitting and his capacity for working out original discoveries unflinching. At the end of the term of six years he had contributed thirty-one papers, based upon his research work in Biology and Botany. In 1880 Dr. Ryder was appointed to a position on the United States Fish Commission, to make investigations relative to the embryology, growth and feeding habits of the American food-fishes and other aquatic animals. Six years of great activity and valuable service followed, during which time Dr. Ryder produced twenty-nine papers on the oyster and oyster-culture, and fifty on the development of fishes, all displaying extensive knowledge resulting from the most careful study of the subjects under investigation. His resignation was accepted in 1886, but two years later he was again in the employ of the Commission, investigating the sturgeon fisheries in the Delaware River. In 1886 the authorities of the University, acting under the advice of Professor Horace Jayne, decided to establish a Chair of Comparative Histology and Embryology, and Dr. Ryder was chosen to fill this important Professorship. His valuable service to the University was all that might be expected of a man who was at once a diligent student, a singularly inventive investigator and an unselfish teacher. Mr. H. F. Moore, a former pupil, says of him: "What he may have lacked in some of the usual attributes of a successful teacher was more than compensated for by his keen sympathy, his painstaking care and his skill with crayon and pencil. If he had found a point of interest in his work, he usually invited us to enter, and would unfold to us his hopes and aspirations with the enthusiasm and simplicity of youth." The following are the words of his friend Mr. W. V. McKean: "Ryder was essentially the kind of investigator that it would have been a public benefit to have established in an amply endowed University chair, so that he might be entirely free to pursue his researches unhindered by any mere task work." Dr. Ryder continued as Professor of Embryology until his death which occurred March 26, 1895. He was a member of the Academy of Natural Sciences of Philadelphia, the American Philosophical Society, the Zoological Society of Philadelphia, the American Morphological Society, the American Society of Naturalists, the American Association for the Advancement of Science, the

Association of American Anatomists and the Historical Society of Pennsylvania. The degree Doctor of Philosophy was conferred upon him by the University in 1886. A complete bibliography of Dr. Ryder's writings is to be found in the Proceedings of the Academy of Natural Sciences of Philadelphia for April 1896.

REED, Henry, 1846-1896.

Trustee 1886-1896.

Born in Philadelphia, 1846; graduated Univ. of Pa., 1865; admitted to Philadelphia Bar, 1869; published Statute of Frauds, 1883; Judge Philadelphia Court of Common Pleas, 1886-96; Trustee of the University, 1886-96; died 1896.

HENRY REED, Jurist, was born in Philadelphia, September 22, 1846, the son of Henry and Elizabeth W. (Bronson) Reed. His



HENRY REED

father was Professor Henry Reed of the University of Pennsylvania. Judge Reed prepared for College under his father and at the school of Dr. J. W. Faires, entering the University of Pennsylvania in 1861 and graduating with high honors in 1865. He then began the study of law in the office of E. Spencer Miller and was admitted to practice in 1869. He acquired in the profession the reputation of being a careful lawyer and a man of high literary tastes and attainments. In 1883 he pub-

lished a valuable three volume work on the Statute of Frauds. It at once gained the place of, and still remains, an accepted text-book of criminal law. Judge Reed's publications were not only legal. He translated *The Daughter of an Egyptian King* by Georg Ebers. On November 12, 1886, Governor Pattison appointed him to fill the vacancy caused by the death of Judge Ludlow in the Philadelphia Court of Common Pleas No. 3. In this same year he became a Trustee of the University and retained the position until his death. In 1888 on the expiration of the term he was appointed to fill out he was elected Judge of the Court of Common Pleas No. 3. This position he occupied at his death. Judge Reed was twice married. His first wife was Charlotte Francis Foster and his second Sarita Elizabeth Bond. He died February 23, 1896, in New York City.

BIDDLE, Algernon Sydney, 1847-1891.

Prof. Law and Secretary Law Faculty 1887-1891.

Born in Philadelphia, 1847; graduated Yale, 1868; lawyer; Pres. Law Acad.; Prof. Law, Univ. of Pa., 1887-91, and Sec. of Faculty of Law; editor of various legal journals; died 1891.

ALGERNON SYDNEY BIDDLE was born in Philadelphia, October 11, 1847, the son of George W. and Maria (McMurtrie) Biddle. He came of a family distinguished in the legal history of the city, his father being the leader of the Philadelphia Bar and his brothers George and Arthur being also well-known lawyers. Algernon Sydney Biddle graduated at Yale in 1868, and then spent several years in attendance at lectures at the University of Berlin, preparatory to his studying law in Philadelphia, where he was admitted to the Bar in 1872. In 1874 he became President of the Law Academy and was for several years Secretary of the Law Association of Philadelphia. In 1887 he was appointed Professor of Evidence of Practice and Pleading at Law in the University of Pennsylvania and at the time of his death was Professor of the Law of Torts, Evidence and Practice of Law and Secretary of the Law Faculty of the University. He was also for a number of years Associate Editor of the *Weekly Notes of Cases*, for one year Associate Editor of *The Law and Equity Reporter*, and in 1887-1888 was one of the editors of *The American Law Register*. In addition to the duties of his profession he was at all times interested in humanitarian and other societies, being a member of the American Philosophical Society, the Historical Society of

Pennsylvania, the Philadelphia Social Science Association, the Franklin Institute, the New England Society, the Archæological Society, the Civil Service Reform Association, and the Rittenhouse, University, Wistar, Contemporary and Legal clubs. He was also a manager of the Deaf and Dumb Asylum. He died in Philadelphia April 8, 1891.

BIDDLE, George W., 1818-97.

Founder of Biddle Law Library.

Born in Philadelphia, 1818; graduated Mt. St. Mary's College; lawyer; Common Councilman of Philadelphia; member Constitutional Convention of 1873; Represented U. S. in the Fishery Dispute with Canada; author of many articles on legal subjects; founder of the Biddle Law Library of Univ. of Pa.; died 1897.

GEORGE W. BIDDLE, LL.D., for twenty years the leader of the Philadelphia Bar, was born in Philadelphia, January 11, 1818, the son of



GEORGE W. BIDDLE

Clement Cornell and Mary (Barclay) Biddle. He was educated at Mount St. Mary's College, Maryland, and subsequently studied law in the offices of his uncle, James C. Biddle, and of the Hon. John Cadwalader, being admitted to the Philadelphia Bar January 10, 1839. At once he began that career of successful effort which gradually bore its fruit in the general acknowledgment of his leadership

in the Philadelphia Bar. At different times Mr. Biddle held the offices of School Director, Common Councilman and Trustee of the Gas Works of Philadelphia. He represented the First Senatorial District in the Convention of 1873 to revise and amend the Constitution of the State of Pennsylvania. He afterward represented the Constitutional Convention when the question of their right to submit that instrument to the people was called in question, and was successful in defending that right. Among other famous cases in which he appeared was that in which he represented the Democratic party in the contest in Florida over the vote of that state in the Hayes-Tilden Presidential Controversy of 1876. He also represented the United States in one of the fishery disputes between this country and Canada. Mr. Biddle was a member of the American Bar Association and among the papers read by him before that and other learned bodies are: An Inquiry into the Proper Mode of Trial; Lien of the Debts of a Decedent on his Real Estate in Pennsylvania; Retrospective Legislation; Contribution among Terre-Tenants, and Chief-Justice Taney, his Relations to and Influence on the Federal Constitution. He also prepared an Index to the English Common Law Reports. Mr. Biddle married Maria McMurtrie and had three children: George, Algernon Sydney and Arthur Biddle. Upon the death of the two former Mr. Biddle gave to the University of Pennsylvania, as a memorial to them over five thousand volumes, to form the nucleus of a Law Library, to be known as the George and Algernon Sydney Biddle Library. When Arthur Biddle died in 1897, his widow added to this collection about four thousand volumes and the entire library is now known as the Biddle Law Library, and is located on the second floor of the new Law Building of the University. George W. Biddle died in Philadelphia, April 29, 1897.

REICHERT, Edward Tyson, 1855-

Professor Physiology 1886-

Born in Philadelphia, 1855; educated at public and private schools; graduated, M.D., Univ. of Pa., 1879; Prof. Physiology, Univ. of Pa. since 1886; author of many memoirs and other medical and scientific works.

EDWARD TYSON REICHERT, M.D., was born in Philadelphia, February 5, 1855. He is of German ancestry on the side of his father, Gabriel Adam Reichert, a manufacturer and a naturalist. Professor Reichert's grandfather was a

Lutheran minister of considerable prominence in the Church. Professor Reichert received his early training in public and private schools in Philadelphia, and entering the Medical Department of the University of Pennsylvania, he won the degree of Doctor of Medicine in 1879. He then went abroad further to pursue his studies and researches, being engaged for several years at the Universities in Berlin, Leipzig, Geneva and other centres of medical learning in Europe. In fact, the entire period between the time of his graduation in 1879 and the present has been spent in original investigation and



EDWARD TYSON REICHERT

teaching in chosen fields of work in this country and Europe. Professor Reichert is a prolific and industrious writer on medical subjects, having published many memoirs, books, pamphlets and original articles, and is a member of a great number of medical, scientific, art and other societies of this and foreign countries. June 7, 1883, he married Marion Carlisle Welsh, by whom he has had three children.

DAVIS, Gwilym George, 1857-

Asst. Dem. Surgery 1887-99, Asst. Prof. Applied Anatomy 1899-

Born in Altoona, Pa., 1857; graduated in medicine Univ. of Pa., 1879; graduated in England and Germany; Surgeon to a number of Philadelphia hospitals;

Asst. Demonstrator of Surgery at the University, 1887-89; Asst. Prof. of Applied Anatomy since 1899.

GWILYM GEORGE DAVIS, M.D., was born in Altoona, Pennsylvania, July 20, 1857, son of Thomas Rees and Catherine (Fosselman) Davis, being descended on his father's side from a Welsh family a prominent member of which was the poet and divine of Castle Howell, Rev. David Davis, D.D., who in the last century made that place a centre of scholarship in Wales. On his mother's side Dr. Davis is of Pennsylvania Dutch ancestry. His early education was received at the



GWILYM G. DAVIS

Philadelphia public schools, including graduation from the Central High School in that city in 1876. He afterwards pursued a medical course in the University of Pennsylvania where he was graduated with honors as Doctor of Medicine in 1879. Subsequently he went abroad and studied in London receiving the Membership of the Royal College of Surgeons of England in 1880 and at the University of Göttingen in Germany receiving the degree of Doctor of Medicine *cum laude* in 1881. Returning to the United States he was Resident Physician to the Pennsylvania Hospital from May 1881 to October 1882. The next year he became Assistant Surgeon to the Orthopaedic Hospital in Philadelphia and in 1884 was Out-Patient Surgeon at the Episco-

pal Hospital. From 1887 to 1896 Dr. Davis was connected with the Children's Hospital in Philadelphia. In 1889 he was appointed Surgeon at St. Joseph's Hospital and from 1892 to 1896 he was Surgeon to the German Hospital. He has been Assistant Professor of Applied Anatomy in the University since 1899, having previously been for twelve years Assistant Demonstrator of Surgery. Dr. Davis was a member of a number of medical associations including the American Medical Association and the Philadelphia County Medical, Pathological and Pediatric societies. He is a fellow of the American Academy of Medicine, the College of Physicians of Philadelphia, the Philadelphia Academy of Surgery, and a member of the American Orthopaedic Association. Dr. Davis received the degree of Master of Arts from the Philadelphia High School in 1881. He is a member of the University, Art and Faculty clubs of Philadelphia.

KEEN, Gregory Bernard, 1844-

Librarian 1887-1897.

Born in Philadelphia, 1844; graduated Univ. of Pa., 1861; graduated Div. Sch. of P. E. Church, Philadelphia, 1866; P. E. Clergyman, 1866-68; Prof. Math. Theol. Sem. St. Charles Borromeo, Overbrook, Pa., 1871-72; Librarian of the University, 1887-98; Librarian of the Historical Society of Pennsylvania, 1898-; author and Editor.

GREGORY BERNARD KEEN was born in Philadelphia, March 3, 1844, son of Joseph Swift and Lucy Ann (Hutton) Keen. He entered the University of Pennsylvania in 1857, received the Freshman Greek prize equally with Edward J. Heyl, the Sophomore Greek and Junior Latin prizes and honorable mention for the Junior Greek prize, and graduated, Valedictorian, with the Class of 1861, receiving the Master of Arts degree in course. In preparation for the ministry he entered the Divinity School of the Protestant Episcopal Church of Philadelphia, and graduating there in 1866, was ordained Deacon in that church. In 1868 he resigned that office and became a Roman Catholic. In 1869-1870 he studied and travelled in Europe, and, returning to Philadelphia, attended lectures in the Medical Department of the University during 1870-1871. In 1871-1872 he was Professor of Mathematics in the Theological Seminary of St. Charles Borromeo at Overbrook, Pennsylvania. For several years he devoted himself to the study of Greek literature, and in 1880 was elected Corresponding Secretary of the Historical Society of Pennsylvania, which office he held till 1898. In 1887 he was chosen Librarian of the

University of Pennsylvania and occupied that office till 1898, when he resigned to become Librarian of the Historical Society of Pennsylvania, of which he was Editor in 1883-1884. He is Historiographer of



GREGORY B. KEEN

the Alumni Society of the College Department, and a member of the American Philosophical Society, the American Catholic Historical Society, the Society of Colonial Wars, the Pennsylvania Society of the Sons of the Revolution, the Society of the War of 1812, the Philomathean Society and the Phi Beta Kappa Fraternity. He married Stella Maria, daughter of John Marshall Watson, of New York.

WHITAKER, Ozi William, 1830-

Trustee 1887-

Born in New Salem, Mass., 1830; graduated Middlebury College, Vt., 1856; Prin. High School, North Brookfield, Mass., 1856-60; graduated Gen. Theol. Sem., New York City, 1863; Rector St. John's Church, Gold Hill, Nevada, 1863-65; St. Paul's, Englewood, N. J., 1865-67; St. Paul's, Virginia City, Nevada, 1867; Missionary Bishop of Nevada, 1869-87; Bishop of Pennsylvania since 1887; Trustee of the University since 1887; D.D. Kenyon College, Ohio, 1869; LL.D. Univ. of Pa., 1898.

OZI WILLIAM WHITAKER, D.D., LL.D., Bishop of Pennsylvania, was born in New Salem, Massachusetts, May 10, 1830. He was two years in Amherst College but was graduated from

Middlebury College, Middlebury, Vermont, in 1850, and during the four years following he held the position of Principal of the High School of North Brookfield, Massachusetts. He then entered the General Theological Seminary in New York City, and after graduation in 1863 he was admitted to the Diaconate in Grace Church, Boston, Massachusetts, July 15, and ordained Priest in St. Stephen's Chapel of that city, August 7, of the same year. He was first settled as Missionary in charge of St. John's Church, Gold Hill, Nevada, and in 1865 he was called to St. Paul's Church in Englewood, New Jersey. After two years he returned to Nevada to become Rector of St. Paul's Church in Virginia City of that state. At the General Convention held in New York City in 1868 he was elected Missionary Bishop of Nevada, and the following year, October 13, he was consecrated in St. George's Church, New York City. Elected Assistant Bishop of Pennsylvania and translated in 1886, upon the death of Bishop Stevens, June 11, 1887, he became Bishop of Pennsylvania. Bishop Whitaker was given the degree of Doctor of Divinity by Kenyon College in 1869, and that of Doctor of Laws by the University



O. W. WHITAKER.

of Pennsylvania in 1898. Since 1887 he has served the University as a member of the Board of Trustees. He is now Chairman of the Standing Committee on Religious Services.

GEST, John Barnard, 1823-

Trustee 1887-

Born in Philadelphia, 1823; graduated Univ. of Pa., 1844; LL.B., 1852; practicing lawyer; Vice.-Pres. and Pres. Fidelity Insurance Trust & Safe Deposit Co., since 1873; Trustee of the University since 1887.

JOHAN BARNARD GEST, Lawyer, was born in Philadelphia, November 4, 1823, son of John and Ann (Barnard) Gest. He graduated, Bachelor of Arts, at the University of Pennsylvania in 1844, taking the Master's degree in course. He read law with Charles Ingersoll and was admitted to practice



JOHN B. GEST

in 1847 and afterwards entered the Law School and there graduated in 1852, establishing a practice in Philadelphia. Mr. Gest was Chairman of Committees in 1848, 1870 and 1880, appointed from the Alumni Society of the College Department to compile an Alumni Catalogue. He has been on the Board of Trustees of the University since 1887. He was engaged actively in the practice of his profession and in business enterprises, until 1873 when he became Vice-President and in 1890 President of the Fidelity Insurance Trust & Safe Deposit Company. He is a Director of the Mortgage Trust Company of Pennsylvania. From 1884 to 1892 he was President of the Alumni Society of the College Department. He has been a Corporator and Trus-

tee of the Presbyterian Hospital, President of the Union Benevolent Association, and is a member of the Historical Society of Pennsylvania, the Zelosophic Society and Phi Beta Kappa Fraternity. Mr. Gest in 1852 married Elizabeth Ann, daughter of Alexander Purves. They have three sons all of whom have been educated in the University of Pennsylvania.

HOLLINGSWORTH, Samuel Shorey, 1842-1894.

Professor Law 1888-1894.

Born in Cleveland, Ohio, 1842; graduated Yale, 1863; lawyer; member Councils of Philadelphia; Prof. Law of Contracts in Univ. of Pa., 1888; died 1894.

SAMUEL SHOREY HOLLINGSWORTH was born at Cleveland, Ohio, November 11, 1842. He obtained his early education at Zanesville High School and graduated from Yale in 1863. He then came to Philadelphia and studied law with William Henry Rawle, being admitted to the Philadelphia Bar in 1866. For a number of years he was associated in practice with George W. Biddle and later with Joseph C. Fraley. He was a member of the Councils of the City of Philadelphia and in 1888 was elected Professor of the Law of Contracts at the University of Pennsylvania. In 1879 he prepared, together with Hon. Samuel W. Pennypacker, the supplement to the Digest of the English Common Law Reports. Professor Hollingsworth was famous for his method of instruction in the Law School, combining the best features of the Case System and the Text Book System. He died in Philadelphia June 1894, and the report of the meeting of the Bar Association of Philadelphia to take official notice of his death bears ample witness to his qualities as an eminent lawyer and a true gentleman.

BURK, Charles Meredith, 1868-

Instructor Zoölogy 1888-1899.

Born in Philadelphia, 1868; graduated Biological Dept. Univ. of Pa., 1888; M.D., 1891; Instructor Zoölogy in the University, 1888-99; practicing physician, 1891 to date.

CHARLES MEREDITH BURK, M.D., a son of Rev. Jesse Y. Burk, the Secretary of the University, and Gertrude Helé Burk, was born in Philadelphia, October 16, 1868. He is a grandson of Isaac Burk, the well known botanist and donor of the Burk Herbarium at the University of Pennsylvania. He was prepared for College at the

Episcopal Academy in Philadelphia, and entering the University of Pennsylvania was graduated from the Biological Department in 1888. After completing his course he became Instructor in Zoölogy in the Biological Department at the University, in the meantime, however, pursuing medical studies in the Medical School, from which he was graduated with the degree of Doctor of Medicine in 1891. He at once took up the practice of medicine, though he continued to hold his Instructorship until June 1899, when he gave it up on account of the increasing attention which he was obliged to devote to his pro-



CHARLES M. BURK.

feccion. Dr. Burk is a member of a number of scientific societies, among others: the Academy of Natural Sciences of Philadelphia, the Biological Club of the University of Pennsylvania and the Gloucester County, New Jersey, Medical Society. He was married in April 1893 to Helen Richards Ford, and has one child.

LAMBERTON, William Alexander, 1848-

Born in Philadelphia, 1848; graduated Univ. of Pa., 1867; Instr. in Math. at the University, 1867-68; Instr. in Latin and Greek at Lehigh Univ., 1869-73; Instr. in Math., Lehigh, 1873-78; Prof. of Greek and Latin, Lehigh, 1878-80; Prof. of Greek, Lehigh, 1880-88; Prof.

of Greek Lang. and Lit. at the University since 1888; author.

WILLIAM ALEXANDER LAMBERTON, Professor of Greek, was born in Philadelphia, November 26, 1848, son of Robert and Jane (Porter) Lamberton. He graduated at the University of Pennsylvania in 1867, receiving the degree of Master of Arts in course, while in College being awarded the Freshman Declamation prize. During the year following graduation he remained at the University in the capacity of Instructor in Mathematics, and then accepted an appointment as Instructor in Latin and Greek at Lehigh University. He continued in that institution until 1888 holding the several progressive positions of Instructor in Mathematics, 1873-1878, Professor of Greek and Latin, 1878-1880, and Professor of Greek, 1880-1888. In 1888 he came to the University as Professor of Greek, and has continued in that charge since that time. Among other literary works he has edited the Sixth and Seventh Books of Thucydides in Harper's Classical Series. Professor Lamberton married Mary, daughter of Daniel McCurdy. He is a member of the Zelosophic Society and the Delta Phi and Phi Beta Kappa fraternities.

PATTEN, Simon Nelson, 1852-

Professor Political Economy 1888-

Born in Sandwich, Ill., 1852; educated at Northwestern Univ. and in Germany; received degrees of A.M. and Ph.D. from Univ. of Halle, 1878; Prof. of Political Economy in Univ. of Pa. since 1888; one of the founders of the American Academy of Political and Social Science; author of important works in economics and sociology.

SIMON NELSON PATTEN, Ph.D., was born in Sandwich, Illinois, May 1, 1852, of Scotch-Irish ancestry. He is to-day at the head of a school of economic thought in this country which numbers a great many disciples both here and in Europe. Professor Patten secured his early education at Jennings Seminary, Aurora, Illinois, afterwards passing to Northwestern University at Evanston. After teaching for a period he went abroad and remained for three years at the University of Halle, Germany, as a student under Professor Conrad, one of the most distinguished economists in Germany; perhaps no Professor of Political Economy on the continent to-day attracts more American students to his lectures. Professor Patten took his examinations and was graduated with the degrees of Master of Arts and Doctor of Philosophy in August 1878.

Returning to the United States he again engaged in teaching, and in 1888 was called to the University of Pennsylvania as Professor of Political Economy, at which place he has since remained in the Faculty of the Wharton School of Finance and Economy. He has drawn many students from all parts of the United States to his classes and seminaries and has built up a school of thought in regard to political and social questions which at the present time numbers many adherents. It may be said in a general way that Professor Patten represents a constructive political economy, or as he himself



SIMON N. PATTEN

has named it, a system of "dynamic" economics. He defends a policy by which each people will adapt itself to its own environment and make the most of that with which nature has endowed it. Although not without recourse to induction, he is in the main a deductive thinker and by deductive processes has constructed a body of theory which is highly regarded by economists not only in this country but abroad as well, especially in Germany, where reside those writers who so much impressed him in his youth and have continued to be his inspiration in later life. Professor Patten's principal writings are: Premises of Political Economy; The Economic Basis of Protection, which is being translated into French; Theory of Dynamic Economics;

Theory of Social Forces and the Development of English Thought. The Economic Basis of Protection was the first scientific exposition of the German theories of protection as they may be applied to the United States. Free of any taint of German socialism, the book furnished a back-ground for a body of scientific knowledge which marked a definite turning away of American Protectionist writers from the doctrines of Henry C. Carey. The work profoundly influenced public opinion regarding this subject and has put the protective theory in America on a more rational basis. Professor Patten's Development of English Thought was published in 1899. It is the result of studies extending over several years and embracing investigations pursued in England during a recent leave of absence from his teaching work at the University. He has also written much on sociology. In pure economics his most notable achievements have been in reference to problems of consumption, his development of the long neglected theories in this field of research being recognized as very important. Professor Patten is one of the founders of the American Academy of Political and Social Science, being a frequent contributor to its published proceedings. He is also an active member of the American Economic Association.

BENNETT, Joseph Monroe, 1816-1898.

Founder of Bennett House, Benefactor.

Born in Burlington Co., N. J., 1816; clothing merchant, 1840-79; founder of Bennett House at the University; died 1898.

JOSEPH MONROE BENNETT, was born in the little settlement of Juliestown, near New Egypt, Burlington county, New Jersey, on August 13, 1816. He did not follow his father's trade, that of a wheelwright, but started out as a country school-teacher. From this he drifted into one occupation after another, finally settling down in Kensington, a district of Philadelphia, as a tailor. Here he married Rachael Scott. Leaving tailoring he entered the retail clothing house of Laurent Brothers in Philadelphia, where he worked himself up so quickly that when the Laurents were ready to go out of business he, with James Umberger and Perry McNeall, was ready to buy the business. Bennet & Company, as the firm was known, began its active career at No. 516 Market Street. The business was soon extended to the wholesale trade. The interest of Perry McNeall was bought out by

the two other partners. The business grew so rapidly after this that it outgrew the building No. 516. No. 518 was then occupied. Here the building so well known as Town Hall was erected. Just after 1856, when Town Hall was completed, Mr. Umberger died. In 1859 John Wanamaker, who had been with Mr. Bennett since 1854, left him to go into business by himself. Mr. Bennett or Colonel Bennett, as he was called after 1859, derived his military title from a staff appointment in the old militia of Pennsylvania by Governor Johnson in that year. Colonel Bennett on the outbreak of the Civil War equipped one of the militia regiments with which his name was associated and sent it to the front. The organization became part of the brigade of Colonel William Small. Colonel Bennett withdrew from business in 1879, the possessor of a great fortune. In 1881 he bought the property on which Fox's Theatre stood, remodelled it under the name of the Chestnut Street Opera House, and by his will left it to the University of Pennsylvania. This and other bequests of his to the University are now in litigation. During his lifetime he presented to the University two houses at the corner of Thirty-fourth and Walnut Streets to be used as a residence for women pursuing work in the graduate schools. Just before his death he bought four adjoining houses with the intention of presenting them, too, to the University, but he died before the transfer could be made. His gifts to the University amounted to over \$60,000. He was the founder of the two Joseph M. Bennett Fellowships for women students in the Department of Philosophy. Colonel Bennett died in Philadelphia on September 29, 1898.

[Portrait on page 163.]

Philadelphia. In 1861 he entered the service of the Northern army as Captain of a company in the Seventy-first Pennsylvania Regiment of the United States Volunteers, and serving in the fighting in Maryland and Virginia was advanced to the ranks of Lieutenant-Colonel and Colonel of the regiment. He was made a Brigadier-General of Volunteers in November 1862, for services at the battle of Antietam, and commanded the Second Division of the Eighteenth Army Corps. After the war he resumed practice in Philadelphia and became identified with many important business enterprises of the



ISAAC J. WISTAR

WISTAR, Isaac Jones, 1827—

Benefactor — Founder Wistar Institute of Anatomy.

Born in Philadelphia, 1827; educated at Haverford College; studied law and practiced in Philadelphia; entered U. S. service in 1861, and became Brig.-Gen. of Vols., 1862; Pres. Acad. Nat. Sciences, Philadelphia, 1893; Sc.D. Univ. of Pa., 1893.

ISAAC JONES WISTAR, Benefactor, was born in Philadelphia, November 14, 1827, son of Caspar Wistar, a graduate of the Medical School of the University of Pennsylvania and a descendant of the distinguished Professor of Anatomy of the same name. After a course of study at Haverford College, Pennsylvania, he studied law and entered practice first at San Francisco and afterwards in

city. In 1893 he was given the degree of Doctor of Science by the University of Pennsylvania. General Wistar is well known as the founder of the Wistar Institute of Anatomy of that University. From 1893 to 1897 he was President of the Academy of Natural Sciences of Philadelphia. At present he is Vice-President of the American Philosophical Society, and President of the State Board of Public Charities of Pennsylvania.

GRAHAM, George Scott, 1850—

Professor Criminal Law 1889-1899.

Born in Philadelphia, 1850; graduated Law Dept. Univ. of Pa., 1870; member of Select Council of Phila-

delphia, 1877-86; Dist. Atty. of Philadelphia, 1881-99; Prof. of Criminal Law, Univ. of Pa. 1889-99.

GEORGE SCOTT GRAHAM, LL.D., was born in Philadelphia, September 13, 1850, the son of James and Sarah Jane (Scott) Graham. After studying in the Philadelphia public schools and under a private tutor, Mr. Graham entered the Department of Law in the University of Pennsylvania, graduating in 1870. He was admitted to the Bar in 1871. Mr. Graham soon built up a lucrative practice in Philadelphia, and, entering politics as a Republican soon became a member of Select Coun-



GEORGE S. GRAHAM

cil in 1877. After holding this position for three years Mr. Graham in 1881 became District Attorney of Philadelphia, remaining in office for eighteen years. In 1888 he was chosen Professor of Criminal Law in the University of Pennsylvania; resigning the chair in 1899. Mr. Graham is a Mason and a Knights Templar, and a member of the Union League, Art, University and Lawyers' clubs. In 1870 Mr. Graham married E. M. Ellis, and in 1898 Pauline M. Wall.

BROWN, Amos Peaslee, Jr., 1864-

Asst. Professor Mineralogy and Geology 1889-

Born in Germantown, Philadelphia, 1864; graduated B.S. at Univ. of Pa., 1886; E.M., 1887; Ph.D., 1893;

Assistant on 2nd Geological Survey of Pa., 1887-89; Inst. in Mining and Metallurgy at the University, 1889-; Asst. Prof. of Mineralogy and Geology since 1895.

AMOS PEASLEE BROWN, JR., Ph.D., was born in Germantown, Philadelphia, December 3, 1864, son of Amos Peaslee and Frances (Brown) Brown. He graduated at the University of Pennsylvania with the degree of Bachelor of Science in 1886, and after one year received the degree of Mining Engineer. From 1887 to 1889 Professor Brown was engaged as Assistant on the Second Geological Survey of Pennsylvania and then accepted an appointment to an Instructorship in Mining and Metallurgy at the University. Since 1895 he has been Assistant Professor of Mineralogy and Geology in the College Department and in 1892 he was appointed Professor of Geology and Mineralogy in the Auxiliary Department of Medicine of the University, which Professorship he held until this Department was abolished in 1898. He is a member of the American Institute of Mining Engineers, of the Academy of Natural Sciences and Frankiin Institute of Philadelphia, etc.

COPE, Edward Drinker, 1840-1897.

Professor Geology and Paleontology 1889-1897.

Born in Philadelphia, 1840; studied in Medical Dept. Univ. of Pa., and at the Philadelphia Academy of Natural Sciences; Prof. Comparative Zoölogy and Botany at Haverford College, 1864-67; U. S. Geologist, 1873-75; recipient of the Bigsby Medal from Royal Geographical Soc., 1879; honorary Ph.D. Heidelberg, 1886; Prof. Geology and Palæontology in Univ. of Pa., 1889-97; died in Philadelphia 1897.

EDWARD DRINKER COPE, Ph.D., former Professor of Geology and Paleontology, was born in Philadelphia, July 28, 1840, the son of Alfred Cope, and the grandson of Thomas Pym Cope, the well-known Philadelphia merchant. After receiving his preliminary education at the Friends' School at Westtown, Chester county, Pennsylvania, he began the study of medicine at the University of Pennsylvania. He did not graduate there, however, becoming so interested in his independent investigations at the Academy of Natural Sciences that he gave up his intention of becoming a physician. In 1859 he went to Washington to study at the Smithsonian Institute, returning the next year to Philadelphia to work again for three years at the Academy. Then followed a year of study in Europe at all the great museums from London to Vienna. Upon his

return to America in 1864 he accepted the Professorship of Comparative Zoölogy and Botany at Haverford College. This position he resigned in 1867. In 1866 he had taken up the study of the reptiles found in the marl pits in New Jersey, and now he devoted all his time to this work, making a name for himself as a paleontologist. As such he ranked first in America. From the New Jersey dinosaurs he turned next to the Miocene fauna of Maryland and Virginia, and in 1868 he undertook the study of the air-breathing vertebrates for the Ohio Geological Survey. In 1870 he began his



EDWARD D. COPE

studies of the wonderful fauna buried in the rocks of Kansas and other Trans-Mississippi states. Some little was known of these strange forms through the labors of Owen and Leidy, but Cope was in reality to open up a new field. In this year, 1870, he visited western Kansas and brought to light the huge reptiles now considered so characteristic of that region. In 1872 he visited the Bad Lands about the head waters of Green River, Wyoming. His discoveries in these regions brought him such distinction that he was appointed Vertebrate Paleontologist of the United States Geological and Geographical Survey of the Territories, under Dr. F. V. Hayden. In 1874 he was appointed to a similar survey of the lands west of the hundredth

meridian, under Lieutenant Wheeler. Dr. Cope discovered over one thousand new species of extinct vertebrates. In the discussion of evolution Dr. Cope consistently advocated the neo-Lamarckian hypothesis. His evolutionary essays were collected in 1887 under the title *The Origin of the Fittest*. His publications were numerous, comprising about twenty books and three hundred and fifty papers in scientific journals. His honors from scientific societies both here and in Europe were very many. In 1872 he was elected a member of the National Academy of Science, and in 1879 the Royal Geographical Society of Great Britain bestowed upon him the Bigsby gold medal. In 1883 he was elected Vice-President of the biological section of the American Association for the Advancement of Science, and in 1896 he became its President. In 1886 he received the honorary degree of Doctor of Philosophy from Heidelberg. In 1889 he became Professor of Geology and Paleontology at the University of Pennsylvania, and held the position until his death. He was the proprietor of the *American Naturalist* from 1877. In 1866 he married Annie, daughter of Richard Pym. He died in Philadelphia, April 12, 1897.

CRAWLEY, Edwin Schofield, 1862-

Professor Mathematics 1899-

Born in Philadelphia, 1862; graduated B.S. Univ. of Pa., 1882; Ph.D., 1892; Instr. in Civil Eng. at the University, 1882-85; in Math., 1885-89; Asst. Prof. of Math., 1889-99; Thomas A. Scott Prof. of Math., since 1899; author of *Elements of Trigonometry*.

EDWIN SCHOFIELD CRAWLEY, Ph.D., was born in Philadelphia, July 31, 1862, son of Joseph S. and Elmira (Hammell) Crawley. He entered the University of Pennsylvania in 1878, and winning the Freshman prize for Mechanical Drawing, and honorable mention for the Freshman Mathematics prize, graduated with the degree of Bachelor of Science in 1882. In 1892 the University conferred the degree of Doctor of Philosophy. Immediately upon graduation he entered an Instructorship in Civil Engineering, and in 1885 was transferred to the subject of Mathematics. From 1889 to 1899 he was Assistant Professor of Mathematics and in June 1899 he was elected to the Thomas A. Scott Professorship of Mathematics. Professor Crawley has published the *Elements of Trigonometry*. He was a member of the Franklin Scientific Society. He married Annie, daughter of Charles H. Reckefus.

GUITERAS, John, 1852-

Professor Pathology 1889-1898.

Born in Matanzas, Cuba, 1852; graduated La Empresa College, Cuba, 1867; graduated (M.D.) Univ. of Pa., 1873; physician; Lecturer on Symptomatology Univ. of Pa., 1874; member U. S. Yellow Fever Commission in Havana, 1879; Prof. Pathology, Univ. of Pa., 1889-1898; Chairman Pathological Section in First Pan-Amer. Med. Congress, 1895; Acting Asst. Surgeon, U. S. A., Santiago Campaign, 1898; Prof. Tropical Diseases, Univ. of Havana, 1900-

JOHN GUITERAS, M.D., was born in Matanzas, Cuba, January 4, 1852, the son of Eusebio and Josefa (Gener) Guiteras. His ancestry was Spanish. He received his early education at a school called La Empresa in Matanzas, graduating in 1867 with the degree of Bachelor of Arts from the College of the same name. In 1873 he received the degree of Doctor of Medicine from the University of Pennsylvania, and at once became Resident Physician to the Philadelphia Hospital. In 1874 he was appointed Lecturer on Symptomatology at the University, and Visiting Physician to the Philadelphia Hospital in 1876. He was a member of the United States Yellow Fever Commission in Havana in 1879. In 1880 he entered the United States Marine Hospital Service. Dr. Guiteras became Professor of Pathology in the University of Pennsylvania in 1889. He was Chairman of the Pathological Section in the First Pan-American Medical Congress in 1895. When the Spanish War broke out he volunteered as Acting Assistant Surgeon in the United States Army and served during the Santiago Campaign in 1898. He became Professor of Tropical Diseases in the University of Havana in 1900. Dr. Guiteras is a member of the Pathological Society of Philadelphia, the College of Physicians of Philadelphia and the Association of American Physicians. He was married on May 5, 1883, to Dolores Gener, and has one daughter, Milagros Guiteras.

HARRIS, Joseph Smith, 1836-

Trustee 1889-

Born at Frazer, Pa., 1836; graduated Central High School, Philadelphia, 1853; civil engineer; engaged for ten years in making coast and international boundary surveys; civil and mining engineer in Pottsville, Pa., 1864-68; in railway business since 1868; Mgr. Central R. R. of N. J., 1880-82; Pres. Lehigh Coal & Navigation Co., 1882-93; Pres. Philadelphia & Reading Railway Co., since 1893; Trustee of the University since 1889.

JOSEPH SMITH HARRIS, President of the Philadelphia and Reading Railway Company, was born at Frazer, Chester county, Pennsylvania,

April 29, 1836. It is worth noting that all of Mr. Harris' ancestors from the date of their arrival in America lived wholly or at least for a part of their lives in Chester county. His parents were Stephen and Marianne (Smith) Harris. The Harris family resided in the seventeenth century in Wiltshire, England. They seem to have dwelt for a few years in Antrim, Ireland, whence the great-grandfather of the subject of this sketch, Thomas Harris, emigrated in 1747. He settled in Chester county, where he became a prosperous farmer. His son, William Harris, Joseph Smith Harris' grandfather, was also a Chester county



JOS. S. HARRIS

farmer and held during his life a number of minor public offices. He was a member of the State Legislature in 1779 and 1780, and again in 1810 and 1811. He was a Captain during the Revolution, and remaining in the military service rose to the rank of Brigadier-General, dying at the outbreak of the War of 1812. Joseph Smith Harris' father, Stephen Harris, who also lived at the old Harris homestead in Chester county, was educated at the Chester County Academy, graduating at the University of Pennsylvania with the degree of Doctor of Medicine in 1819. He was a practicing physician throughout his life. On his mother's side Mr. Harris' ancestors in the Smith family were of Scotch descent. His great-great-grandfather, John Smith, emigrated

from Ireland to Chester county in 1720. John's son, Robert Smith, was engaged in the military service throughout the Revolution, and from 1777 to 1786 was Lieutenant of Chester county. He ranked as Colonel, and had charge of raising, arming and provisioning the military contingent of his district throughout the war. Robert's son, Joseph Smith, Joseph Smith Harris' maternal grandfather, was an iron merchant in Philadelphia. On his mother's side Mr. Harris is also descended from Persifer Frazer, who was his great-grandfather, a prominent merchant and iron master, who became an officer of the Continental Army during the Revolutionary War, holding at the time of his retirement the rank of Lieutenant-Colonel. Mr. Harris received his early education in the schools of Chester county and Philadelphia, and was graduated from the Central High School of Philadelphia in 1853. Choosing the profession of a civil engineer, he was attached for a time to the engineer corps of the North Pennsylvania Railroad. In 1854 he joined the United States Coast Survey, being engaged in this branch of the government service for three years. In 1857 he was appointed astronomical assistant to the United States Northwest Boundary Commission which fixed the boundary between the United States and British Columbia as far east as the summit of the Rocky Mountains. This position he held until 1864, being for a time, in 1862, in command of the United States Steamer *Sachem* which was attached to Farragut's fleet in the Mississippi River campaign. From 1864 to 1868 Mr. Harris was a civil and mining engineer at Pottsville, Pennsylvania, in the anthracite coal regions. During those years he was largely engaged in railroad work which since that time has been his chief occupation. He was Chief Engineer of the Morris and Essex Railroad from 1868 to 1870; Associate Engineer of the Philadelphia & Reading Coal & Iron Company, from 1871 to 1877; Superintendent and Engineer of the Lehigh Coal & Navigation Company, from 1877 to 1880. In 1880 he was appointed General Manager of the Central Railroad of New Jersey, which office he held until 1882, when he was elected President of the Lehigh Coal & Navigation Company. For eleven years he retained his position. In 1893, when a change was made in the management of the Philadelphia and Reading Railroad, he was chosen to the Presidency of that company, which position he still holds. Mr. Harris married Delia Silliman Brodhead in June 1865. They have five children: Marian Frazer; George Brodhead,

Treasurer of the Reading Iron Company, and a graduate of the University of Pennsylvania in the Class of 1888; Frances Brodhead, the wife of Reynolds Driver Brown, Professor of Law in the University; Clinton Gardner, an architect and a graduate of the University in the Class of 1893, and Madeline Vaughan Harris. The two younger daughters are graduates of Bryn Mawr College.

PEARSON, Leonard, 1868-

Prof. Theory and Practice of Veterinary Medicine 1891-

Born in Evansville, Ind., 1868; graduated B.S., Cornell, 1888; V.M.D. Univ. of Pa., 1890; studied at Imperial Veterinary School, Germany, 1890-91; Prof. Theory and Practice of Veterinary Med., Univ. of Pa., since 1891; Dean of Veterinary Dept. of the University, 1897 to date; State Veterinarian of Pa., 1896 to date; Pres. American Veterinary Soc., 1899-1900.

LEONARD PEARSON, V.M.D., was born in Evansville, Indiana, August 17, 1868. His parents were Leonard Pearson, born in Byfield, Massachusetts, in 1828, a descendant of an English family which came from England in 1635 to Salem, Massachusetts, and Lucy Small (Jones) Pearson. His mother's family came from Wales about 1740. Dr. Pearson's early education was received in private schools and at the High School in Sedalia, Missouri. Entering Cornell as a student of Science and Agriculture he was graduated with the degree of Bachelor of Science in 1888. From Cornell Dr. Pearson passed to the University of Pennsylvania as a student in Veterinary Medicine, receiving the degree of Doctor of Veterinary Medicine in 1890. For a few months he was Resident Surgeon at the Veterinary Hospital at the University of Pennsylvania, but in July 1890 went to Europe, pursuing studies at the Imperial Veterinary School in Berlin for one year. Upon his return he was appointed Assistant Professor of the Theory and Practice of Veterinary Medicine in the University of Pennsylvania and Professor in 1894, a position he still holds at this date. In the meantime he actively engaged in general and special veterinary practice, and in 1897 was elected Dean of the Veterinary Department at the University of Pennsylvania, an office which he continues to occupy. For two years from 1894 Dr. Pearson was Consulting Veterinarian of the Department of Health of Philadelphia, and since 1896 he has been the State Veterinarian of Pennsylvania. From 1893 to 1895 he was President of the Pennsylvania Veterinary Society and for the year 1899-

1900 was President of the American Veterinary Society. Dr. Pearson is a member of the University Club and the Faculty Club of Philadelphia.

LEA, Henry Charles, 1825-

Benefactor.

Born in Philadelphia, 1825; early education in Philadelphia; LL.D. Univ. of Pa., 1868; LL.D. Harvard, 1890; LL.D. Princeton, 1896; Donor of the Univ. Laboratory of Hygiene; author and publisher.

HENRY CHARLES LEA, LL.D., Author and Publisher, was born in Philadelphia, September, 19, 1825, son of Isaac Lea, LL.D., the



HENRY C. LEA

eminent naturalist and publisher. Mr. Lea was educated by private teachers, and when seventeen years old, entered the publishing house of his father, of which he later became proprietor until 1880, when he retired from business. In 1889, the urgent need being apparent for a separate laboratory for the study of Hygiene at the University, Mr. Lea volunteered to present such a building on the following conditions: the completed laboratory was to be at once adequately equipped and endowed, the study of Hygiene was to be required in certain specified courses, and the Trustees were to extend the Medical course from three years to four. These conditions being agreed to and the land set apart,

the construction of the building commenced at once under the personal direction of Mr. Lea and Dr. John S. Billings, who had been appointed Director. The Laboratory of Hygiene was formally opened for use February 22, 1892. Mr. Lea is a corresponding member of the Massachusetts Historical Society, a fellow of the American Academy of Arts and Sciences, and a member of the American Philosophical Society, of the Royal Academy of Bavaria, of the Royal Society of Antiquaries of Scotland, the Royal Society of History of Rome, and of numerous other learned bodies. He holds the degree of Doctor of Laws from the Universities of Pennsylvania, of Harvard and of Princeton. For many years he has been an industrious and able author; his first writings were papers on Chemistry and Conchology. His writings for the past forty years have been directed chiefly towards historical topics, and among the works of this nature may be mentioned: *Superstition and Force*; *Studies in Church History*; *An Historical Sketch of Sacerdotal Celibacy*; *A History of the Inquisition of the Middle Ages*; *A History of Auricular Confession and Indulgences*; *Chapters from the Religious History of Spain* and a *Formulary of the Papal Penitentiary in the Thirteenth Century*.

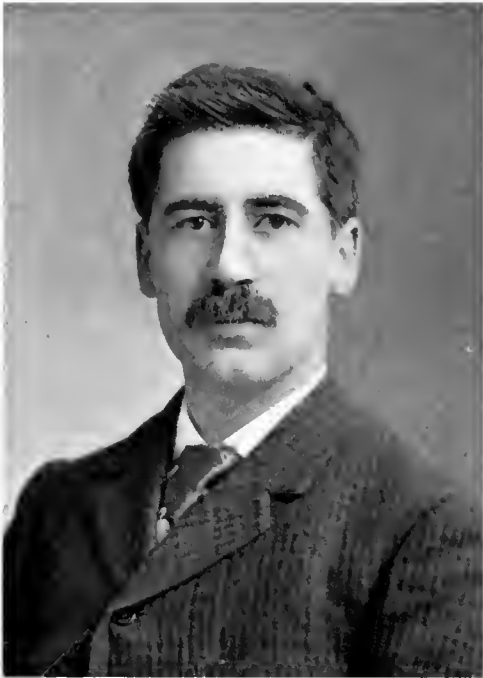
CHEYNEY, Edward Potts, 1861-

Professor of European History 1897-

Born in Wallingford, Pa., 1861; graduated Univ. of Pa., 1883; Instr. in History, 1884-91; Asst. Prof., 1881-97, Prof. since 1897; author of numerous works on historical and social subjects.

EDWARD POTTS CHEYNEY, A.M., author of the History of the University of Pennsylvania which forms the first part of this volume, was born in Wallingford, Delaware county, Pennsylvania, January 17, 1861, the son of Waldron J. and Fanny (Potts) Cheyney. His ancestors on his father's side came from England in 1728 and settled as farmers in Thornbury Township, Chester county, Pennsylvania, where the family lived continuously, active in membership in the Episcopal Church and on the side of the patriots in the Revolution. His mother's family were members of the Society of Friends and were residents of Philadelphia from 1740. Edward Potts Cheyney was educated in public and private schools in the country and in Philadelphia until the fall of 1875, when he left school to take a position in the Bureau of Agriculture of the Centennial Exposition, in which he remained until its close in

1876. He then resumed preparation for College and entered the University of Pennsylvania in 1879, taking the Arts course. As an undergraduate, he was awarded a junior mathematical prize and honorable mention for the Greek prize in the same year, was Editor of the Pennsylvania Magazine, member of the Philomathean Society and Class President. He graduated with high honors, being chosen a member of the Phi Beta Kappa, and receiving honorable mention for the Joseph Warner Yardley Memorial prize. After some months of travel in Europe, Mr. Cheyney returned to take a post-



E. P. CHEYNEY

graduate course in the Wharton School of Finance and Economy, and published a paper on "Early American Land Tenures" and, as a thesis, a monograph on "The Anti-Rent Agitation in the State of New York, 1839-1842." Upon taking the degree of Master of Arts in 1884, Mr. Cheyney was appointed Instructor in European History in the University of Pennsylvania, continuing as Instructor until 1891, when he was made Assistant Professor, and was appointed Professor of the same subject in 1897. He still occupies the Chair of European History. In 1894 Professor Cheyney made another visit abroad, observing the methods of Seminar teaching in the German Universities, and in England making preparatory studies for his work on "Social

Changes in England in the Sixteenth Century," which is now in course of publication by the University of Pennsylvania. Professor Cheyney has served for a number of years with his colleagues of the Department of History in the University, as Editor of the "Translations and Reprints," of which he has prepared six volumes, and has been a frequent contributor to critical and economic periodicals, notably the American Historical Review and the Annals of the American Academy of Political and Social Science, as well as a lecturer in connection with the University Extension movement. He is a member of the Pennsylvania Historical Society, of the American Historical Association, and of the Board of Managers of the University Alumni Association, of which last he has been Secretary for the past five years. He married June 8, 1886, Gertrude Levis Squires, of Philadelphia, by whom he has three children.

DANA, Charles Edmund, 1843-

Professor of Art 1890-

Born in Wilkesbarre, Pa., 1843; graduated Union College as Civil Engineer, 1865; Prof. of Art in the University since 1890.

CHARLES EDMUND DANA was born in Wilkesbarre, Pennsylvania, January 18, 1843, son of General Edmund Lovell and Sarah Helen (Peters) Dana, and a descendant of Richard Dana, who settled in Cambridge, Massachusetts, in 1640. Professor Dana graduated at Union College in Schenectady, New York, as a Civil Engineer in the Class of 1865. He was appointed Professor of Art in the University of Pennsylvania in 1890 and is connected with many art clubs and societies. He is President of the Fellowship of the Alumni of the Pennsylvania Academy of Fine Arts, Vice-President of the Fairmount Park Art Association, of the Art Clubs of New York City and a member of the American Philosophical Society, the American Academy of Political and Social Science, the Numismatic and Antiquarian societies of Philadelphia, etc., the Loyal Legion, the Aztec Club of 1847, the Sons of the Revolution and the Founders' and Patriots' Society. He also belongs to several social clubs in Philadelphia, including the Rittenhouse, the Art and the Philadelphia Barge clubs. In the Department of Architecture Professor Dana delivers to advanced students courses on water-color rendering of architectural perspectives. In 1870 he was married to Emilie H. Woodbury of Wilkesbarre, and has one daughter, Milicent W. Dana.

WEYGANDT, Cornelius, 1871-

Instructor English 1897-

Born in Germantown, Philadelphia, 1871; graduated College Dept. Univ. of Pa., 1891; reporter on Philadelphia Record, 1892-93; Assoc. Editor of Philadelphia Eve. Telegraph, 1893-97; Instr. in English Univ. of Pa., 1897 to date.

CORNELIUS WEYGANDT, was born in Germantown, Philadelphia, December 13, 1871, the son of Cornelius Nolen and Lucy Elmaker (Thomas) Weygandt. His father, who is President of the Western National Bank of Philadelphia, is the great-grandson of Cornelius Weygandt who came to



CORNELIUS WEYGANDT

Germantown from the Palatinate in 1736. His mother's grandfather, Isaac Thomas, was one of the first iron masters of the Schuylkill Valley. Mr. Weygandt received his early education at the old Germantown Academy, from which he passed to the University of Pennsylvania in 1887, graduating from the College Department with the degree of Bachelor of Arts in 1891. He continued his studies there in the Post-graduate Department in 1891-1892, and then joined the city staff of the Philadelphia Record. He retained his connection with that newspaper for a year. In 1893 he became Associate Editor of the Philadelphia Evening Telegraph. He was engaged here in dramatic and literary criticism and other forms of newspaper writing until 1897, when he returned to the University of Pennsylvania as In-

structor of English which position he still holds. Mr. Weygandt was married in June 1900 to Sara M. Roberts.

DAY, Frank Miles, 1861-

Lecturer on Architecture 1888-

Born in Philadelphia, 1861; graduated B.S., Univ. of Pa., 1883; studied at So. Kensington Sch. of Arts and at Royal Acad. of Arts, London, Eng., 1883-85; Lect. on Architecture at the University and Lecturer at the Pa. Academy of the Fine Arts.

FRANK MILES DAY, Architect, was born in Philadelphia, April 5, 1861, son of Charles and Anna Rebecca (Miles) Day. Entering the University of Pennsylvania in 1879 he won the Freshman prize for Mechanical Drawing, and graduated Bachelor of Science in 1883, having the distinction of being both President and Valedictorian of his class. The years immediately following graduation were spent in the study of Architecture by means of travel in Europe and at the South Kensington School of Arts and at the Royal Academy of Arts in London, England. Returning to America in 1885, he entered the practice of his profession in Philadelphia in 1888, and was appointed Lecturer on Architecture to the University. Mr. Day is Vice-President of the American Institute of Architects, and a member of the American Philosophical Society. From his pen has appeared *The Microscopic Examination of Timber with Regard to Its Strength*, and other works on architectural topics.

MEIGS, Arthur Vincent, 1850-

Trustee 1890-1893.

Born in Philadelphia, 1850; graduated Univ. of Pa. Medical School, 1871; Resident Phys. to Pa. Hosp., 1872; Attending Phys. to Children's Hosp. since 1879, and to Pa. Hosp. since 1881; Consulting Phys. to Pa. Inst. for Blind; Trustee of the Univ., 1890-93; practicing physician in Philadelphia.

ARTHUR VINCENT MEIGS, M.D., was born in Philadelphia, November 1, 1850, son of Dr. John Forsyth and Ann Wilcocks (Ingersoll) Meigs. He entered the Academic Department of the University of Pennsylvania in 1866, and after two years transferred to the Medical School, where he graduated in 1871 at the age of twenty-one. Since then besides conducting a successful practice in Philadelphia he has performed hospital service as Resident Physician to the Pennsylvania Hospital in 1872, Attending Physician to the Children's Hospital for some time after 1879, and to the Penn-

sylvania Hospital since 1881, and as Consulting Physician to the Pennsylvania Institution for the Blind. From 1890 until 1893 Dr. Meigs served on the Board of University Trustees. He is a fellow of the College of Physicians of Philadelphia and a member of the Philomathean Society, the Pathological Society of Philadelphia, the Obstetrical Society of Philadelphia (formerly), the Philadelphia County Medical Society, the Association of American Physicians and the Pennsylvania Society of the Sons of the Revolution. His publications include a monograph on Milk Analysis and Infant Feeding and one entitled *The Origin of Disease*, and various papers in the Reports of the Transactions of the College of Physicians of Philadelphia and of the Philadelphia County Medical Society. Dr. Meigs married Mary Roberts, daughter of Edward Browning of Philadelphia. -

PATTERSON, Christopher Stuart, 1842-

Prof. of Law 1887-98; Dean of Law Dept. 1890-96.

Born in Philadelphia, 1842; graduated Univ. of Pa., 1860; admitted to the Bar, 1865; Sergt. in 1st Regt. Philadelphia Light Artill., 1863; Inspector State Penitentiary, 1884; Prof. of Law at the University, 1887; Dean of the Law Dept., 1890-96; Director, Pa. R. R. Co., 1895; Pres., Commercial Trust Co., 1900.

CHRISTOPHER STUART PATTERSON, formerly Professor of Law and Dean of the Law Department, was born in Philadelphia, June 24, 1842, son of Joseph and Jane (Cuyler) Patterson. He entered the Sophomore Class in the University of Pennsylvania in 1857, became Vice-President of his Class and President of the Zelosophic Society and graduated in 1860, receiving the Master of Arts degree in course. Subsequently he studied law and was admitted to the Pennsylvania Bar in 1865, entering practice in Philadelphia. From 1887 until 1898 he was Professor of the Law of Real Estate and Conveyancing and Professor of Constitutional Law, and in 1890 was appointed to the office of Dean of the Law Department in which position he continued until 1896. Professor Patterson was Inspector of the State Penitentiary in Philadelphia from 1884 to 1891. In 1863 he became a Sergeant in Landis' First Battery of Philadelphia Light Artillery, and was wounded in the Gettysburg campaign. He has published Treatises on Railway Accident Law, and on Constitutional Law, and many pamphlets on historical and political topics. Mr. Patterson is a member of the American Philosophical Society, the Pennsylvania Society of the Sons of the Revolution and the Delta Psi and Phi Beta

Kappa fraternities. He married Ellen, daughter of George H. Stuart of Philadelphia. Mr. Patterson is a member of the Union League Club, the Philadelphia Club and the Century Association of New York, and in 1897 and 1898 he was President of the Union League. In 1893 Mr. Patterson retired from practice at the Bar and has devoted himself to banking and railroads. Since 1895 he has been a Director of the Pennsylvania Railroad Company and Vice-President of the Western Saving Fund Society and since 1900 President of the Commercial Trust



C. STUART PATTERSON

Company of Philadelphia. Mr. Patterson presided over the Indianapolis Monetary Convention of 1897, and was a member of the Monetary Commission appointed under the resolutions of the convention.

MILLS, Charles Karsner, 1845-

Prof. Mental Diseases, and George B. Wood Prof. Medical Jurisprudence.

Born in Philadelphia, 1845; graduated Central High School, 1864; M.D. Univ. of Pa., 1869; Ph.D., 1871; Prof. Nervous Diseases in Philadelphia Polyclinic and in Woman's Med. College of Pa.; Prof. Mental Diseases and George B. Wood Prof. Med. Jurisprudence, Univ. of Pa.; author of many important works on medical subjects.

CHARLES KARSNER MILLS, M.D., Ph. D., Neurologist, was born at the Falls of Schuylkill, Philadelphia, December 4, 1845. He is a son

of James Mills, a native of Wiltshire, England, and Lavinia Ann (Fitzgerald) Mills. Graduating at the Philadelphia Central High School in 1864, he enlisted for the state's defence, serving for a time with the Pennsylvania militia during the Civil War. He later entered the Medical School of the University of Pennsylvania, receiving the Doctor's degree in 1869. As a recognition of his further studies in his science the same institution conferred the degree of Doctor of Philosophy upon him in 1871. He has been a member and officer of numerous scientific and medical associations. Among other offices held by Dr. Mills are: President of the American Neurological Association, President of the Philadelphia Neurological Society and President of the Medical Jurisprudence Society of Philadelphia. He was at first engaged in the practice of general medicine but soon became interested in neurology, and since 1885 has devoted himself entirely to nervous diseases and insanity. He has been Professor of Nervous Diseases in the Philadelphia Polyclinic and in the Woman's Medical College of Pennsylvania and for several years now has been Professor of Mental Diseases in the University of Pennsylvania. He also occupies the George B. Wood Chair of Medical Jurisprudence. Dr. Mills is the author of many monographs and papers chiefly on neurological subjects. He is also the author of several books, the most important of which is a treatise on Diseases of the Brain and Cranial Nerves, being the first part of a general work on the nervous system and its diseases. He is frequently engaged in medico-legal work and has had a hand in many notable cases of this character. Dr. Mills is a member of the University Club of Philadelphia. In 1873 he married Clara Elizabeth Peale by whom he has three sons and one daughter.

of the estate left by his father but he was also much interested in a number of Philadelphia institutions. He was one of the projectors of the Academy of Music, acting as Chairman of the Building Committee when the Academy was put up in 1857. He was afterwards its President. At the time of his death he was President of the Academy of Fine Arts, having been elected on the death of James L. Claghorn. He was President of the Rittenhouse Club, a member of the Union League, a Director of the Investment Company of Philadelphia, and of the United States Security & Trust Company. He



GEO. S. PEPPER

PEPPER, George S., 1808-1890.

Benefactor 1890.

Born in Philadelphia, 1808; studied at Princeton; read law in the office of Horace Binney; Chairman of Building Com. of Philadelphia Acad. of Music, 1857; Pres. Philadelphia Acad. of Fine Arts; founder of Pepper Professorship of Hygiene in Med. Dept., Univ. of Pa.; died 1890.

GEORGE S. PEPPER was born in Philadelphia, June 11, 1808, the son of George Pepper. He received his education at Princeton and then entered the law-office of Horace Binney. He was admitted to the Bar, but never practiced. He devoted his time principally to the management

died May 2, 1890. Although Mr. Pepper never had any official connection with the University of Pennsylvania he was always deeply interested in its welfare. In his will he left \$60,000 to endow the Pepper Professorship of Hygiene and over \$70,000 to the University Hospital. The University was also his residuary legatee and the fund thus acquired now amounts to over \$30,000.

FALKNER, Roland Post, 1866-

Assoc. Professor Statistics 1891-

Born in Bridgeport, Conn., 1866; graduated, Ph.B., Univ. of Pa., 1885; Ph.D. Univ. of Halle, Germany, 1888; Instr. in Accounting and Statistics at the Univer-

sity, 1888-91; Assoc. Prof. of Statistics since 1891; author of Statistics of Prison Reform, Statistics of Corporations, etc.

ROLAND POST FALKNER, Ph.D., was born in Bridgeport, Connecticut, April 14, 1866, son of Rev. John Blake and Helen Moore (Butler) Falkner. Entering the University of Pennsylvania in 1883, he won the Alumni Junior Declamation prize and graduated with the degree of Bachelor of Philosophy in 1885. The next three years were spent in Germany at the Universities of Halle, Berlin and Leipzig. In 1888 he received the degree of Doctor of Philosophy at Halle, after special research work in statistical science. Returning to America in 1888 he was appointed Instructor in Accounting and Statistics in the University, and in 1891 was promoted to his present rank as Associate Professor of Statistics. Professor Falkner was in 1891 Secretary to the sub-committee of the United States Senate Committee on Finance, appointed to investigate the effect of the McKinley Tariff upon wages and upon the cost of living, which published the well-known Aldrich Report. In 1892 he was appointed Secretary to the American delegation to the International Monetary Conference, and acted as Secretary to the Conference. He was Secretary of the American Academy of Political and Social Science from 1891 to 1896 and Vice-President and Acting President from 1896 to 1898. He is also a member of the International Statistical Institute (a body limited to one hundred and fifty members), the Delta Phi Fraternity, the American Economic Association and the American Statistical Association. From 1890 to 1896 he was Associate Editor, and since the latter date has been Editor of the Annals of the American Academy of Political Science, and besides being the author of a translation of Meitzen's History of the Theory and Technique of Statistics has written numerous essays on statistics of crime, corporations, prices, wages, money etc., appearing in the Annals of the Academy of Political and Social Science, the publications of the American Statistical Association and the American Economic Association, the Forum and other periodicals.

PIERSOL, George Arthur, 1856-

Professor Anatomy 1891.

Born in Philadelphia, 1856; graduated C.E., Polytechnic College of Pa., 1874; M.D. Univ. of Pa., 1877; connected with Histological Lab. of the University and Ophthalmological Dept. of the University Hosp., 1877-84; conducted researches in Germany, 1886-88; Prof.

Histology and Embryology in the University, 1890-91; Prof. of Anatomy 1891 to date.

GEORGE ARTHUR PIERSOL, M.D., was born in Philadelphia, May 17, 1856. He is the son of Jeremiah M. Piersol, who came of an English family, and Minna (Elliger) Piersol, of German birth. Dr. Piersol received his early instruction at Fewsmith's School in Philadelphia, and entering the Polytechnic College of Pennsylvania, was graduated with the degree of Civil Engineer in 1874. Having decided upon the study of medicine he matriculated in the University of Pennsylvania, graduating



GEORGE A. PIERSOL

from the Medical Department in 1877. Immediately upon receiving his doctor's degree he connected himself with the Histological Laboratory of the University and with the Ophthalmological Department of the University Hospital. In 1884 he was appointed Demonstrator of Histology, a connection that he retained until 1890. In 1886 he determined to devote his entire time to scientific work and going abroad spent two years in study and research in histology and embryology in the laboratories of Germany. Returning home in 1888 he resumed his teaching at the University. Two years later he was appointed Professor of Histology and Embryology. This position he held for only one year, for in 1891 he was elected Professor of

Anatomy in the University, a Chair which he still occupies. Professor Piersol is a Fellow of the College of Physicians of Philadelphia and is a member of a number of clubs and societies, among others: the Academy of Natural Sciences of Philadelphia, the Pathological Society of Philadelphia, the American Philosophical Society, the Association of American Anatomists, the Pennsylvania Chapter of the Sigma Xi Fraternity and the Union League of Philadelphia. He is a prolific writer on subjects pertaining to his own branches of the medical science. Dr. Piersol has been twice married, first in 1879 to Anne Wessel Steel, by whom he has three children, and second, in 1898, to Florence Lukens Reeder, by whom he has had one son.

GRIFFITH, John Price Crozer, 1856-

Clinical Prof. Diseases of Children 1891-

Born in Philadelphia, 1856; graduated College Dept. Univ. of Pa., 1877; M.D. and Ph.D., 1881; studied abroad; Asst. Dem. Histology in the Univ., 1882-86; Instr. Clinical Medicine, 1887-91; Clinical Prof. Diseases of Children since 1891; Asst. Phys. to Univ. Hosp., 1887-91; Prof. Clinical Med. in Philadelphia Polyclinic, 1891-97; has held many important hospital appointments.

JOHAN PRICE CROZER GRIFFITH, M.D., Ph.D., was born in Philadelphia January 5, 1856; son of Rev. Benjamin and Elizabeth (Crozer) Griffith. He graduated from the College Department of the University of Pennsylvania in 1887, taking first in the first class of honors in his class, and from the Medical School in 1881, being awarded the first prize for a medical thesis at graduation, equally with Dr. William Robinson, and the George B. Wood Alumni Prize in the Department of Philosophy, equally with Dr. Louis J. Loutenbach, for thesis containing the results of original investigation. In that year he was also made a Doctor of Philosophy. He practiced his profession for one year and then spent two years in study in foreign schools. He then returned to Philadelphia where he has continued to practice. Dr. Griffith's connection with the teaching force of the University commenced in 1882, when he was appointed Assistant Demonstrator of Histology; from that position he was transferred in 1887 to an Instructorship in Clinical Medicine, in which he continued until advanced to his present office of Clinical Professor of the Diseases of Children in 1891. He also acted as Assistant Physician to the University Hospital from 1887 to 1891. Dr. Griffith has since gradua-

tion been continuously engaged in hospital work in various important positions. He was Resident Physician of the Presbyterian Hospital, 1881-1882; Physician to the Philadelphia Dispensary, 1883-1884 and 1885-1886; Physician to the Southern Home for Children, 1883-1895; Physician to St. Clement's Hospital for several years after 1886; Physician to the Medical Dispensary of St. Mary's Hospital 1887-1888; Pathologist to the Presbyterian Hospital 1888-1895; Attending Physician to the Howard Hospital 1889-1896; Physician to the Rush Hospital for Consumption 1891 and 1892-



JOHN P. C. GRIFFITH

1899; and he now holds the following positions: Consulting Physician to the Baptist Orphanage; Visiting Physician to St. Agnes Hospital; Physician to the Medical Dispensary of the Children's Hospital; Visiting Physician to the Children's Hospital; Consulting Physician to the Woman's Hospital; Visiting Physician to the Methodist Hospital. He was also until about three years ago Professor of Clinical Medicine in the Philadelphia Polyclinic. Dr. Griffith is a member of the Association of American Physicians; the American Pediatric Society; the American Medical Association; the Academy of Natural Sciences; the Philadelphia County Medical Society; the Philadelphia Pediatric Society; the Philadelphia Neurological Society; the Philadelphia

Pathological Society; and is a fellow of the College of Physicians of Philadelphia. While in College he joined the Philomathean Society, the Delta Psi Fraternity, the Franklin Scientific Society, and later the Phi Beta Kappa Fraternity. He married Julia E., daughter of Barton Howard Jenks (Class of 1846).

SCHELLING, Felix Emmanuel, 1858-

Professor History and English Literature.

Born in New Albany, Ind., 1858; graduated Univ. of Pa., 1881; LL.B., 1883; A.M., 1885; Ph.D., Franklin and Marshall, 1898; practicing lawyer until 1886; Inst. in English at the University, 1886-89; Asst. Prof. Eng. Lit., 1889-91, and Prof., 1891-93; John Welsh Centennial Prof. of History and Eng. Lit. since 1893; author and Editor.

FELIX EMMANUEL SCHELLING, Author and Editor, was born in New Albany, Indiana, September 3, 1858, son of Felix and Rose (White) Schelling. He entered the University of Pennsylvania as a Sophomore in 1887, became Chairman of the Class Record Committee and Class Poet, and graduated Bachelor of Arts in 1881; he took the Master's degree in 1885. His graduation from the College Department was followed by law study, and graduating Bachelor of Laws in 1883, he engaged in practice in Philadelphia. After three years, however, he abandoned the law profession and accepted an appointment to the teaching force of the University, where he has held successively the positions of Instructor in English 1886-1889, Assistant Professor of English Literature 1889-1890, Professor of the same 1890-1893, and John Welsh Centennial Professor of History and English Literature since 1893. Professor Schelling has published the following literary works: *Poetic and Verse Criticism of the Reign of Elizabeth*; *The Discoveries of Ben Jonson*; *Life and Writings of George Gascoigne*; *A Book of Elizabethan Lyrics*, a *Book of Seventeenth Century Lyrics*, *The English Chronicle Play*, and numerous articles contributed to different periodicals. In College he was a member of the Philomathean Society and the Phi Kappa Psi Fraternity and Phi Beta Kappa. He married Caroline, daughter of James Alexander Derbyshire of Philadelphia.

PENNIMAN, Josiah Harmar, 1868-

Asst. Prof. English and Dean of College 1897-

Born in Concord, Mass., 1868; graduated A.B. Univ. of Pa., 1890; Ph.D. Univ. of Pa., 1895; Inst. in English at the University 1891-96; Asst. Prof. of English Lit.

and Dean of the College Faculty since 1897; Lect. in University Extension Society, Philadelphia Dist.

JOSIAH HARMAR PENNIMAN, Ph.D., Dean of the College Faculty, was born in Concord, Massachusetts, July 20, 1868, son of James Lanman and Maria Davis (Hosmer) Penniman. Entering the College Department of the University in 1886, he became Moderator of the Philomathean Society, Editor-in-Chief of the *Pennsylvanian* and a member of the Class Record Committee, and being awarded the Freshman Greek prize of the first rank and the Junior Greek and Mathematics prizes,



JOSIAH H. PENNIMAN

graduated as Valedictorian of the Class of 1890. In 1895 he received the degree of Doctor of Philosophy from the University of Pennsylvania. In 1891 he was appointed to the teaching force of the University in the capacity of Instructor in English, and in 1896 he was advanced from that position, and made Assistant Professor of English Literature and Vice-Dean of the College Faculty. In 1897 he was made Dean of the College Faculty. He is also Lecturer to the University Extension Society in the Philadelphia District. Dr. Penniman is a member of the Phi Kappa Psi and Phi Beta Kappa fraternities. An important part of Dr. Penniman's work in the English Department is a course on the development of the English novel.

SMITH, Walter George, 1854-

Trustee 1891-

Born in Mackochee, Logan Co., O., 1854; graduated Univ. of Pa., 1873; graduated Law Dept. of the Univ., 1877; practicing lawyer in Philadelphia; Pres. Law Acad. of Philadelphia, 1880; Trustee of the Univ. since 1891.

WALTER GEORGE SMITH, Lawyer, was born in Mackochee, Logan county, Ohio, November 24, 1854, son of Brevet Major-General Thomas Kilby and Elizabeth Budd (McCullough) Smith. He is a graduate of both the College and Law Departments of the University of Pennsylvania, the degree of Bachelor of Arts having been received at graduation in 1873, that of Master of Arts in 1876 and that of Bachelor of Laws in 1877. He delivered the Law Oration at graduation. In both departments Mr. Smith was President of his class in the Senior year. He was admitted to practice at the Philadelphia Bar in 1877, and has followed his profession in Philadelphia, since 1879, having been engaged in general practice. Since 1891 he has served the University as one of its Board of Trustees. He was President of the Law Academy of Philadelphia. Mr. Smith was a member of the Zelosophic Society, the Phi Kappa Sigma Fraternity, and the Central Committee of Alumni, and by inheritance he belongs to the Military Order of the Loyal Legion. He delivered the Oration before the Phi Beta Kappa Society in 1899, and was elected an honorary member. He married Elizabeth Langstroth, daughter of Francis A. Drexel of Philadelphia; she died in 1890.

University of Pennsylvania, and also entered the Law School of the University. He devoted himself to teaching, first, Latin and Higher Mathematics in the High School, Pleasantville, Pennsylvania 1876-1877, and then as Superintendent of Schools, North East, Pennsylvania 1878-1882. He was Professor of History, Social Science and Literature in the Philadelphia Central Manual Training High School 1886-1890, and at the same time Lecturer in American History at the University of Pennsylvania. In 1891 the Chair of American Constitutional History was created for him, which he



FRANCIS N. THORPE

THORPE, Francis Newton, 1857-

Professor American Constitutional History 1891-1898.

Born in Swampscott, Mass., 1857; Ph.D., Syracuse Univ., 1883; admitted to the Bar, Erie, Pa., 1885; Fellow of Wharton School, Univ. of Pa., 1885-87; Lect. in Amer. Hist. and Civil Govt. at the University, 1886-90; Prof. Amer. Constitutional Hist., 1891-98.

FRANCIS NEWTON THORPE, Ph.D., was born in Swampscott, Essex county, Massachusetts, April 16, 1857, son of Judah Welles and Rosanna (Porter) Thorpe. He was educated at the Lake Shore Seminary, North East, Pennsylvania, and Syracuse University, receiving the degree of Doctor of Philosophy from the latter institution after two years' post-graduate work in 1883. In 1885 he was admitted to the Bar at Erie, Pennsylvania, and in that year became Fellow in History and Political Economy in the Wharton School,

filled until his resignation in September 1898. It was due to Professor Thorpe's efforts that the Library of American History (15,000 volumes) was obtained for the University (1889-1893). Professor Thorpe has published: *The Government of the People of the United States*, 1889; *The Story of the Constitution*, 1891; *Benjamin Franklin and the University of Pennsylvania*, 1893; *The Government of the People of the State of Pennsylvania*, 1894; *A Short Course in Civil Government*, 1894; *The Constitution of the United States with Index and Bibliography*, 1895; *A Constitutional History of the American People*, 1776-1850, 2 vols., 1898. He has in press a *Biography of William Pepper, M.D., LL.D.*, and *A Constitutional History of the*

United States, 1760-1895, 2 vols. He has contributed many articles on economic and historical subjects, chiefly in *The Atlantic Monthly*, *The Century Magazine*, *Harper's Magazine*, *The Annals of the American Academy*, *Education*, *The Chautauquan*, *The Magazine of American History*, *The American Law Register and Review*, *The Revue du Droit Public, et de la Science Politique en France et à l'Étranger* and *The Philadelphia Press*. He was active in University Extension 1890-1898, and has delivered many public lectures in American history at various institutions.

HARRISON, Alfred Craven, 1846-

Benefactor.

Born in Philadelphia, 1846; graduated Univ. of Pa. 1864; A.M. in course; engaged in sugar refining business; member 1st Troop Philadelphia City Cav., 1863; one of the founders and donors of the John Harrison Laboratory of Chemistry, 1892.

ALFRED CRAVEN HARRISON, Benefactor, was born in Philadelphia, February 20, 1846, son of George Leib Harrison, LL.D., and Sarah Ann (Waples) Harrison. Entering the University of Pennsylvania in 1860 he took up a course of academic study and in 1864 graduated with the degree of Bachelor of Arts, receiving the Master of Arts degree in course. While in College he was a member of the Philomathean Society and the Zeta Upsilon Fraternity. Since graduation he has been engaged in the sugar refining business in Philadelphia. Mr. Harrison's loyalty to his Alma Mater found worthy expression when, in conjunction with his brothers, Charles C. Harrison and William H. Harrison, he became a donor of the John Harrison Laboratory of Chemistry. This building, which was erected in 1892, was so called in memory of the grandfather, John Harrison, the founder of the industry of Chemical Manufactures in the United States. During the emergency in 1863, Mr. Harrison was a member of the First Troop of Philadelphia City Cavalry. He married Kate de Forest, daughter of William Crawford Sheldon.

MARBURG, Edgar, 1864-

Professor Civil Engineering 1892-

Born in Hamburg, Germany, 1864; attended schools in Louisiana; graduated, C.E. at Rensselaer Polytechnic Inst., 1885; for seven years Technologist with leading Bridge Building and other Industrial com-

panies; Prof. Civil Engineering in the University, since 1892.

EDGAR MARBURG is of German ancestry; he was born in Hamburg, Germany, March 4, 1864. He was educated as a boy at private schools in New Orleans and Shreveport, Louisiana. Later he entered the Rensselaer Polytechnic Institute at Troy, New York, and was graduated from that school with the degree of Civil Engineer in 1885, completing the four-year course in three years. For seven years after graduation he was engaged in active professional practice. He was employed



EDGAR MARBURG

successively in the engineering departments of the Keystone Bridge Company, at Pittsburg, the Phoenix Bridge Company at Phoenixville, Pennsylvania, the Edgemoor Bridge Works at Wilmington, Delaware, and the Carnegie Steel Company at Pittsburg and Chicago. In 1892 he was appointed Acting Professor of Civil Engineering at the University of Pennsylvania, becoming full titular Professor of this subject in the following year. In 1898, under commission from the United States Corps of Engineers, he prepared designs for a massive steel, cantilever-arch bridge, over Rock Creek, on the line of Massachusetts Avenue, Washington, District of Columbia, published in Senate Document No. 163, 55th Congress, 2nd Session. Professor Marburg is

identified with a large number of scientific bodies. He is a member of the American Society of Civil Engineers, the International Association for Testing Materials, the Society for the Promotion of Engineering Education, the Engineers' Club of Philadelphia, the Franklin Institute, the Rensselaer Society of Engineers, and the Pennsylvania Forestry Association. He was Chairman of the Committee on Science and the Arts at the Franklin Institute in 1899, and is at the present time President of the Engineers' Club of Philadelphia and Secretary of the Society for the Promotion of Engineering Education. He was married to Fanny Dulany Moncure in 1893, and has one son and three daughters.

ROWE, Leo Stanton, 1871-

Asst. Professor Political Science 1892-

Born in McGregor, Iowa, 1871; graduated, Ph.B., Univ. of Pa., 1890; Ph.D. Univ. of Halle, Germany, 1892; Asst. Prof. Political Science at the University since 1892; Commissioner to Revise Laws of Porto Rico, 1900.

LEO STANTON ROWE, Ph.D., was born in McGregor, Iowa, September 17, 1871, son of Louis and Kathe (Raff) Rowe. He entered the Arts Department of the University as a Sophomore in 1887, but later transferred to the Wharton School of Finance and Economy, and at graduation in 1890, received the degree of Bachelor of Philosophy. Then as a Fellow of the Wharton School with the privilege of foreign study, he spent two years in Germany, and took the Doctor's degree at the University of Halle in 1892. He then spent one year in France, and one year in Italy and England. Upon his return he was appointed to his present position in the University as Assistant Professor of Political Science. Mr. Rowe has published in the *Annals of the American Academy of Political and Social Science*: *Instruction in Public Law and Economics in Germany*, July and October 1890; *Instruction in French Universities, with Special Reference to Instruction in Public Law and Economics in the Law Faculties*, January 1892; *Problems of Political Science*, September, 1897; *The Municipality and the Gas Supply*, May 1898, and *The Possibilities and Limitations of Municipal Control*, An Address, May 1900; in *Palgrave's Dictionary of Political Economy*, an article on *Municipal Government and Institutions in Prussia* and an article on *Municipal Government in the United States*; in the *Proceedings of the National Municipal League*: *Factors of Efficiency on Govern-*

ment and a Report of the Committee on Municipal Program, 1898; in the *Citizen* for September 1897: *The Fourth and Fourteenth of July — A Comparative Study of American and French National Traits*; in *City and State* for January 13, 1898: *Taxation in Glasgow and English Cities*; in the *Yale Review*: *The Socialistic Municipalities of Northern France*, February 1899, and *The Political Consequences of City Growth*, May 1900; in the *Forum* for March 1899, *Influence of the War on Our Public Life*; in the *Journal of Sociology* for May 1900, *The City in History*. He is at present Editor of the *Depart-*



L. S. ROWE

ment of Notes on Municipal Government in the *Annals of the American Academy of Political and Social Science*. Mr. Rowe has recently been appointed, from nomination by President McKinley, a member of the Commission to Revise the Laws of Porto Rico.

MUNRO, Dana Carleton, 1866-

Asst. Professor History 1896-

Born in Bristol, R. I., 1866; graduated Brown Univ., 1887; teacher; Instr. De Veaux College, 1887-89; Instr. Haverford College Grammar School, 1890-93; Instr. and Asst. Prof. History, Univ. of Pa., 1893-

DANA CARLETON MUNRO, was born in Bristol, Rhode Island, June 7, 1866, the son of John B. and Abby Howland (Batt) Munro.

He received his early education in the English and Classical schools of Providence, Rhode Island, and then entered Brown University where he graduated with the Class of 1887. He was Instructor in De Veaux College from 1887 to 1889, and after pursuing graduate studies in this country and in Germany, he became Instructor in Haverford College Grammar School where he remained until 1893. He then was appointed Instructor in History in the University of Pennsylvania, becoming Assistant Professor of History in 1896. He was married July 16, 1891,



DANA CARLETON MUNRO

to Alice Gardner Beecher, and has three children: Dana Gardner, Jeannette and Caroline Walker Munro.

MACFARLANE, John Muirhead, 1855-

Professor of Botany 1893-

Born in Kirkcaldy, Scotland, 1855; graduated B.S. Univ. of Edinburgh, 1880, and D.S. 1883; Instr. Botany at Edinburgh, 1881-91; Prof. Botany Edinburgh Royal Veterinary College, 1882-91; Tutor Botany St. Georges' College, Edinburgh, 1882-89; Prof. Botany Univ. of Pa. since 1893; Director of Botanic Garden at the University since 1897.

JOHAN MUIRHEAD MACFARLANE, Sc.D. was born in Kirkcaldy, Scotland, September 28, 1855, a son of Peter and Isabella (Muirhead) Macfarlane. Peter Macfarlane was a son of Alex-

ander Macfarlane, a manufacturer of Linktown, Kirkcaldy, and a descendant of the Macfarlanes of Blairgowrie. Professor Macfarlane received his early education at private and public schools in his native place. In 1876 he entered Edinburgh University, graduating with his Class as Bachelor of Science in 1880. Deciding to make botany his special subject of study he continued in the University, taking the degree of Doctor of Science in 1883. In the meantime he was appointed Instructor in Botany in Edinburgh University, a position which he held from 1881 until 1891. In 1882 he was appointed Professor of Botany in the Edinburgh Royal Veterinary College. This position he also held until 1891. From 1882 until 1889 he was Tutor in Botany at St. Georges' College, Edinburgh, and for two years he was Lecturer on Botany in the Ladies' University Extension College. Coming to America in 1891 Dr. Macfarlane was appointed Professor of Biology in the University of Pennsylvania in 1892, and of Botany in 1893, which chair he still occupies. In 1894 he started to organize the University Botanical Garden under Provost Harrison's fostering hand and from 1897 to date he has been Director of it. Professor Macfarlane holds membership in a number of scientific societies. Since 1882 he has been a fellow of the Botanical Society of Edinburgh, and was Secretary of the society for five years from 1885. He has been a fellow of the Royal Society of Edinburgh since 1885. He is a member of the British and American Association for the Advancement of Science, the Academy of Natural Sciences of Philadelphia and the American Philosophical Society. He was President of the Society for Plant Morphology and Physiology for the year 1899. Professor Macfarlane was married in September 1887 to Emily Warburton, by whom he has five children.

WITMER, Lightner, 1867-

Lect. and Asst. Prof.

Born in Philadelphia, 1867; graduated Univ. of Pa., 1888; Ph.D. Univ. of Leipzig, Germany, 1892; Lect. on Experimental Psychology at the University, 1892- ; Asst. Prof., 1894.

LIGHTNER WITMER, Ph.D., was born in Philadelphia, June 18, 1867, son of David Lightner and Katherine (Huckel) Witmer. He entered the College Department of the University of Pennsylvania in 1884, and becoming Moderator of the Philomathean Society, was awarded its prizes for orations and essays. He also won the Matriculate Latin prize of first rank, the Matriculate Greek

prize of second rank equally with Theodore W. Kretschmann, the Sophomore Declamation prize, the Junior English prize and the Alumni Junior Declamation prize and had honorable mention for the Freshman Greek and Junior Philosophy prizes. He was elected President of his class in his Freshman year, Chairman of the Class Executive Committee, Editor of the *Pennsylvanian*, and Cremation Speaker, Junior Exhibition Speaker, Class Prophet and Valedictorian. After graduation in 1888, Professor Witmer went abroad to pursue advanced study in the University of Leipzig, and there he received the degree of Doctor of Philosophy in 1892. In the same year, returning to America, he was appointed Lecturer on Experimental Psychology at the University, and being in 1894 advanced to the position of Assistant Professor, continues in that office.

JOHNSON, Joseph French, 1853-

Professor of Journalism 1894-

Born in Hardwick, Mass., 1853; studied at Northwestern Univ.; graduated Harvard, 1878; studied in Germany; for several years an editor of the *Springfield Republican*; later with the *Chicago Tribune* and the *Spokane Spokesman*; Associate Prof. Business Practice in Univ. of Pa., 1893-94; Prof. Journalism since 1894.

JOSEPH FRENCH JOHNSON, Journalist, was born in Hardwick, Massachusetts, in 1853, son of Gardner Nye and Eliza (French) Johnson, a paternal ancestor, John Johnson, having emigrated from England and settled in Massachusetts about 1635. He was prepared for College in Jennings Seminary at Aurora, Illinois, from which he entered Northwestern University at Evanston. Passing later to Harvard he graduated as a Bachelor of Arts in 1878, subsequently studying for a short time in the University of Halle on the Saale in Germany. From 1878 to 1881 he was a teacher in the Harvard School in Chicago, but soon entered journalism, being on the editorial staff of the *Springfield, Massachusetts, Republican* for several years and afterwards serving as Financial Editor of the *Chicago Tribune*. After twelve years of a practical journalist's life he was called to the School of Finance and Economy in the University of Pennsylvania. In 1893-1894 he was Associate Professor of Business Practice and since 1894 he has been Professor of Journalism, that department of instruction having just been established in that year. Although it is a wholly new branch of University work, consider-

able success has already been attained by Professor Johnson in training College men for practical careers in newspaper offices. Professor Johnson is a member of the American Economic Association and the American Academy of Political and Social Science. He was married in 1884 to Caroline T. Stolp, and has three children.

PATTERSON, George Stuart, 1868-

Professor of Law 1893-

Born in Philadelphia, 1868; studied at Haverford College, 1884-86; graduated, Ph.B., Univ. of Pa., 1890; LL.B., 1891; Prof. of Law at the University since 1893; practicing lawyer in Philadelphia.

GEORGE STUART PATTERSON, Lawyer, was born in Philadelphia, October 10, 1868, son of Christopher Stuart Patterson of the



GEORGE STUART PATTERSON

Class of 1860, at one time Professor and Dean of the Law Department of the University, and Ellen (Stuart) Patterson. He first pursued Collegiate study at Haverford College, and entered the University as a partial student in the Junior class in 1886. After two years' work he entered the Department of Law, and while in that department received the degree of Bachelor of Philosophy, in 1890, and that of Bachelor of Laws in 1891. At graduation, receiving honorable mention for his law essay and

honorable mention for the Law Faculty prize, he was elected a Fellow of the Law Department, and in 1893 was appointed to his present position as Professor of Law. In addition to his educational work Professor Patterson is Assistant Solicitor of the Pennsylvania Railroad Company. He is a member of the Delta Psi Fraternity.

PEPPER, George Wharton, 1867-

Professor of Law 1893-

Born in Philadelphia, 1867; graduated A.B. Univ. of Pa., 1887; LL.B., 1889; Fellow of the Law Dept. of the University, 1889-92; Algernon Sydney Biddle Prof. of Law since 1893; practicing lawyer; author.

GEORGE WHARTON PEPPER, Lawyer, was born in Philadelphia, March 16, 1867, son of Dr. George and Hitty Markoe (Wharton) Pepper.



GEORGE WHARTON PEPPER

He graduated from the College Department of the University of Pennsylvania with the Bachelor of Arts degree in 1887, during his course having been Class President in his Freshman year, a member of the Class Record Committee, Editor of the Pennsylvanian and University Magazine and Spoonman and Valedictorian of the class. He also acted the principal rôle, Dikaiopolis, in the drama, The Archarnians, which was produced by the University. At graduation from the Law School in 1889, he was

the Law Orator at the Commencement Exercises, and was awarded the Sharswood and P. Pemberton Morris prizes. He entered the practice of his profession in Philadelphia, and in 1893 was appointed to the Algernon Sydney Biddle Professorship of Law. Professor Pepper has published: The Borderland of Federal and State Decisions, a treatise on Pleading at Common Law and under the Codes and the article on Pleading in the American and English Encyclopædia of Law. He married Charlotte Root, daughter of Professor George P. Fisher of New Haven, Connecticut.

CARSON, Hampton Lawrence, 1852-

Professor of Law 1894-

Born in Philadelphia, 1852; graduated, A.B., Univ. of Pennsylvania, 1871; LL.B., 1874; public speaker in all national campaigns since 1880; orator at many anniversaries; Orator of the Day at the World's Fair, Chicago, July 4, 1893; Prof. of Law in the Univ. since 1894; author on constitutional works and many writings on legal subjects; LL.D. Lafayette College, 1899.

HAMPTON LAWRENCE CARSON, LL.D., was born in Philadelphia, February 21, 1852, son of Joseph and Mary (Hollingsworth) Carson. A direct ancestor on his mother's side, Henry Hollingsworth, came to Philadelphia with William Penn on the ship Welcome. Mr. Carson's great-grandfather, Levi Hollingsworth, took a prominent part in the Revolutionary War being for a time on the staff of General Washington. Another great-grandfather, Joshua Humphreys, was the architect of the frigate Constitution, the famous "Old Ironsides" and other warships which served the United States in the naval conflict with England in 1812-1815. Mr. Carson's father, Dr. Joseph Carson, was for twenty-six years Professor of Materia Medica in the University of Pennsylvania, being the author of a History of the Medical Department of the University. On his father's side Hampton L. Carson is of Scotch-Irish stock; on his mother's side of Welsh and English. Mr. Carson was prepared for College at Dr. Faries' Classical Institute. He entered the Department of Arts in the University of Pennsylvania in 1867, graduating with the Class of 1871. Selecting for himself a legal career he read law in the office of William M. Tilghman, a grandson of Edward Tilghman, a distinguished Philadelphia leader in the olden days. He studied at the same time in the University Law School and received his degree of Bachelor of Law in 1874. Mr. Carson was not long in establishing

his claim to popularity as a public speaker. His first important oration was delivered at the University upon receiving his Master's degree in 1874, his subject being Education as a Means of Social Reform. A Republican in politics he early took the platform in the party campaigns. His first notable services of this kind were in 1878 when he eloquently denounced the evils of fiat money. He entered the National Campaign in 1880 and helped to elect President Garfield and has been a prominent figure on the stump in every Presidential struggle since that date. Some of Mr. Carson's



HAMPTON L. CARSON

principal orations must be mentioned. June 1, 1880, he spoke at a great mass meeting in Chicago against the movement for a third term for Grant: at the Bi-Centennial Anniversary of the landing of William Penn in Philadelphia he responded to the toast The Laws made by William Penn: May 20, 1886, on the One Hundred and Thirty-sixth Anniversary of the birth of Stephen Girard at a banquet at Girard College, he delivered an eloquent tribute to the work of the Philadelphia merchant and philanthropist. October 13, 1887, at a dinner during the Constitutional Centennial ceremonies in Philadelphia, Mr. Carson responded to the toast The Centennial Commission, he being the Secretary of that body. July 4, 1893, he delivered the Oration of the day before an audience of seventy thousand

people in Jackson Park, Chicago, at the invitation of the City of Chicago and the World's Fair Commission. In September 1895, he made a strong legal argument against sending the Liberty Bell to New Orleans. In 1896 he delivered the Oration at the University's celebration of Washington's Birthday in the Philadelphia Academy of Music. Mr. Carson was again Orator of the occasion at the unveiling of the Grant monument in Philadelphia April 27, 1899, an immense audience being present, among others, President McKinley, Mrs. Grant and hundreds of distinguished guests. His political, historical and commencement orations, if collected for publication, would fill several volumes. Mr. Carson has contributed many articles on legal subjects to the legal magazines, and has also made a number of careful historical studies. An important work is an elaborate treatise on the Constitution of the United States printed in two large volumes and aggregating no less than four thousand pages. This was followed by his History of the Supreme Court, the most exhaustive and elaborate of all his works, handsomely illustrated with portraits of every judge who has held a seat on the bench of the Supreme Court of the United States. He has also published a book on the Law of Criminal Conspiracies which is familiar to judges. In 1894 Mr. Carson was elected a Professor in the Law Department of the University, and continues in that office at present. He is a member of the American Philosophical Society, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the American Bar Association and the Pennsylvania Bar Association as well as several social clubs. In 1880 he married Anna Lea, a daughter of John R. Baker of Philadelphia, and has four children, two boys and two girls. Mr. Carson received the honorary degree of Doctor of Laws from Lafayette College in 1899.

BRUMBAUGH, Martin Grove, 1862-

Professor Pedagogy 1894-

Born in Huntingdon Co., Pa., 1862; B.E. Brethren's Normal College, 1881; M.E., 1883; B.S. Juniata College, 1885; M.S. 1887; County Supt. of Schools Huntingdon Co., 1884-90; Prof. Eng. Lit. Juniata, 1882-84, 1890-91; graduate student Harvard, 1891-92; Pres. Juniata College since 1892; A.M. Univ. Pa., 1893; Ph.D., 1895; Prof. Pedagogy, Univ. of Pa. since 1894; appointed Com. of Education for Porto Rico, 1900, for four years.

MARTIN GROVE BRUMBAUGH, Ph.D., Commissioner of Education for Porto Rico, was born in Huntingdon county, Pennsylvania,

in 1862. He taught in the public schools two years and graduated at Brethren's Normal College with the degree Bachelor of English in 1881 and in 1883 was made a Master of English by that institution. Continuing studies in science at Juniata College (of which he has been President since 1892) he took the Bachelor of Science degree there in 1885, and was made a Master of Science in 1887. In the meantime his active life as an educator had commenced with his service as Professor of English Literature in Juniata College, 1882-1884, and with the appointment as County Superintendent of



M. G. BRUMBAUGH

Schools in Huntingdon county; this latter office he held from 1884 until 1890. In 1890-1891 he was again Professor of English Literature at Juniata. The next year was spent in graduate study at Harvard, and in 1892 Professor Brumbaugh returned to Philadelphia to assume the duties of the Presidency of Juniata College, and to pursue further studies at the Graduate School of the University of Pennsylvania, where the degree of Master of Arts was conferred upon him in 1893, and that of Doctor of Philosophy in 1895. It was but a natural consequence of a career in which the occupations of student and teacher have been so constantly and equally mingled, that the appointment as Professor of Pedagogy came to him from the University in

1894; as much a student as teacher himself, he is eminently fitted to teach the educator's profession. Professor Brumbaugh has been for several years frequently engaged in lecturing before Teachers' Institutes in Pennsylvania, Ohio, New Jersey, Delaware, Maryland, Kentucky, Louisiana and other states. He is the author of many works on history and education. He has recently been appointed Commissioner of Education for Porto Rico, to serve during a term of four years.

HOUSTON, Henry Howard, 1820-1895.

Benefactor and Trustee 1885-1895.

Born in York Co., Pa., 1820; with D. Leech & Co., Philadelphia, 1847-51; Freight Agent Pa. Railroad, 1851; General Freight Agent, 1852-67; Director, 1881-95; Trustee of the University of Pa., 1885-95; founder of Houston Hall, dedicated 1896; died 1895.

HENRY HOWARD HOUSTON, founder of Houston Hall, was born near Wrightsville, York county, Pennsylvania, October 3, 1820, the son of Samuel Nelson and Susan (Strickler) Houston. His early life was spent in Wrightsville and Columbia. Upon leaving school he engaged in mercantile pursuits and soon became connected with the iron furnace business in Clarion and Venango counties, Pennsylvania. In 1847 Mr. Houston entered the office of D. Leech & Co., in Philadelphia. Here he learned the canal and railroad transportation business, acquiring such a mastery of all their details that he attracted the attention of Colonel William C. Patterson, then President of the Pennsylvania Railroad Company. Colonel Patterson induced him in 1851 to take charge of the freight business of the line which the company had just completed from Philadelphia to Pittsburg, consisting of the railroad to Hollidaysburg, the State Portage Road and the canal from Johnstown westward. So well did he manage the business of this road that on November 23, 1852, he was appointed General Freight Agent. The organization he effected while in this office, which he held until 1867, remains practically unchanged to-day, so thorough and far-seeing was his work. After his retirement as General Freight Agent, which was due to ill-health, Mr. Houston became one of the promoters and Managers of the Union Line and also of the Empire Line. In 1881, he was elected a member of the Board of Directors of the Pennsylvania Railroad Company and was until his death one of its most active members. He was also a Director of the Pennsylvania Company, the Pittsburg, Cincinnati, Chicago and

St. Louis Railway Company and of many of the subordinate organizations of the Pennsylvania Railroad Company. Mr. Houston became a Trustee of the University of Pennsylvania in 1885 and held the position until his death. Among his many donations to the University the greatest was that of Houston Hall, the recreation hall for the students. This was erected at a cost of \$100,000 as a memorial to his son, Henry Howard Houston, Jr., a member of the Class of 1878, who died while traveling in Europe. Begun during Mr. Houston's lifetime the hall was not finished until six months after his death, being formally dedicated January 2, 1896. Mr. Houston was a Trustee of Washington and Lee University. He was married to Sarah S. Bonnell in 1856. He died June 21, 1895, at his country-place at Wissahickon Heights, just outside of Philadelphia.

[Portrait on page 174.]

ELLCOTT, Eugene, 1846-

Assistant to Provost.

Born in Baltimore, Md., 1846; appointed to U. S. Coast Survey, 1864; resigned from Coast Survey with rank of Asst. in 1890; admitted to the Bar, 1891; called to the University in 1895; now Assistant to the Provost.

EUGENE ELLCOTT, Assistant to the Provost, was born in Baltimore, Maryland, December 8, 1846, a descendant of a Maryland family. His parents were Benjamin and Mary (Carroll) Ellicott, his father being a son of Elias Ellicott, a descendant of the founder of Ellicott City, and one of the Founders of the Baltimore & Ohio Railroad, who married Mary Thomas, a sister of Philip E. Thomas, the first President of the Baltimore & Ohio Railroad Company. On his mother's side Eugene Ellicott is a descendant, a great-great-grandson, of Daniel Carroll, a member of the convention which framed the Constitution of the United States, also a member of the Commission (of three) appointed by Washington to decide on a plan for the Capital City. His education was secured in private schools, in Maryland, and in 1864 when he was but eighteen years old, he was appointed as an Aide in the service of the United States Coast Survey. This was the time of the Civil War and he was engaged for a period on the defences of Baltimore and Washington. In June 1865, he returned to Coast Survey duty being engaged at one time or another during his long term of service on almost every part of the Atlantic and Pacific coasts of the United States. He has had

charge of many important engineering works taking part in the San Juan Boundary Line Survey in 1871 to determine the northwestern frontier. He had charge of the work of determining the boundary line between Maine and New Brunswick 1887-1889. In 1883 he made a survey for a Fishway over the Falls of the Potomac. Mr. Ellicott resigned from the Coast and Geodetic Survey with the rank of Assistant in April 1890. He took up his residence in West Virginia and in 1891 was admitted to the Bar. His connection with the University dates from February 1895, and his position now is that of



EUGENE ELLCOTT

Assistant to the Provost. During the Spanish American War he served as Captain in the First Regiment of United States Volunteer Engineers, in Porto Rico (and on special duty in Cuba) where he had charge of various engineering details of importance to the military administration of the island. Mr. Ellicott belongs to a number of societies and clubs, among others, the Sons of the Revolution, the Society of American Wars, the Naval and Military Order of the Spanish-American War, the Metropolitan Club of Washington, District of Columbia, and the University Club of Baltimore. He was married in 1877, to Margaret Ingersoll, daughter of Richard W. Tyson of Baltimore. She died in 1890, leaving two daughters: Mary Carroll and Margaret

Tyson Ellicott. Mr. Ellicott was again married in June 1895, his second wife being Eleanor Cuyler Patterson, of Philadelphia.

PENROSE, Charles Bingham, 1881-

Professor Gynæcology 1893-

Born in Philadelphia, 1862; graduated Harvard 1881; and Ph.D. and A.M. (Phys.), 1884; graduated Univ. of Pennsylvania Medical School, 1884; Prof. of Gynæcology at the Univ. since 1893.

CHARLES BINGHAM PENROSE, M.D., Ph.D., was born in Philadelphia, son of Richard A. F. and Sarah H. B. Penrose. After



CHARLES B. PENROSE

preliminary education with private tutor he entered Harvard, where he graduated with the degree of Bachelor of Arts in 1881. For professional study he entered the Medical School of the University of Pennsylvania, and upon graduation there in 1884 he also received the degrees of Doctor of Philosophy and Master of Arts in Physics from Harvard. Since 1893 Dr. Penrose has been Professor of Gynæcology in the Medical School of the University, at the same time conducting an extensive practice in Philadelphia. The father of Dr. Penrose, Dr. Richard A. F. Penrose, LL.D., is Emeritus Professor of Obstetrics and Diseases of Women and Children in the University.

FRAZIER, William West, Jr., 1858-

Trustee 1894-

Born in Montevideo, S. A., 1839; graduated Univ. of Pa., 1858; business; Trustee of the University since 1894.

WILLIAM WEST FRAZIER, Trustee, was born in Montevideo, South America, August 27, 1839, son of Benjamin West Frazier and Isabella Frazier. He entered the University of Pennsylvania in 1855, and while in College became Moderator of the Philomathean Society. Mr. Frazier has been a Trustee of the University since 1894. He married Harriet Morgan, daughter of George L. Harrison.

LEWIS, William Draper, 1867-

Dean of Law School 1896-

Born in Philadelphia, 1867; graduated B.S. Haverford College, 1888; appointed Fellow in Univ. of Pa., 1889; received degrees of Ph.D. and LL.B. from Univ. of Pennsylvania, 1891; Lecturer on Economics in Haverford College, 1890-96; Instructor in the Univ., 1893-96; Dean of the Univ. Law School since 1896; author of economic writings and editor of many important legal works.

WILLIAM DRAPER LEWIS, Ph.D., Dean of the Law School of the University, was born in Philadelphia, April 27, 1867. He is a son of Henry Lewis, and on his father's side is of Puritan New England lineage, being a direct descendant of the Winslow family which came to this country in the Mayflower in 1620. His mother was of Pennsylvania Quaker stock. He prepared for College at the Germantown Academy and the Penn Charter School, entering Haverford College in 1884, from which he was graduated in 1888, receiving the degree of Bachelor of Science. In the autumn of 1889 he was appointed a Fellow in Economics in the University of Pennsylvania, at the same time matriculating in the University Law School. In 1891 he simultaneously received the degrees of Doctor of Philosophy and Bachelor of Laws from the University, both of these degrees following upon examinations which were passed with much distinction. In the Law School he was awarded the Sharswood prize for the best essay on the subject Federal Power over Commerce and its Effect on State Action. Upon graduation he at once opened a law office in Philadelphia, and in association with George Wharton Pepper undertook the editorship of the American Law Register and Review. At the same time he was appointed Lecturer on Economics at Haverford College, a position which he held until 1896. In

1893 he was appointed an Instructor in the Subject of Legal Institutions in the Wharton School of Finance and Economy of the University. This course he continued to conduct until 1896 in which year he was elected Dean of the University Law School to succeed Professor C. Stuart Patterson. In the few years which have intervened since his elevation to this position radical changes and improvements have been made in the school. Many of these have been brought about almost entirely through Dr. Lewis' assiduous personal efforts. The most notable of these changes has been the erection and equipment of a large new Law School Building in the University of Pennsylvania group in West Philadelphia. In 1895 the school occupied but a few rooms in the Old Court House Building down town at Sixth and Chestnut Streets. To-day the school has what is considered to be the best equipped and most spacious structure devoted exclusively to the teaching of law in the United States. The entrance requirements in that period have also been materially raised. At the present time in order to matriculate in the School a student must have a College training or its proven equivalent. In 1895 the Department had but nineteen hours a week on the roster, and to-day including the quizzes there are almost ninety. At the same time the teaching force has been increased from eleven to eighteen. While there were only nine thousand volumes in the Law Library in 1895 it now contains no less than twenty-five thousand. The school supports a legal magazine which is published by the Faculty and the students of the Law Department. It would be possible to name many other improvements in the work of the Department which have been due in large degree to the untiring activity of its new Dean. Dr. Lewis is the author of *Federal Power over Commerce and its Effect on State Action*; *Our Sheep and the Tariff*; as well as numerous articles on legal, economic and historical topics. He is the Editor of the new editions of *Greenleaf's Evidence*, three volumes; *Wharton's Criminal Law*, two volumes; *Blackstone's Commentaries*, four volumes; *Digest of Decisions of United States Supreme Court and Circuit Court Appeals Reports*, one volume, and is co-Editor with George Wharton Pepper of *Pepper and Lewis' Digest of Pennsylvania Statutes*, three volumes, and also of a *Digest of Decisions and Encyclopædia of Pennsylvania Law*, about twelve volumes, six of which are in type. He was a member of the Advisory Board of *Kaiser's World's Best Orations* and is one of the Editors of the Board

which is at present editing the *Hundred Best Essayists*. Dr. Lewis was at one time officially connected with the Municipal League of Philadelphia. He was for a time the President of the Haverford Alumni Society and a Trustee of the public schools of Germantown. He is a member of several learned societies and the University and Faculty clubs of Philadelphia. In 1892 he married Caroline Mary Cope; they have three children.

QUINN, Arthur Hobson, 1875-

Instructor English 1895-

Born in Philadelphia, 1875; graduated Univ. of Pa., 1894; Ph.D. 1899; Instructor in Mathematics at the University, 1894-95; Instructor in English, 1895-; author of *Pennsylvania Stories*, etc.

ARTHUR HOBSON QUINN, Ph.D., was born in Philadelphia, February 9, 1875, the son of Michael Aloysius and Mary (MacDon-



ARTHUR H. QUINN

ough) Quinn. He graduated from the Arts Department of the University of Pennsylvania in 1894, taking Honors for all four years, and winning the H. La Barre Jayne Prize in English, Freshman Year, the Second Prize in Mathematics, Junior Year, and the Henry Reed Prize in English and Faculty German Prize in Senior Year. He also took an active interest in Class and University affairs, being

Editor-in-Chief of the Red and Blue, Senior Secretary of his Class, Class Poet, Secretary of the Zelosophic Society, and serving on the Class Record and other important committees. He was also a member of the Beta Theta Pi Fraternity and the Phi Beta Kappa Society. Upon graduation he was appointed Instructor in Mathematics at the University and was transferred in 1895 to the position of Instructor in English which he still occupies. During the academic year 1897-1898 he obtained leave of absence and spent the time in advanced work in modern philology at the University of Munich, Bavaria. In 1899 he obtained the degree of Doctor of Philosophy from the University of Pennsylvania. Dr. Quinn is the author of *Pennsylvania Stories*, a series of short stories dealing with life at the University, and has contributed at various times to *The Saturday Evening Post*, *Life*, *The Youth's Companion*, etc. He has also in press a critical edition of George Eliot's *Silas Marner*. He is a member of the Modern Language Association of America, and of the Faculty, Bibliographical, Writeabout and Mount Airy County clubs, and is a Mitglied des Akademisch-dramatischen Vereins zu München.

SOMMERVILLE, Maxwell, 1829-

Professor Glyptology 1894-

Born in Philadelphia, 1829; graduated Central High School, Philadelphia; entering the publishing business he later became a traveller and collector of gems; his celebrated collection deposited with the Univ. of Pa.; Professor of Glyptology in the University since 1894; author of works descriptive of his labors and his travels.

MAXWELL SOMMERVILLE, born in Philadelphia, May 1, 1829, is of Virginia parentage. He graduated at the Central High School of Philadelphia in 1847. After some experience with the publishing business which fortunately resulted in the acquisition of considerable wealth, he went to reside in Europe where much of his later life has been spent. He formed a desire to study gem archæology and soon began the collection of engraved gems of which he secured a great and remarkable variety. In the pursuit of his purpose he frequently travelled in Turkey, Syria, Egypt, the Libyan Desert, China, Japan, India, Burmah, Siam and other countries. For more than thirty years he sought these treasures, and many gems of great antiquity and beauty came into his possession. In 1886 Professor Sommerville began to re-classify and remount in cases his valuable accumulations, then

grown so large as to be celebrated among the large collections of the world. The gems represent nearly all ancient countries and almost all centuries. For three years they were exhibited in the Metropolitan Museum of Art in New York, after which time they were transferred to the Archæological Museum of the University of Pennsylvania. Year by year the collection has increased in size, one of the latest acquisitions being a large cameo representing the Triumph of Constantine, with Helena, Crispus and Fausta dating from the fifth or sixth century A.D. It had once been the property of Catherine II.



MAXWELL SOMMERVILLE

of Russia. In 1894 Professor Sommerville was appointed to his present position in the Professorship of Glyptology in the University. He belongs to a number of learned societies, among them the American Oriental Society, the Academy of Natural Sciences of Philadelphia, the Historical Society of Pennsylvania and the Numismatic and Antiquarian Society of Philadelphia. He is a corresponding member of the Société Académique des Sciences, Arts et Belles Lettres du Département de L'Aube, France. In 1889 Professor Sommerville issued *Engraved Gems*, a catalogue of his collection, containing over five hundred engravings of the finer examples. A prefix contains an account of the author's travels in quest of the treasures which he describes with a

history of engraved gems and the place they occupy in art. Many illustrations from the author's own hand accompany this part of the work. In 1897 Professor Sommerville published *Siam on the Meimam from the Gulf to Ayuthia*, which is a description of his journeys in Siam. He has also published monographs on the engraved gems *Jupiter Aegiochus*, *Constantine*, and *Grand Cameo of France*, and has in press *Sands of Sahara*, a description of his travels in Algeria, *Kabylia* and the *Desert of Sahara*. Professor Sommerville has created and installed an *East Indian Hindu Museum* and has erected and equipped a *Buddhist temple* in the *Museum of the University of Pennsylvania*, which is a representative type of houses of worship in the East.

NEWBOLD, William Romaine, 1865-

Asst. Prof. Philosophy 1894- , Dean Faculty of Philosophy (Graduate School) 1896-

Born near Wilmington, Del., 1865; A.B. Univ. of Pa., 1887; Ph.D., 1891; Instr. in Latin Univ. of Pa., 1889-91; Lect. in Philosophy, 1890-94; Asst. Prof. Philosophy since 1894; Dean of Faculty of Philosophy (Grad. School,) since 1896; author of philosophical writings.

WILLIAM ROMAINE NEWBOLD was born near Wilmington, Delaware, November 20, 1865, the son of William Allibone and Martha Smith (Baily) Newbold. He is eighth in descent from Michael Newbould, who came from Sheffield Park, Yorkshire, England, about 1680 to Burlington, New Jersey, this Michael being himself sprung of a family of yeomen which had been settled in the parish of Beighton, County Derby, at least from the beginning of the fifteenth century. William Romaine Newbold received his early education at the Cheltenham Military Academy entering in 1877 and graduating in 1883. He entered the Sophomore Class of the University of Pennsylvania in 1884 and received the degree of Bachelor of Arts in 1887. Immediately upon graduation he accepted the position of teacher of Latin in the Cheltenham Military Academy, remaining there two years. In 1889 he became Instructor in Latin in the University of Pennsylvania and taught for two years. He received the additional title of Lecturer in Philosophy in June of 1890. In 1887 he also entered the Graduate School of the University and received the degree of Doctor of Philosophy in June 1891 with a major in Philosophy. His thesis was entitled *Prolegomena to a Theory of Belief*. In 1891 he resigned his Instructorship in Latin and went to Europe for travel and to study at the University of

Berlin. He returned to the University of Pennsylvania, September 1892, and took up his duties as Lecturer in Philosophy. In 1894 he was advanced to an Assistant Professorship in the same subject and in 1896 was appointed Dean of the Faculty of Philosophy, i. e. of the Graduate School, a position which he still holds. He was elected a member of the University Club of Philadelphia in April 1893, resigning in 1896. He is a member of the American Psychological Association, of the Classical Club of Philadelphia, and of the Bibliographical Club of the University. In the years 1893 to 1898 he published



WILLIAM R. NEWBOLD

many articles and reviews dealing for the most part with suggestibility, automatism and kindred phenomena. The more important are a series of thirteen papers which appeared in the *Popular Science Monthly* between December 1895 and February 1897, which gave the first fairly complete survey of the subject from the psychological point of view which had appeared in English. Other writings are: *Experimental Induction of Automatic Processes*, *Psychical Review*, July 1895; *Subconscious Reasoning*, *Proceedings of the Society of Psychical Research*, June 1896; *Record of Observations of Certain Phenomena of Trance*, *Proceedings of the Society for Psychical Research*, December 1898. From March 1895 to March 1896, Mr. Newbold was the Editor of the *Psychological De-*

partment of the American Naturalist. Mr. Newbold married in Boston, Massachusetts, April 9, 1896, Ethel Sprague Kent, only daughter of Rev. George T. and Anna (Sprague) Packard.

TOWNSEND, Charles Cooper, 1867-

Professor of Law 1894-1899.

Born in Overbrook, Pa., 1867; graduated Univ. of Pa., 1887; LL.B., 1891; Fellow in the Law Dept. of the University, 1891-94; Prof. of Law, 1895-1899; practicing lawyer.

CHARLES COOPER TOWNSEND, was born in Overbrook, Montgomery county, Pennsylvania, April 20, 1867, son of Joseph Brevitt and



CHARLES C. TOWNSEND

Ada Eliza (Barton) Townsend. He joined the College Department of the University of Pennsylvania in 1883, became Cremation Speaker and Class Presenter and graduated Bachelor of Arts in 1887. During his course in the Law Department he was for three consecutive years, 1889, 1890 and 1891, awarded the Faculty prize for the best general examination average and in 1891 he graduated with the degree of Bachelor of Laws. He was at once appointed to a Fellowship in the Law Department, which he held until 1894. In 1894 he was elected Professor of Law in the University, but resigned in 1899 owing to stress of outside work. He conducts a general practice of law in Philadelphia, where he

is a member of the Philadelphia and University clubs, and a Trustee of Jefferson Medical College.

CONKLIN, Edwin Grant, 1863-

Professor of Zoölogy 1896-

Born in Waldo, O., 1863; graduated B.S., Ohio Wesleyan Univ., 1885; A.B., 1886; A.M., 1889; Ph.D., Johns Hopkins, 1891; Prof. of Biology at Ohio Wesleyan Univ., 1891-94; Prof. of Zoölogy at Northwestern Univ., 1894-96; Prof. of Zoölogy at Univ. of Pa., 1896.

EDWIN GRANT CONKLIN, Ph.D., was born in Waldo, Ohio, November 24, 1863, son of Abram Virgil and Maria (Hull) Conklin, the latter a daughter of Colonel Nathaniel Hull. Professor Conklin attended the public schools near his home and later entered the Ohio Wesleyan University at Delaware, Ohio, from which institution he was graduated with the degree of Bachelor of Science in 1885. He received the degree of Bachelor of Arts from the same College in 1886 and that of Master of Arts in 1889, having in the meantime held an appointment as Professor of Latin and Greek at Rust University in Holly Springs, Mississippi. Later he took a post-graduate course at Johns Hopkins University in Baltimore where he was a Fellow in 1890-1891 and where he received the degree of Doctor of Philosophy at the conclusion of his studies in 1891. He at once accepted the position of Professor of Biology at his Alma Mater the Ohio Wesleyan University, where he remained until 1894. In that year he transferred his services to the Northwestern University as Professor of Zoölogy remaining there for two years. In 1896 he went to the University of Pennsylvania to occupy the Chair of Zoölogy in the Biological School. He is a member of the staff of the Marine Biological Laboratory at Woods' Hole, Massachusetts, a position which he has held since 1891, having also been a Trustee of the Laboratory since 1897. Professor Conklin is a member of a large number of learned societies; the American Philosophical Society, the Academy of Natural Sciences of Philadelphia, the American Society of Naturalists, the American Society for the Advancement of Science and the American Morphological Society being among the number. Of the last named he was elected President in 1899. He married Bella Adkinson, June 13, 1889, by whom he has two children, Paul and Mary Conklin. Professor Conklin resides in Philadelphia and in the course of his biological studies and investigations has written many useful monographs and contributed interesting articles to the magazines.

CRYER, Matthew Henry, 1840-

Asst. Prof. Oral Surgery 1896-1899, Professor 1899-

Born in Manchester, England, 1840; came to this country, 1851; served during Civil War with Ohio troops, and won rank of Major; graduated Philadelphia Dental College, 1876; M.D. Univ. of Pa., 1877; Lecturer on Prosthetic Dentistry and Demonstration of Anatomy at Philadelphia Dental College, 1880-81; Asst. Prof. of Oral Surgery at the University, 1896-99, and Professor since 1899.

MATTHEW HENRY CRYER, M.D., D.D.S., was born in Manchester, England, in 1840, son of Henry and Elizabeth Cryer. At the age of eleven years he came to the United States and



MATTHEW H. CRYER

while a boy was educated in Ohio. In 1861 he entered the service of the Northern Army as an unenlisted volunteer in the Sixth Ohio Cavalry Regiment and was in active service throughout the war, winning a notably brilliant record and rising from the ranks to the position of Major. The record of his service includes participation in the following engagements: Shenandoah Valley, Suray Valley, Culpeper, White Sulphur Springs, the Second Bull Run, Chantilly, Wilderness, Trevillian Station, Mallory's Cross Roads, St. Mary's Church, Reams's Station, Deep Bottom, Rowanta Creek, Boydton Plank Road, Fort Steadman, Dinwiddie, Jetterville, Sailor's Creek, Appomattox Station and Appomattox Court House. At Deep Bottom he was wounded in the

leg and obliged to remain in the hospital three months, and received several other wounds, which did not disable him for service. At St. Mary's Church two horses were shot under him. He was commissioned Major, April 8, 1865, and the following day was granted the honor of starting Grant's last fight with Lee. After the war Dr. Cryer took up studies to prepare for the dental profession, and received the degree of Doctor of Dental Surgery at the Philadelphia Dental College in 1876, the following year graduating from the Medical Department of the University of Pennsylvania. Before coming to the teaching force of the University he had been for twenty years connected with the Philadelphia Dental College as Lecturer on Prosthetic Dentistry and Demonstrator of Anatomy, and during sixteen years of that time he had been Assistant Professor to Professor Garretson, the eminent oral surgeon. In 1896, when the department of Oral Surgery was instituted at the University, Professor Cryer was appointed Assistant Professor of Oral Surgery and in 1899 he was advanced to full Professorship. Among many important writings chiefly on the subject of the anatomy of the head may be mentioned *The Anatomy of the Head and Face*, a chapter in the *American System of Dentistry*, and *The Development of Tooth-Enamel*. These published reports of his investigations mark a decided contribution to the previously existing knowledge of the subjects. He has materially added to the efficacy of the Bonwill Surgical Engine by the work of invention which he had done upon it. For many years Dr. Cryer has been widely known as a lover of finely bred horses and dogs, immediately after the war devoting his time until 1874 to importing and raising blooded stock. He was the owner of the celebrated Lobelin, and has bred and trained many other well-known thoroughbreds. At bench shows he is a reputed breeder and judge of Pugs and Toys, though he has had much experience with other breeds, having been at one time an importer of grey-hounds, importing in 1870 the foreign prize-winners Saladin and Bettelheim. He has also hundreds of prizes, won by his chickens and finely bred pigs. He is a member of the Academy of Stomatology, the American and Pennsylvania Dental Societies, the American Medical Association, the Union League Club of Philadelphia, the Military Order of Loyal Legion and American Kennel Club. In the dental societies he has been an active worker, and was recently President of the Academy of Stomatology.

GUDEMAN, Alfred, 1862-

Associate Professor Classical Philology 1893-

Born in Atlanta, Ga., 1862; graduated Columbia, 1883; Ph.D. Univ. of Berlin, 1888; Reader in Classical Philology at Johns Hopkins, 1890-93; Associate Prof. Classical Philology in Univ. of Pa., since 1893; author of a number of Latin Text Books, and an officer of the American Archæological School in Rome.

ALFRED GUDEMAN was born in Atlanta, Georgia, August 26, 1862. He received his early education in private schools, fitting for Columbia University where he received the Bachelor of Arts degree in 1883. Afterwards he went



ALFRED GUDEMAN

abroad to pursue post-graduate work at Berlin, where he took his Master of Arts and Doctor of Philosophy *magna cum laude*, in 1888, with a dissertation entitled *De Heroidum Ovidii Codice Planudeo*, he being the first American to receive a Doctor's degree in the Classics at the University of Berlin. From 1890 to 1893 Dr. Gudeman held the position of Fellow by Courtesy and Reader in Classical Philology in Johns Hopkins University. In 1893 he was called as Associate Professor of Classical Philology to the University of Pennsylvania, his present position. Professor Gudeman is the author of several books and numerous articles in Classical journals. His *Outlines of the History of Classical Philology* reached its third edition in

1897. Among his other works are: *P. Cornelii Taciti Dialogus de Oratoribus*, with *Prolegomena*, *Critical Apparatus*, *Exegetical and Critical Notes*, *Bibliography and Indexes*, published in 1894; *Latin Literature of the Empire*, selected with revised texts and brief introductions, in two volumes, one devoted to prose and the other to poetry; three volumes of *Tacitus in the Allyn and Bacon College Latin Series*, *Dialogus de Oratoribus*, *Agricola* and *Agricola and Germania*. Dr. Gudeman is a member of the American Philological Association, the Modern Language Association, the American Institute of Archæology, the Delta Chapter (Columbia) of the Phi Beta Kappa Society; the Bibliographical, the University, the Faculty, and the Classical Club (all of Philadelphia), of which last he is the founder (1895) and Secretary. He is also a member of the Executive Committee of the Managing Committee of the American Archæological School in Rome.

LEWIS, Morris James, 1852-

Trustee 1896-

Born in Philadelphia, 1852; graduated in Arts at Univ. of Pa., 1871, and in Medicine, 1874; Ph.D., 1874; Resident Phys. to Pa. Hosp., 1874-75; Dispen. Phys. to Children's Hosp. and to Pa. Hospital; Asst. Phys. to Orthopædic Hosp.; Phys. to Episcopal Hosp., 1881-1890; and to Children's Hosp. since 1885; Physician to Pa. Hosp. since 1890; Physician to Orthopædic Hosp. since 1891; Trustee of the University since 1896; practicing physician in Philadelphia.

MORRIS JAMES LEWIS, M.D., Ph.D., was born in Philadelphia, March 25, 1852, son of Saunders and Phœbe M. (James) Lewis. He graduated from the Academic Department of the University in 1871, after which he took the Master's degree in course, and from the Medical School in 1874, receiving in the latter year the degrees of Doctor of Medicine and Doctor of Philosophy. He has been continuously engaged in the practice of his profession in Philadelphia besides holding staff positions at various hospitals in the city, during the past twenty years having been Resident Physician, Dispensary Physician and Attending Physician to the Pennsylvania Hospital, Dispensary Physician and Physician to the Children's Hospital, Assistant Physician and Physician to the Orthopædic Hospital and Physician to the Episcopal Hospital. Since 1896 he has been a member of the Board of Trustees of the University. For several years he has been a frequent contributor to various medical journals. Dr. Lewis is a member of the Philoma-

thean Society, the Pathological Society of Philadelphia, the Neurological Society of Philadelphia and the Philadelphia County Medical Society, the Paediatrics Society and Fellow of the College of Physicians of Philadelphia, member of the Association of American Physicians, and of the American Neurological Association. He married Maria, daughter of William Heyward Drayton of Philadelphia.

LINDSAY, Samuel McCune, 1869-

Asst. Professor Sociology 1896-

Born in Pittsburg, Pa., 1869; graduated Ph.D. Univ. of Pa., 1889; Ph.B. Univ. Halle, 1892; Instructor in Sociology, Univ. of Pa., 1894-96; Asst. Prof. of Sociology at the University since 1896.

SAMUEL McCUNE LINDSAY, Ph.D., was born in Pittsburg, Pennsylvania, May 10, 1869, son of Daniel Slater and Ella Elizabeth (England) Lindsay. Entering the University of Pennsylvania in 1885 he elected a course of study in the Wharton School of Finance and Economy, leading to the degree of Bachelor of Philosophy, and with that degree he graduated in 1889. While in College he received honorable mention for the Henry La Barre Jayne English prize in his Freshman year, and was appointed Chairman of the Executive Committee of his class in the Senior year, besides being Editor of the *Pennsylvanian*. After graduation he went abroad for advanced study, spending three and one-half years at the Universities of Halle, Berlin, Vienna, Rome and Paris, and in 1892 taking the degree of Doctor of Philosophy at the University Halle, Germany. Upon his return to the United States in 1894 he was appointed instructor and since September 1896 he has been Assistant Professor of Sociology at the University. Professor Lindsay is a member of the Philomathean Society, and acted as Chairman of its Seventy-fifth Anniversary Committee. He is a member of the American Economic Association, the British Economic Association, the American Social Science Association, the National Conference of Charities and Correction, the American Academy of Political and Social Science, of which he is first Vice-President and Acting President, and of other literary and scientific bodies, to whose publications as well as to current periodical literature he is a frequent contributor. Among Professor Lindsay's more important books, monographs, and publications are the following: Articles on the Silver Question and on the Eleventh Census in *Conrad's Jahrbücher*, 1892; *Social Work at the Krupp Foundries* — *Annals*, November 1893; *Die Preis-*

bewegung der Edelmetalle seit 1850, Jena 1893, pp. 234; *Social Aspects of Philadelphia Relief Work*, Philadelphia 1896, pp. 174; Articles in *Palgrave's Dictionary of Political Economy*, Volumes II and III, 1896-97; *Vacant Lot Cultivation*, *Charities Review*, April 1898; *The Study and Teaching of Sociology* — *Annals*, July 1798; *Statistics of Pauperism and Benevolence*, *Publications of American Economic Association*, March 1899; *The Unit of Investigation in Sociology* — *Annals*, November 1899 and January 1900; and *Sociological Notes* — *Annals*,



SAMUEL McC. LINDSAY

1896-1900. Professor Lindsay was married on April 9, 1896, to Anna Robertson Brown, Ph.D., of Philadelphia.

KIRK, Edward Cameron, 1856-

Professor Clinical Dentistry and Dean of Dental Faculty 1896-

Born in Sterling, Ill., 1856; graduated Pa. College of Dental Surgery, 1878; Dean of the Dental Dept. of the University since 1896; Prof. of Clinical Dentistry since 1896.

EDWARD CAMERON KIRK, D.D.S., Dean of the Faculty of Dentistry, was born in Sterling, Illinois, December 9, 1856, son of Brigadier-General Edward N. and Eliza Marcella (Cameron) Kirk. After early education in Public Schools of Philadelphia he became an Instructor in

Chemistry in the Arts Department of the University, and in 1876 entering the Medical Department as a student, obtained there the first of his professional education. In 1878 he graduated from the Pennsylvania College of Dental Surgery with the degree of Doctor of Dental Surgery and entered upon the practice of his profession in Philadelphia. Dr. Kirk was made Dean of the Dental Department of the University in 1896, and since that time the department has materially improved under his vigorous and efficient administration. It was largely through his efforts that the splendid new building of the



EDWARD C. KIRK

School was erected, and the superior and advanced methods of teaching now employed brought into use. Dr. Kirk has occupied the Chair of Chemical Dentistry since 1896. Among his numerous writings may be mentioned the notable American Textbook of Operative Dentistry; the Section on Dental Metallurgy in the American System of Dentistry, and the article on Dentistry in the revised ninth edition of the Encyclopædia Britannica. Dr. Kirk has also for the past ten years been Editor of *The Dental Cosmos*, the leading dental periodical of the world. He has been from the beginning of his professional career an active worker in the dental societies, being now President of the Academy of Stomatology and a member of the Pennsylvania

State Dental Society, the National Dental Association, the American Academy of Dental Science and the New York State Dental Society and many other state and local dental Associations.

MUMFORD, Edward Warloch, 1868-

Registrar 1896-

Born in Philadelphia, 1868; graduated Ph.B., Univ. of Pa., 1889; Asst. Sec'y Board of Trustees of the University, 1891; Registrar of the College and Dept. of Philosophy since 1896.

EDWARD WARLOCH MUMFORD was born in Philadelphia, May 6, 1868, son of Joseph Pratt and Mary Eno (Bassett) Mumford. He graduated Bachelor of Philosophy at the University of Pennsylvania in 1889, while in College having been elected President of his class in the Senior year, and Editor of the *Pennsylvanian*. In 1891 Mr. Mumford entered the service of the University as Assistant Secretary of the Board of Trustees, and was appointed Registrar of the College and Department of Philosophy in 1896. He is a member of the Beta Theta Pi Fraternity.

ROSENGARTEN, Joseph George, 1835-

Trustee 1896-

Born in Philadelphia, 1835; graduated Univ. of Pa., 1852; A.M. in course; studied law and admitted to Bar, 1856; studied at Univ. of Heidelberg, Germany, 1856-57; 1st Lieut. and Capt. 121st Pa. Reg., U. S. Vols., 1862-64, and served on staff of Maj.-Gen. John F. Reynolds; Trustee of the University since 1896; member of the Bar, in Philadelphia.

JOSEPH GEORGE ROSENGARTEN, Lawyer, was born in Philadelphia, July 14, 1835, son of George D. and Elizabeth (Bennett) Rosengarten. He prepared at the Academical Department of the University, under Dr. Samuel Crawford, and in 1849 entered and graduated from the College Department of the University of Pennsylvania with the Class of 1852, taking the Master's degree in course, and subsequently studying law, was admitted to the Pennsylvania Bar in 1856. After a year of study in the University of Heidelberg, Germany, he returned to America and began law practice in Philadelphia, in which he has since continued. Mr. Rosengarten was in the United States Volunteer Army during the Civil War, as First Lieutenant and later as Captain in the One Hundred and Twenty-first Regiment of Pennsylvania Volunteers, and serving on the staff of Major-General John F. Rey-

nolds in the Army of the Potomac. Since 1896 he has been a member of the Board of Trustees of the University. On many occasions he has spoken before literary and charitable societies, e. g. an address on the Life and Public Services of General John F. Reynolds, delivered before the Pennsylvania Historical Society in 1880; an address on the First Day at Gettysburg in 1881, etc. He is the author of the *German Soldier in the Wars of the United States*, and translator of Captain Max von Elking's *The German Allied Troops in the North American War of Independence*. In College he was elected to membership in the Zelosophic Society and the Phi Beta Kappa Fraternity. He has been a contributor to various local and other newspapers, magazines and journals. He was appointed by the Board of Judges a Manager of the Philadelphia House of Refuge and has been for many years active in its management. He is one of the Trustees of the Drexel Institute. He is President of the Free Library of Philadelphia, and of the Society of the Alumni of the University of Pennsylvania and of the Delta Chapter of the Phi Beta Kappa Society. He has also been a member of the Central Committee of the Alumni of the University and is a Vice-President of the General Society of the Alumni of the University and one of the Vice-Presidents of the University Club of Philadelphia.

McKEAN, Thomas, 1842-1898.

Trustee 1895-98, Benefactor.

Born in Philadelphia, 1842; graduated Univ. of Pa., 1862; member of firm of McKean, Borie & Co.; Pres. of No. Pa. Railroad; Trustee of the University, 1895-98; presented \$100,000 for the new Law School building, 1897; died 1898.

THOMAS McKEAN was born in Philadelphia, November 28, 1842, the son of Henry Pratt and Phœbe Elizabeth (Warren) McKean. His great-grandfather was Thomas McKean, a Signer of the Declaration of Independence. He entered the University of Pennsylvania in 1858 and graduated in 1862. Entering business, Mr. McKean became a member of the firm of McKean, Borie & Company, of which his father was the head. He became connected with many of the leading financial institutions of Philadelphia. At the time of his death he was President of the North Pennsylvania Railroad, a Director of the Reading Railroad, the Lehigh Valley Railroad, the Lehigh Coal & Navigation Company, the Insurance Company of North

America, the Fidelity Insurance, Trust & Safe Deposit Company and the Philadelphia Saving Fund Society. He was President of the Germantown Cricket Club and a member of the Historical Society, the Pennsylvania Society, the Sons of the Revolution and most of the leading clubs of the city. Mr. McKean became a Trustee of the University in 1895 but long before that had been active in University affairs. He was one of Pennsylvania's most liberal patrons. Greatest of his gifts to the University was the presentation in 1897 of \$100,000 towards the fund for the erection of the



THOMAS McKEAN

new Law School building which was completed in 1900. In recognition of this gift the reading room of the building is called in honor of his ancestor, the Signer, Thomas McKean. Mr. McKean married Elizabeth Wharton, the daughter of George Mifflin Wharton. He died in Philadelphia, March 16, 1898.

AMES, Herman Vandenburg, 1865-

Instructor and Lecturer American History 1897-

Born in Lancaster, Mass., 1865; graduated, A.B., Amherst College, 1888; pursued postgraduate studies at Columbia and Harvard, later attending Universities in Europe; received A.M. from Harvard, 1890, and Ph.D., 1891; Instr. of Hist. at Univ. of Michigan, 1891-94; Asst. Prof. Hist. Ohio State Univ., 1896-97; Instr.

and Lecturer in American Hist., Univ. of Pa., since 1897; author of *Historical Monographs* and Editor of *State Documents*.

HERMAN VANDENBURG AMES, Ph.D., was born in Lancaster, Massachusetts, August 7, 1865. Through his father, the Rev. Marcus Ames, he is descended from William Ames who settled in Braintree, Massachusetts, as early as 1636. He is also a scion of the Winslow family of the original Colony which the Mayflower emigrants established at Plymouth. Through his mother, Jane Angeline (Vandenburg) Ames, Dr. Ames is descended from



HERMAN V. AMES

a New York Knickerbocker family. He was prepared for Amherst College at Phillips' Academy in Andover, Massachusetts, and at a classical school Providence, Rhode Island, and he entered Amherst in 1884, receiving the degree of Bachelor of Arts in 1888. His graduate studies were pursued at various Universities. In 1888-1889 he attended courses in History and Political Science at Columbia, and from 1889 to 1891 he was a student at Harvard University, receiving the degree of Master of Arts in 1890 and that of Doctor of Philosophy in 1891. For a part of his time at Harvard, in 1890-1891, he was Goodwin Memorial Fellow in Constitutional Law. Selecting the life of a teacher he was called to the University of Michigan as Instructor in

History. He remained there in this position from 1891 to 1893, and the next year 1893-1894, was Acting Assistant Professor of American History at Ann Arbor. The year 1894-1895 was spent abroad in further studies at the Universities of Leipzig and Heidelberg, and upon his return he attached himself to the Ohio State University as Assistant Professor of History, where he continued for one year when in 1897 he was appointed Instructor and Lecturer in American History at the University of Pennsylvania where he has remained to date. In 1896 Dr. Ames was awarded the American Historical Association Prize for a Monograph on "The Proposed Amendments to the Constitution of the United States during the First Century of its History." The essay was printed in 1877, making a volume of 446 pages. He is the Editor of State documents on Federal Relations, the States and the United States, and other historical works. Dr. Ames is a Councillor of the American Academy of Political and Social Science and a member of the American Historical Association, adjunct member for the State of Pennsylvania of the Public Archives Commission, appointed by the American Historical Association. He belongs to the Delta Upsilon Fraternity, being at the present time the President of the Delta Upsilon Club of Philadelphia.

BROWN, Reynolds Driver, 1869-

Professor Law 1897-

Born in Newcastle, Del., 1869; graduated, A.B., Harvard, 1890; taught Preparatory Schools in Philadelphia; graduated in law Univ. of Pa., 1894; Fellow in the University Law School, 1894-97; Prof. of Law since 1897.

REYNOLDS DRIVER BROWN, a son of Henry W. Brown, was born in Newcastle, Delaware, May 6, 1869. His preparatory schooling was received in Philadelphia principally at the Germantown Academy where he studied for eight years. Entering Harvard College he was graduated as Bachelor of Arts with the Class of 1890. Subsequently for one year he was a teacher at the Germantown Academy and for another year he taught at the Penn Charter School in Philadelphia. Matriculating in the University of Pennsylvania's Law Department, he graduated with the degree of Bachelor of Laws in 1894. For three years subsequently he was a Fellow in the Law School and in 1897 he was appointed to a Professorship in the School. As a practicing lawyer Professor Brown was an Assistant for six years in the law offices of

Read & Pettit in Philadelphia. He is at the present time a member of the law firm of Burr, Brown & Lloyd. He is a member of the Sharswood Law Club, the Harvard Club of Philadelphia, of which he is the Secretary, and the Germantown Cricket Club, being one of the Governors of the last named organization. In 1895 he married Frances Brodhead Harris. He resides in Germantown.

MITCHELL, John Kearsley, 1859-

Asst. Demstr. Clinical Medicine 1886-99, Lect. General Symptomatology 1894-99.

Born in Philadelphia, 1859; prepared for College at Dr. Faires's School in Philadelphia, and St. Paul's School, Concord, N. H.; studied at Harvard with Class of 1881; graduated Méd. Dept. Univ. of Pa., 1883; pursued medical studies in Vienna; Asst. Demstr. Clinical Medicine Univ. of Pa., 1886-94; Lect. on General Symptomatology, 1894-99.

JOHAN KEARSLEY MITCHELL, M.D., a son of Dr. S. Weir Mitchell, the distinguished novelist and physician, was born in Philadelphia in 1859. He was prepared for Harvard at Dr. Faires's School in his native city and at St. Paul's School in Concord, New Hampshire. He entered Harvard in 1877 and would have graduated with the Class of 1881 but had to abandon his course owing to an illness at the commencement of the Senior year. He thereupon entered the Medical School at the University of Pennsylvania, graduating with the degree of Doctor of Medicine in 1883. Immediately upon graduation he was for a time Resident Physician at the Children's Hospital and for two years from 1883 until 1885 he held the same position at the Episcopal Hospital in Philadelphia. Dr. Mitchell spent the year 1885-1886 in Vienna where he continued his studies in the medical science. On his return to this country in 1886 he was appointed Assistant Demonstrator of Clinical Medicine in the University of Pennsylvania, a post which he continued to hold until 1894, when he was appointed Lecturer on General Symptomatology and Diagnosis. This position he resigned in 1899.

HOUSTON, Samuel Frederic, 1866-

Trustee 1898-

Born in Germantown, Philadelphia, 1866; graduated Ph.B. Univ. of Pa., 1887; engaged in business in Philadelphia; Trustee of the University since 1898.

SAMUEL FREDERIC HOUSTON, was born in Germantown, Philadelphia, August 30, 1866, son of Henry Howard and Sallie Sherred

(Bonnell) Houston. He graduated at the University of Pennsylvania with the degree of Bachelor of Philosophy in 1887. While in his Junior year he was elected President of his Class. He is now engaged in business in Philadelphia, being Director in several financial and transportation companies. Since June 1898 Mr. Houston has served on the Board of Trustees of the University. He is a Director of the Pennsylvania Institution for the Deaf and Dumb, and a member of the Academy of Natural Sciences of Philadelphia, the American Economic Association, the American Academy of



S. F. HOUSTON

Political and Social Science, the Franklin Institute, the Historical Society of Pennsylvania, the Pennsylvania Society of Sons of the Revolution, the Society of the War of 1812, the Military Order of Foreign Wars, the Society of Colonial Wars and the Delta Upsilon Fraternity. He married Edith Atlee, daughter of Samuel Fisher Corlies of Philadelphia; Mrs. Houston died in April 1895.

McCREA, James, 1848-

Trustee 1898-

Born in Philadelphia, 1848; educated at Faires' Classical Inst., Philadelphia, and the Polytechnic College of State of Pa.; in railway connections since 1865; Supt.

of the Middle Div. Pa. R. R., 1875; Supt. of N. Y. Div., 1878; General Mgr. of all Pa. lines west of Pittsburg, 1885; First Vice-Pres., 1891; Director Pa. R. R. since 1899; Trustee Univ. of Pa., since 1898.

JAMES MCCREA was born in Philadelphia, May 1, 1848. He is a son of James A. and Ann B. (Foster) McCrea. His great-grandfather, James McCrea, was a Scotch-Irishman who came to Philadelphia in 1775 as the representative of a Scotch banking house. His grandfather, John McCrea, and father, James A. McCrea, were well known citizens of Philadelphia. On his maternal side he is descended from William Foster of Rhode Island who came from England early in the seventeenth



JAMES MCCREA

century and whose son removed to New Jersey in 1681. Mr. McCrea's early education was received at the Classical Institute conducted by John W. Faires in Philadelphia. Later he was a member for two years of the Class of 1866 of the Polytechnic College of the State of Pennsylvania, but having secured a position in an engineer corps in 1865 did not return to graduate. This step decided his career and he has been connected with the railway service ever since. He has made his way from the lowest to the highest positions in the railway business. In June 1865 he was appointed Rodman and Assistant Engineer of the Connellsville and Southern Pennsylvania Railroad. In 1867 he transferred

his services as a civil engineer to the Wilmington & Northern Railroad, passing into the service of the Allegheny Valley Railroad in the following year. In 1871 he was appointed Principal Assistant Engineer in the Construction Department of the Pennsylvania Railroad and by successive promotions he became the Superintendent of the Middle Division of the Pennsylvania Railroad in 1875. In 1878 he was advanced to the Superintendency of the New York Division of the Pennsylvania. On May 1, 1882, Mr. McCrea was transferred to the Pennsylvania lines west of Pittsburg as Manager of the Southwest, or Pan Handle, System, with his headquarters at Columbus, Ohio. In 1885 he was moved to Pittsburg as General Manager of all the Pennsylvania Lines west of Pittsburg. In 1887 he was made Fourth Vice-President and General Manager, and in 1890 Second Vice-President. Finally in 1891 he was promoted to be First Vice-President, which position he still holds. In June 1899 Mr. McCrea was elected a Director of the Pennsylvania Railroad to fill the vacancy caused by the death of President Frank Thomson. Through his Pennsylvania Railroad connections Mr. McCrea is also President of the Cincinnati and Muskingum Valley Railway Company, the Terre Haute and Indianapolis Railroad Company (Vandalia Line) the Grand Rapids and Indiana Railroad Company and the Cleveland, Akron and Columbus Railway Company. Mr. McCrea's steady rise in the railway service has been due to his ability, his practical knowledge of details, his sound judgment and his close application to the arduous duties of railroad work. On February 1, 1898, he was elected a Trustee of the University of Pennsylvania, this being the first instance in the history of the institution when a Trustee had ever been selected whose residence was outside the City of Philadelphia. The vacancy filled by his election was that caused by the death of ex-United States Senator John Scott of Pittsburg, who, however, had not been a Trustee until after his removal to Philadelphia. Mr. McCrea is a member of the American Society of Civil Engineers. Among the clubs in which he holds membership are: the Philadelphia Club, the Union League of New York, the Chicago Club, the Pittsburg and Duquesne clubs of Pittsburg and the Faculty Club of Philadelphia. In 1873 he married Ada, daughter of William and Eliza (Moorehead) Montgomery of Perry county, Pennsylvania. He has three children: James Alexander, Archibald Montgomery and Ada Montgomery McCrea.

MORGAN, Randal, 1853-

Trustee 1897-

Born in Philadelphia, 1853; prepared for College at Germantown Academy; graduated College Dept. Univ. of Pa., 1873; studied law and admitted to Bar, 1877; Gen. Counsel of the United Gas Improvement Co. since 1882; Trustee of the University, since 1897.

RANDAL MORGAN, a Trustee of the University and a well-known Philadelphia lawyer, was born in Philadelphia, October 18, 1853. His father was Charles E. Morgan, and his mother, Jane Potter (Buck) Morgan, both the Morgans and Bucks having been residents of the State of New



RANDAL MORGAN

Jersey for many generations. Randal Morgan was prepared for College at the Germantown Academy, and upon finishing his course there in 1869, entered the College Department of the University of Pennsylvania, receiving his degree of Bachelor of Arts in 1873. At graduation he determined upon the study of the law and entered the office of Morgan & Lewis of Philadelphia, being admitted to the Bar in that city in 1877. In the meantime, the University had conferred the degree of Master of Arts upon Mr. Morgan in token of his continued interest in intellectual pursuits. He has made a specialty of corporation practice, and in 1882 was appointed general counsel of the United Gas Improvement Company, a very wealthy and powerful corporation.

This position he has held continuously up to this date, having also been Third Vice-President of the Company since 1892. Mr. Morgan resides in Chestnut Hill, the beautiful suburb in the neighborhood of Philadelphia. He is a member of the Rittenhouse, the University and the Manufacturers' clubs of Philadelphia and of the Lotus and University clubs of New York City. He was married in June 1880, to Anna Shapleigh, and they have three children. Mr. Morgan was elected a Trustee of the University of Pennsylvania in 1897, an office which he still occupies, being at present Chairman of the Standing Committee on Finance and Property.

HARRISON, George Leib, Jr., 1872-

Treasurer 1898-

Born in Philadelphia, 1872; attended Univ. of Pa., 1889-92; Treasurer of the University since May 1898.

GEORGE LEIB HARRISON, Jr., Treasurer, was born in Philadelphia, March 23, 1872, son of Provost Charles Custis Harrison, LL.D., and Ellen Nixon (Waln) Harrison. From 1889 until 1892 Mr. Harrison was a student in the Science Department of the University. Since May 3, 1898, he has filled the office of Treasurer.

SAILER, Thomas Henry Powers, 1868-

Instructor Hebrew 1895-

Born in Philadelphia, 1866; graduated Princeton, 1889; graduated Princeton Theol. Sem., 1893; Ph.D. Univ. of Pa., 1895; Instr. in Hebrew Univ. of Pa., since 1895, and in New Testament Introduction, 1897-

THOMAS HENRY POWERS SAILER, Ph.D. was born in Philadelphia, May 23, 1868, the son of Randolph and Josephine (Pile) Sailer. He prepared for College at Hastings' West Philadelphia Institute and entered Princeton, graduating with the degree of Bachelor of Arts in 1889. He then pursued theological studies at the Princeton Theological Seminary, graduating in 1893. In 1895 he received the degree of Doctor of Philosophy from the University of Pennsylvania, having spent three years there in post-graduate study in Semitics. Dr. Sailer has been Instructor in Hebrew in the University of Pennsylvania since 1895 and in New Testament Introduction since 1897. He is a member of the Psi Upsilon Fraternity. On April 30, 1895, he was married to Elizabeth Jackson Clothier and has two children, Josephine and Randolph Clothier Sailer.

ABBOTT, Alexander Crever, 1860-

Pepper Prof. Hygiene 1896-

Born in Baltimore, Md., 1860; attended Baltimore City College; M.D. Univ. of Md., 1884; graduate student Johns Hopkins Univ., 1885-87; studied in Germany, 1887-89; Asst. at Johns Hopkins, 1889-90; Asst. in Lab. of Hygiene Univ. of Pa., 1890-96; Pepper Prof. Hygiene, and Director of Lab. of Hygiene since 1896.

ALLEXANDER CREVER ABBOTT, M.D., was born in Baltimore, Maryland, February 26, 1860, son of Alexander and Elizabeth (Beatty) Abbott. He entered the Baltimore City College after early education in the public schools, and there pursued an academic course of study. Dr. Abbott's professional training was received at first in the Medical Department of the University of Maryland, where he received the Doctor's degree in 1884. His studies were then continued in the Johns Hopkins University, the German Universities of Munich and Berlin, and at the Royal Polytechnicum in Munich, his sojourn abroad extending over two years. In 1889 he became an Assistant in Bacteriology and Hygiene at Johns Hopkins University, and in the following year changed to a similar position in the Laboratory of Hygiene of the University of Pennsylvania. The Pepper Professorship of Hygiene was offered to him in 1896, and he has since continued in the work of that chair, holding the additional position of Director of the Laboratory of Hygiene. Dr. Abbott has also been, since 1897, Director of the Laboratory of the Philadelphia Board of Health. He is a fellow of the College of Physicians of Philadelphia, and a member of the following organizations: Association of American Physicians, the American Physiological, Bacteriological and Philosophical societies, the Pathological Society of Philadelphia, the Philadelphia County Medical Society, the American Medical Association, the American Public Health Association, the Philadelphia Chapter of the Sigma Xi Fraternity, the University Club of Philadelphia, and the Faculty Club of the University of Pennsylvania. He was married, August 30, 1892, to Georgina Picton, eldest daughter of the Hon. Justice Osler, of the Court of Appeal, Ontario, Canada; their children are: Britton Vaughan and Catherine Elizabeth Ellen Abbott. Dr. Abbott has made frequent contributions to scientific literature, the most important of his writings being: A Contribution to the Pathology of Malarial Fever (in association with W. T. Councilman), 1885; Report on the Koch Treatment of Tuberculosis in Berlin, 1891; The Etiology of Diphtheria (in association with

Professor William H. Welch), 1891; Corrosive Sublimate as a Disinfectant, etc., 1891; The Relation of the Pseudo-diphtheretic to the Diphtheretic Bacillus, 1891; Further Studies upon the same Question, 1891; Ueber die Glykogenbildung nach Aufnahme verschiedener Zuckerarten, etc. (in association with Otto, Lusk and Voit), 1890; A Report on the Heating and Ventilation of Johns Hopkins Hospital, 1891; A Contribution to the Pathology of Experimental Diphtheria (in association with A. A. Griskey), 1893; The Etiology of Membranous Rhinitis' (rhinitis fib-



A. C. ABBOTT

rinosa), 1893; The Results of Inoculation of Milch Cows with cultures of the Bacillus of Diphtheria, 1893; Physical, Chemical, and Bacteriological Studies upon the Air over Decomposing Substances, with special reference to their application to the Air of Sewers, 1894; The Effects of the Gaseous Products of Decomposition upon the Health and Resistance to Infection of certain Animals that are forced to respire them, 1895; The Influence of Acute Alcoholism on the normal vital Resistance of Rabbits to Infection, 1896; The Significance of Pathogenic Spirilla in American Surface Waters, etc., 1896; The Relative Infrequency of Acute Specific Infections in the First Year of Life, with the probable explanation for it, 1900;

Statistical Data bearing upon the Epidemiology of Typhoid Fever, 1900. In addition to the above special contributions, he is the author of the textbooks:—Principles of Bacteriology, and The Hygiene of Transmissible Diseases.

ADAMS, John William, 1862—

Prof. Veterinary Surgery and Obstetrics 1893—

Born in Middleton, Miss., 1862; graduated Coll. Dept. Univ. of Minn., 1886; taught in Faribault, Minn., 1886-89; graduated Veterinary Dept. Univ. of Pa., 1892; post-graduate student in Royal Veterinary High School, Berlin, Germany, 1892, and in Royal Veterinary School of Saxony, Dresden, 1893; Prof. Veterinary Surgery and Obstetrics Univ. of Pa. since 1893.

JOHN WILLIAM ADAMS, A.B., V.M.D., was born in Middleton, Carroll County, Mississippi, November 8, 1862, son of John Charles and Helen



JOHN W. ADAMS

Marr (Doty) Adams. He is descended from English and Scotch-Irish ancestry. Dr. Adams was prepared for College in the first grade High School of Lake City, Minnesota, and 1886 he graduated from the College Department of the University of Minnesota, receiving the degree Bachelor of Arts. He was then for three years engaged in teaching in the Shattuck Military School of Faribault, Minnesota, and in 1889 entered the Veterinary Depart-

ment of the University of Pennsylvania, graduating with the degree of the school in 1892. In the summer of that year he continued professional study in the Royal Veterinary High School of Berlin, Germany, and was also a graduate student in the Royal Veterinary School of Saxony, in Dresden in the summer of 1893. In 1893 he was appointed Assistant Professor of Veterinary Surgery and Obstetrics in the Veterinary Department of the University of Pennsylvania, and was made full Professor in 1896. Dr. Adams has been for four years Veterinarian to the Pennsylvania State Board of Health, and was in 1896 appointed to a similar office in the Department of Public Safety of Philadelphia. He is a member of the Keystone Veterinary Society, the Pennsylvania Veterinary Medical Society, the American Veterinary Medical Association, the Veterinary Medical Society of the University of Pennsylvania, of which he is honorary President, the Faculty Club of the University of Pennsylvania, and the Psi Upsilon Fraternity. He was married, December 28, 1893, to Mary Adams of Warsaw, New York, and has one child, Alice Naomi Adams, born September 14, 1897.

BARNWELL, James Gaston, 1833—

Librarian 1884-1887.

Born in Newtown Stewart, Ireland, 1833; educated in public schools of Philadelphia; teacher, 1850-63; studied law, 1851-53; member Philadelphia City Council, 1857; connected with Philadelphia Mercantile Library as Director, 1863-68; Librarian Cincinnati Mercantile Library, 1864-66; Librarian Univ. of Pa. Library, 1884-87; Librarian Philadelphia Library since 1887.

JAMES GASTON BARNWELL was born in Newtown Stewart, Ireland, February 13, 1833, and in early childhood was taken to Philadelphia where other members of his immediate family had resided for about half a century. He is the son of Robert and Mary Anne (Gaston) Barnwell. He is descended on the paternal side from Sir Alain de Berneval, one of the knights who accompanied William the Conqueror to England in 1066, and from Sir Michael de Berneval, who accompanied Strongbow a century later in his invasion of Ireland, from whom also are descended the noble houses of Kingsland and Trimleston and the Barnewall baronets. A collateral branch of the family was among the early settlers of South Carolina, some of whom represented that state in the United States Senate and House of Representatives and held other positions of distinction, civil and military. On the

maternal side he is of French Huguenot ancestry, being descended from Louis Gaston, who emigrated from France in 1650, on account of religious persecution. He was educated in the private academy of Joseph H. Schreiner and in the public schools of Philadelphia, graduating Bachelor of Arts in 1850 at the Central High School, an institution of collegiate rank — though bearing its original designation, and in 1855 receiving the degree of Master of Arts from the same institution. Before attaining his eighteenth year he became Principal of one of the public schools of Philadelphia, being the youngest



JAMES G. BARNWELL

person who had ever filled such a position there, and by a series of rapid promotions, he became in 1855 Principal of a first class Grammar School, and so continued until 1863. During his teaching career he enjoyed the rare distinction of never having a single boy rejected at examinations for promotion to the High School, and he himself attained the highest average in scholarship of any candidate examined in Philadelphia for the Principalship of a first class Grammar School. In 1852 he was largely instrumental in organizing the Pennsylvania State Teachers' Association, of which he was the first Secretary. In 1851 he became a student of law in the office of Asa I. Fish, and was a member of the Law Class of 1853 in the Univer-

sity of Pennsylvania, but he never practised the legal profession. In the latter year he received the honorary degree of Bachelor of Arts from Yale. From his earliest years he was passionately fond of books and devoted much time to bibliographical studies. He is the possessor of one of the largest private libraries in Philadelphia, containing many rare and out of the way books and numbering over twelve thousand volumes, besides pamphlets, manuscripts, etc. His official connection with public libraries began in 1863, when he became a Director of the Philadelphia Mercantile Library, to the up-building of which for nearly a quarter of a century, (1863-1887) he devoted a large part of his time and energies as a pure labor of love. He was successively Corresponding Secretary and Vice-President and for about twenty years Chairman of the Book Committee. During the period of his greatest activity and largely as a result of it, the library reached the highest point of success in its career. During the years 1864 to 1866 he was Librarian of the Cincinnati Mercantile Library, which he raised from an almost moribund state to a high degree of prosperity. Early in 1884 he was elected the first separate Librarian of the University of Pennsylvania. He found the library a chaotic mass of books without catalogue, classification or arrangement. He immediately applied himself to the task of reducing it to order by classifying and cataloguing it, and had the work almost completed when in 1887 he was elected to the Librarianship of the Philadelphia Library, where by assiduous and faithful attention to his varied duties he maintains the well established reputation of that venerable institution. In 1848 while a boy at school he edited and printed a weekly paper for circulation among his school-mates, perhaps one of the earliest instances of this now numerous class of periodicals printed by boys for boys. In 1850, in conjunction with several associates, he published another weekly paper called *The Minute Book* which was the organ of the literary societies of Philadelphia. He has been a frequent contributor to the *London Notes and Queries*, the *Library Journal*, and other publications. His paper on *A Universal Catalogue of Literature*, read at the organization meeting of the American Library Association in 1876 and afterwards published in the *Library Journal*, attracted wide attention, and though the project was deemed chimerical by many, a long stride towards its accomplishment has been made in the subsequent publication of the British Museum catalogue and the

projected catalogue of the Bibliothèque Nationale. His annotated bulletins of accessions to the Philadelphia Library have received high commendation from librarians and students, and his Reading Notes on the Constitution of the United States, published in 1887, have been also the subject of most favorable criticism and have been adopted in several institutions as the basis of a course of reading and study on the subject. He early took an interest in public affairs, and while yet in his minority took an active part in the movement which culminated in the passage of the Consolidation Act of 1854. In 1856 he was President of the Buchanan and Breckinridge Club, the leading local organization of his party in the Presidential campaign of that year. Since 1860, however, he has been a Republican in national politics, while in local matters he has been an Independent, or Municipal Reformer. In 1857 he was elected a member of the City Council, being the youngest member of that body. While serving in that capacity, it was his privilege among other things to advocate and vote for the passage of the bill for the construction of the first street railway in Philadelphia. For over forty-three years he has been connected with the Masonic order, being a life member of Phoenix Lodge, Columbia Mark Lodge, Harmony Chapter, and Philadelphia Commandery. He is a corresponding member of the Wisconsin Historical Society, a member of the Pennsylvania Library Club, of which he has been successively Vice-President and President, the Philobiblon Club, the Yale Alumni Association of Philadelphia, the Associated Alumni of the Central High School, in the Board of Management of which for many years he was the representative of his class, and the American Library Association, of which he was one of the founders in 1876. Mr. Barnwell was married, August 13, 1868, to Lidie Gillingham Adams.

FRANKEL, Lee Kaufer, 1867-

Instructor Chemistry 1888-1894.

Born in Philadelphia, 1867; attended Rugby Academy, Philadelphia; B.S., Univ. of Pa., 1887; P.C., 1888; Ph.D., 1892; Instr. Chemistry Univ. of Pa., 1888-94; Commercial Chemist, 1894-99; Manager United Hebrew Charities City of New York, 1899-

LEE KAUFER FRANKEL, Ph.D., was born in Philadelphia, August 13, 1867, son of Louis and Aurelia (Lobenberg) Frankel. He was at first educated in the public schools of Philadelphia, and received preparation for College at Rugby Academy.

Entering the University of Pennsylvania in 1883, he devoted himself to the study of science, especially Chemistry, and in that work he took three degrees: Bachelor of Science in 1887, Practical Chemist in 1888, and Doctor of Philosophy in 1892. From 1888 to 1894 he held an Instructorship in Chemistry at the University, and was for five years occupied in practice as a commercial chemist. Since 1899 he has been Manager of the United Hebrew Charities of the City of New York. Dr. Frankel has published: *The Oxidation of Metallic Arsenides by the Electric Current*, and *The Electrolysis of the Metallic Sulpho-Cyanides*. He is a member of the Franklin Institute of Philadelphia, the Deutsche Chemische Gesellschaft of Berlin, the Society of Chemical Industry of London, the Pharisees of Philadelphia, the Judeans of New York City, and the Young Men's Hebrew Association of New York City. He was married, April 18, 1898, to Alice Reizenstein; their son is Lee Kaufer Frankel, Jr. In June last, Dr. Frankel read a paper before the National Conference of Jewish Charities in Chicago on "Tuberculosis as Affecting Charity Organizations." A pamphlet entitled "Common Sense Charity" is from his pen.

DALAND, Judson, 1860-

Instructor Clinical Medicine, 1895-

Born in New York City, 1860; graduated Univ. of Pa. Medical School, 1882; practicing physician in Philadelphia; Demonstrator Clinical Medicine Univ. of Pa., 1882-95; Instr. Clinical Medicine since 1895; Prof. Diseases of the Chest Philadelphia Polyclinic and College for Graduates in Medicine, 1896-97, and Prof. Clinical Medicine since 1897; Visiting Physician to University, Philadelphia Polyclinic and Philadelphia hospitals; Consulting Physician to Kensington Hosp. for Women.

JUDSON DALAND, M.D., was born in New York City, July 11, 1860, son of Benjamin A. and Jane Ann Daland. His descent is traced from French ancestors who originally settled in Salem, Massachusetts, and later were resident in the vicinity of Boston. Dr. Daland received his early training in the public schools of Philadelphia, and when but twenty-two years old graduated in Medicine at the University of Pennsylvania. Since receiving his degree in 1882 he has been constantly connected with the University teaching force, from 1882 to 1895 as Demonstrator of Clinical Medicine and since the latter date as Instructor in the same subject; he was also Lecturer on Physical Diagnosis for four years from 1885. During these

years of professional life Dr. Daland has, in addition to his work at the University, conducted an extensive practice in Philadelphia, and held, at the Philadelphia Polyclinic and College for Graduates in Medicine, the positions of Professor of Diseases of the Chest and Professor of Clinical Medicine, the latter since 1897. He is now Visiting Physician to the University, Philadelphia Polyclinic, and Philadelphia hospitals, and Consulting Physician to the Kensington Hospital for Women. He has also been actively engaged at different times in various positions as follows: University of Pennsylvania Rep-



JUDSON DALAND

representative on the Board of Examiners of the Philadelphia Hospital for several years preceding 1899; Deputy Health Officer of the Port of New York during the summer of 1892; Physician in charge of the Cholera Hospital on Swinburne Island during the summer of 1892; United States Deputy Health Officer of the Mediterranean ports during the summer of 1893; Vice-President of the Pennsylvania Society for the Prevention of Tuberculosis in 1895; Chairman of the Speakers' Committee for the Annual Dinner of the Alumni Society of the Medical Department of the University of Pennsylvania in 1895; Medical Examiner of the United States Masonic Benevolent Association in 1895; Medical Examiner of the Guarantee Fund Life

Association in 1895; First Vice-President of the John B. Stetson Medical Society; Patron and Honorary President of the Judson Daland Medical Society of the Medical Department of the University of Pennsylvania; Chairman at the Opening Exercises of the Stetson Labor Laboratory of Hygiene in 1895; Director of the Stetson Laboratory of Hygiene associated with the Union Mission Hospital in 1895; Secretary of the Section on General Medicine, including Pathology and Therapeutics, of the Second Pan-American Medical Congress in 1896; Honorary President of the Section on Internal Medicine of the Twelfth International Medical Congress held at Moscow in 1897; Philadelphia County Medical Society Delegate to the American Medical Association in 1897, 1898, 1899, and 1900; Chairman of the Dinner Committee of the American Medical Editors' Association in 1897; Treasurer of the American Medical Editors' Association in 1897; Chairman of the Committee on Contagious Diseases of the Philadelphia Polyclinic and College for Graduates in Medicine in 1897; Secretary of the Philadelphia County Medical Society Delegation to the American Medical Association in 1898; Editor of the International Medical Magazine from 1891 to 1895; Editor of the International Clinics from 1891 to 1899; a collaborator of the *Climatologist*; Associate Editor of the *Annual of Universal Medical Sciences*, by Charles E. Sajous, M.D. Dr. Daland is a member of the Philadelphia County Medical, the Philadelphia Neurological, the Philadelphia Pathological, and the Philadelphia Clinical societies; the American Climatological Association; the American Medical Association; the Northwest Medical Society of Philadelphia; also a fellow of the American Academy of Medicine and College of Physicians of Philadelphia; an honorary member of the James Tyson Medical Society of the Medical Department of the University of Pennsylvania; a member of the Gloucester County, New Jersey, Medical Society; the William E. Hughes' Society of Clinical Medicine, at the Medico-Chirurgical College of Philadelphia; the Moscow Therapeutic Society; the Cecil County, Maryland, Medical Society; the Delaware State Medical Society; the Ohio State Medical Society; a first honorary member of the Rocky Mountain Inter-state Medical Society; a member of the Medical Club of Philadelphia; the Alumni Society of the Medical Department of the University of Pennsylvania; a charter member of the University Masonic Lodge; a member of the

Historical Society of Pennsylvania; and the Art, University, Markham, Bachelors' Barge, Winter Harbor, and Centaur Bicycle clubs.

HOLMES, Edmund Wales, 1851-

Demonstrator Anatomy, 1892-

Born in Cape Town, So. Africa, 1851; prepared for College at Phillips Academy, Andover, Mass.; graduated Yale, 1872; M.D. Univ. of Pa., 1880; Resident Phys. Philadelphia Hosp., 1880-81; Demonstrator Anatomy at the University since 1892; Surgeon to Methodist Epis. Hosp.

EDMUND WALES HOLMES, M.D., was born in Cape Town, South Africa, October 24, 1851, son of Gideon S. and Elizabeth (Barr)



EDMUND W. HOLMES

Holmes. His father was a native of New Jersey and his mother of Maine, and both were descended from English families. Dr. Holmes at an early age became a student at Phillips Academy, the famous preparatory school in Andover, Massachusetts, and from there entered Yale, where he graduated, Bachelor of Arts, in 1872. His medical study was performed at the University of Pennsylvania, where he received the Doctor's degree in 1880. During the year following graduation, he occupied a position as Resident Physician at the Philadelphia Hospital, and was later appointed Assistant Physician to the Lying-

in-Charity and the Polyclinic dispensaries. Since 1892 Dr. Holmes has been Demonstrator of Anatomy at the University, and is further engaged as Surgeon to the Methodist Episcopal Hospital, Consulting Surgeon to the Northern Dispensary; and Consulting Surgeon to the State Asylum, Norristown, Pennsylvania. He is a member of the Philadelphia County Medical Society and the American Medical Association, and an honorary member of the Ashhurst, Hirst, Guiteras (?) and Penrose societies of the University A M I I Medical fraternity. Dr. Holmes was married, August 27, 1874, to Anna K. Coates, and has one daughter, Anna Coates Holmes. He is author of Outlines of Anatomy used as a text-book in several of our leading medical colleges.

HOSKINS, William Horace, 1860-

Instructor Veterinary Jurisprudence, etc.

Born in Delaware Co., Pa., 1860; graduated American Veterinary College, 1881; Veterinarian; Instr. Veterinary Jurisprudence, Ethics and Business Methods, Univ. of Pa.; President American Veterinary Medical Association, 1893-96; Editor Journal of Comparative Medicine and Veterinary Archives, 1895-; President State Board of Veterinary Examiners.

WILLIAM HORACE HOSKINS, D.V.S., was born in Rockdale, Delaware county, Pennsylvania, July 23, 1860, the son of John Taylor and Jane (Brown) Hoskins. He comes of Welsh and Irish ancestry. After receiving his early training in the common schools he entered the American Veterinary College, from which he graduated in 1881. Since then he has been engaged in the active practice of his profession. Dr. Hoskins was Secretary of the American Veterinary Medical Association from 1889 to 1893 and President from 1893 to 1896. He has been Editor of the Journal of Comparative Medicine and Veterinary Archives since 1895, and is now ex-President and present Secretary of the Pennsylvania State Board of Veterinary Examiners. He is ex-President of the Pennsylvania State Veterinary Medical Association and of the Keystone Veterinary Medical Association, and is ex-President and ex-Secretary of the Alumni Association of the American Veterinary College. He is an honorary member of the Veterinary Medical Association of New Jersey and of the New York County Veterinary Medical Association. At present he is Instructor in Veterinary Jurisprudence, Ethics and Business Methods at the University of Pennsylvania. He is Worshipful Master of Ivanhoe Lodge 449 in the Masonic Order, and is a member of the Faculty

Club. In politics Dr. Hoskins has been a Democrat, having been Vice-Chairman of the Democratic City Committee since 1898 and Democratic Candidate for Mayor of Philadelphia in 1899. On March 19, 1885, he was married to Annie E. Cheever and has three children: H. Preston, Margaret E., and J. Cheston Hoskins.

JOHNSON, Emory Richard, 1864-

Asst. Prof. Transportation and Commerce 1896-

Born in Waupun, Wis., 1864; Lit.B., Univ. of Wis., 1888; Lit.M., 1891; Ph.D., Univ. of Pa., 1893; Asst. Prof. Transportation and Commerce Univ. of Pa. since 1896; member of U. S. Isthmian Canal Commission; author.

EMORY RICHARD JOHNSON, Ph.D., was born in Waupun, Fond du Lac county, Wisconsin, March 22, 1864, son of Eli and Angeline (Nichols) Johnson, grandson of Elihu and Anna (Chaffee) Johnson, and of Alanson and Jerusha (Irish) Nichols. His ancestors came from Wales in the early part of the eighteenth century and settled in Rhode Island and Massachusetts. Early in the nineteenth century they migrated to New York State. His parents settled in Wisconsin in 1850. He entered the University of Wisconsin after preparatory education in the Oshkosh (Wisconsin) Normal School, and graduated with the degree of Bachelor of Letters in 1888. After two years of teaching, as Principal of the schools of Boscobel, Wisconsin, he pursued graduate study at Johns Hopkins in 1890-1891, in München, Germany, 1891-1892; at the University of Berlin in the summer semester of 1892, and at the University of Pennsylvania in 1892-1893, receiving the degree of Doctor of Philosophy from Pennsylvania in 1893. The Master's degree was conferred upon him in course by the University of Wisconsin. He was appointed Instructor in Economics at Haverford College, and Lecturer on Transportation at the University of Pennsylvania in 1893. In 1894 Dr. Johnson was appointed Instructor in Transportation and Commerce in the Wharton School of Finance at the University of Pennsylvania, and from that position he was advanced to the rank of Assistant Professor in 1896, in which relation he continues at present. His teaching in the Wharton School and his writings upon economic topics of current interest have brought him into public notice. In May 1899 he was appointed expert agent on transportation by the United States Industrial Commission, which position he held until December 28,

1899. In June of the same year he was appointed by President McKinley to the Isthmian Canal Commission engaged in preparing a report upon the project of building a canal across the American Isthmus. Having obtained leave of absence from the University for the academic years of 1899 to 1901, Dr. Johnson has devoted himself to a study of the economic resources of the United States and to an investigation of the proposed canal from a commercial, industrial, and geographical point of view. In 1894 he assumed charge of the book department of the Annals of the American Academy



EMORY R. JOHNSON

of Political and Social Science, becoming one of the two associate editors of the journal in 1896. His special study of transportation subjects began in the undergraduate days at Wisconsin, when he prepared an honor thesis on *The Rise and Fall of the Whig System of Internal Improvements*, and the study of inland navigation was continued at Johns Hopkins and in Europe. Dr. Johnson's *Inland Waterways; Their Relation to Transportation*, a volume of one hundred and sixty-four pages, was published by the American Academy of Political and Social Science, Philadelphia, in 1893. His bibliography also includes an essay on the *Commercial Progress of the Nineteenth Century*, and the following papers: in the *Annals of the Ameri-*

can Academy of Political and Social Science: the River and Harbor Bill, 1892; The Relation of Taxation to Monopolies, 1894; The Industrial Services of the Railways, 1895; The Nicaragua Canal and the Economic Development of the United States; in the Political Science Quarterly: The Early History of the United States Consular Service, 1776-1792, 1897; and Government Regulation of Railways, 1900; in the Review of Reviews: Inland Waterways and the Development of the Northwest, 1893; The Nicaragua Canal and the Commercial Interests of the United States, 1898; in the Independent: Monopoly and Railway Management, 1897; and The Nicaragua Canal, two papers, 1899. Dr. Johnson was married to Orra Linn March of Oshkosh, Wisconsin, in 1894.

LAIRD, Warren Powers, 1861-

Professor Architecture 1891-

Born in Winona, Minn., 1861; studied at Cornell University, 1885-87, Abroad, 1890-91; Instr. Univ. of Pa., 1891; Prof. Architecture, 1891-

WARREN POWERS LAIRD was born in Winona, Minnesota, August 8, 1861, the son of Matthew James and Lydia (Powers) Laird. On his paternal side he comes of Scotch-Irish ancestry resident in Pennsylvania since 1730, while his mother was descended from English stock living in New England and New York since 1650. His early education was received at the public and state normal schools at Winona, Minnesota, after which he took a special course in Architecture at Cornell University from 1885 to 1887. In addition to his course there, he spent three years in study in Minnesota and three in Boston and New York under practising architects, and one year of foreign travel and study in Paris. He was Instructor in Architecture at Cornell during the latter portion of his course there, and became Instructor at the University of Pennsylvania in January 1891. Since June 1891 he has been Professor of Architecture at the University. Beside various offices in local art societies, Professor Laird is Past President of the Fine Arts League of Philadelphia, and is a member of the Committee on Education of the American Institute of Architects, as well as an Honorary member of the Institute. He is a delegate member of the Art Federation of Philadelphia, representing the University of Pennsylvania, and is a member of the Architectural League of America, the Philadelphia Chapter of A. I. A., the T square

Club, the Public Art League, the Public Education Association, the Philadelphia Cornell University Association, the Sigma Xi Society, and the Faculty, Art, and Overbrook Golf clubs. He was married,



WARREN P. LAIRD

November 15, 1893, to Clara Elizabeth Tuller and has had two children: Mary Hall and Helen Powers Laird, the latter of whom has died.

MILLER, Adolph William, 1841-

Lecturer Materia Medica 1886-

Born in Berge, Hannover, Germany, 1841; early education in public schools of Belleville, Ill., and College of St. Paul, Minn.; graduated Philadelphia College of Pharmacy, 1872; M.D. Univ. of Pa., 1872; Ph.D. 1873; engaged in Pharmacy since 1853; Demonstrator Pharmacy Univ. of Pa., 1878-86; Lecturer on Materia Medica since 1886.

ADOLPH WILLIAM MILLER, Ph.D., was born in Berge, Hannover, Germany, October 8, 1841, son of William Henry and Louise (von Lengerken) Miller. He came to this country at an early age and was instructed in the public schools of Belleville, St. Clair county, Illinois, and in the College of St. Paul, Minnesota. His professional study was performed at the Philadelphia College of Pharmacy, where he graduated in 1862, and in the

Medical Department of the University of Pennsylvania, from which he received the degree of Doctor of Medicine in 1872 and that of Doctor of Philosophy in 1873. Dr. Miller has been con-



ADOLPH W. MILLER

tinuously engaged in the practice of pharmacy since 1853, since 1860 in Philadelphia, and previously in St. Louis, Missouri, and St. Paul, Minnesota. In 1878 he was appointed Demonstrator of Pharmacy in the University, so continuing until elected, after twelve years, to his present position as Lecturer on *Materia Medica*. In the various organizations of which he is a member Dr. Miller has held office as follows: President of the Philadelphia Drug Exchange one year; President of the Alumni Association of the Philadelphia College of Pharmacy one year; President of the Alumni Association of the Auxiliary Medical Dept. of the University one year; President of the Alumni Association of the National School of Elocution and Oratory three years; President of the Mycological Society of Pennsylvania two years; Acting President of the Botanical Society of the University two years; and Corresponding Secretary of the Philadelphia College of Pharmacy at present. He married Margaretta T. Ash; their children are: Lillian, now the wife of Alden H. Weed, Laura, now the wife of William H. Helweg, and G. Elizabeth Miller.

MIKELL, William Ephraim, 1868-

Asst. Professor Law 1899-

Born in Sumter, S. C., 1868; graduated Military Dept. Univ. of S. C., 1890; engaged in school teaching, 1890-95; studied law at Univ. of Va.; in practice in Sumter, 1895-96; legal literary work in Philadelphia, 1896-97; Instr. Law Univ. of Pa., 1897-99, and Asst. Prof. since 1899.

WILLIAM EPHRAIM MIKELL was born in Sumter, South Carolina, January 29, 1868, son of Dr. Thomas Price and Rebecca (Moses) Mikell. He is a direct descendant of William E. Mikell, the first of the name in this country, who came to America with Lord Cardross, and settled in Port Royal, South Carolina, in 1682, remaining there until the settlement was destroyed by the Spaniards, when he removed to Edisto Island, South Carolina. Since that time, through eight generations, the family seat has been in that place. Mr. Mikell was educated in the public schools of his native town, and in the University of South Carolina, where he graduated, after a course of study in the Military Department, in 1890. From 1890 for two years Mr. Mikell was



WILLIAM E. MIKELL

Principal of the schools of Blackstock, South Carolina, and from 1892 to 1895 he occupied a similar office in the Piedmont Seminary of Lincoln, North Carolina. He pursued his legal studies

while engaged in teaching, and after a special course in law at the University of Virginia, was admitted to the Bar of South Carolina in 1894. He spent one year in the active practice of law in Sumter and one in legal literary work in Philadelphia, and in 1897 was appointed Instructor in Law at the University of Pennsylvania. He was advanced to his present rank of Assistant Professor in 1899. He is a member of the Kappa Alpha Fraternity So., and an honorary member of the Phi Delta Phi—a legal fraternity. Mr. Mikell was married, April 12, 1894, to Martha Turner McBee, and has two children: William and Mary Mikell.

MOORE, John Percy, 1869-

Instructor Zoology 1892-

Born in Williamsport, Pa., 1869; B.S. Univ. of Pa., 1892; Ph.D., 1896; Asst. Instr. in Zoology at the University, 1890-92; Instructor since 1892; Instr. in Biology Hahnemann Medical College, 1896-98; at times engaged in investigations for U. S. Fish Commission.

JOHAN PERCY MOORE, Ph.D., was born in Williamsport, Pennsylvania, May 17, 1869, son of John P. and Emma (Frank) Moore. In acquiring his early education he passed through the entire public school system of Philadelphia, graduating from the High School in 1886. He entered the University of Pennsylvania in 1888 and taking a special course of study in science, particularly Biology, he graduated with the degree Bachelor of Science in 1892. He continued his studies as a graduate student and in 1896 he received the Doctor of Philosophy degree. Dr. Moore was first appointed to the teaching force of the University in 1890—before graduation, when he was made Assistant Instructor in Zoology. Since 1892 he has been Instructor in the same subject. He is also Instructor in Biology at the Hahnemann Medical College, and at various times he has served as temporary Scientific Assistant to the United States Fish Commission, engaged in special biological investigations. Dr. Moore is a member of the Philadelphia Academy of Natural Sciences, the Zoological Society of France, the American Ornithologists' Union, and the Psi Upsilon Fraternity. He married in 1892 Kathleen Carter, and has two children: Percy Warren and Kathleen Moore.

MUSSER, John Herr, 1856-

Asst. Prof. Clinical Medicine 1889-99, Professor 1899-

Born in Strasburg, Pa., 1856; attended Pa. State Normal School; graduated Univ. of Pa. Med. School, 1877;

Instr. Clinical Medicine at the University, 1881-84; Asst. Prof. 1889-99; Prof. since 1899; Physician to Philadelphia and Presbyterian hospitals.

JOHAN HERR MUSSER, M.D., was born in Strasburg, Lancaster county, Pennsylvania, June 22, 1856, son of Benjamin and Naomi (Herr) Musser. His father, Benjamin, his paternal grandfather, Martin, and his paternal great-grandfather, Joseph Musser, were all physicians of Lancaster County. They were the descendants of Benjamin Musser, of Swiss origin, who immigrating to America in 1714, bought land of William Penn. On the



JOHN HERR MUSSER

maternal side, the grandfather, Bishop John Herr of the Memnonite Church, was also descended from a Swiss family. Dr. Musser was in boyhood educated in the Strasburg public schools, including the High School, and later attended the Pennsylvania State Normal School. For Medical study he entered the Medical Department of the University of Pennsylvania, where he took the degree Doctor of Medicine in 1877, receiving at graduation an appointment for one year as Resident Physician to the Philadelphia Hospital. He served as Medical Registrar of the University Hospital from 1879 to 1882, and was Chief of the Medical Dispensary for six years from 1881. He also filled the office of Pathologist to the Presbyterian Hospital from 1883 to 1887, and since the latter date he has been Physician to that

institution. In 1881, while still acting as Medical Registrar, Dr. Musser was elected to an Instructorship in Clinical Medicine in the University of Pennsylvania, and since that time he has continued to teach that subject to students in the Medical School, from 1889 to 1899 as Assistant Professor, and since 1899 as Professor. He has been Physician to the Philadelphia Hospital for the past fourteen years. An eminent figure in many important local and national medical organizations, he has held office in several as follows: President of the Philadelphia Pathological Society, 1893-1897; President of the Philadelphia County Medical Society, 1899-1900; President of the Philadelphia Medical Club, 1897; Chairman of the Section of Medicine of the American Medical Association, 1890 and 1897; member of the Council of the Association of American Physicians, 1893-1897; and was Vice-President of the American Climatological Society, and of the Philadelphia County Medical Society. He is a member also of: the Neurological Society of Philadelphia; the Philadelphia Pediatric Society; the American Pediatric Society; the American Medical Association; the Pennsylvania State Medical Society; and the Union League and University clubs. He is also an honorary fellow of the Academy of Medicine of Richmond, and a fellow of the College of Physicians of Philadelphia. Before the various societies with which he is allied, Dr. Musser has delivered many notable addresses. He has also written extensively on matters pertaining to the medical profession. His bibliography includes the articles: The Liver of Children, Affections which Simulate Enlargement of the Liver, Congestion of the Liver, Fatty Infiltration, Amyloid Disease, Hydatid Disease, Abscess of the Liver, and Tumors of the Liver in Keatings Cyclopædia of the Diseases of Children; eight articles in Wood's Reference Handbook of the Medical Sciences; articles in Hare's System of Therapeutics; Medical Diagnosis, Lea Brothers & Company, 1894, 1896, and 1898; and more than one hundred and thirty shorter articles published in medical journals and in the transactions of societies. Dr. Musser was married, September 16, 1880, to Agnes Gardner Harper; their children are: May Harper, John Herr, Naomi and Agnes Harper Musser.

OSLER, William, 1849-

Professor Clinical Medicine 1884-89.

Born in Tecumseh, Ont., 1849; studied at Trinity College, Toronto, and Toronto School of Medicine;

M.D. McGill Univ., 1872; studied in London, Berlin and Vienna; Prof. Institutes of Medicine McGill Univ., 1874-84; Prof. Clinical Medicine Univ. of Pa., 1884-89; Prof. Medicine Johns Hopkins Univ., 1889-; fellow of the Royal College of Physicians, London, 1884; fellow of the Royal Society, London; LL.D. Edinburgh, Aberdeen, McGill, and Univ. of Toronto.

WILLIAM OSLER, M.D., LL.D., was born in Tecumseh, Ontario, Canada, July 12, 1849. He received academic training in Trinity College, Toronto, and was educated professionally in the Toronto School of Medicine and McGill University, receiving the degree Doctor of Medicine from



WILLIAM OSLER

the latter institution in 1872. After further study at University College, London, England, and in Berlin and Vienna, he was elected Professor of the Institutes of Medicine in the McGill University, holding that position from 1874 to 1884. He was then called to the University of Pennsylvania to occupy the Chair of Clinical Medicine. Since 1889 Dr. Osler has been Professor of Medicine at Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital. He has written extensively for various medical journals of the United States, Canada and Great Britain, and is the author of the following works: Clinical Notes on Smallpox, Montreal, 1876; Chorea, 1891; Cerebral Palsies of Children, 1889; The Principles and Practice of Medicine 3rd Edition,

1898; Angina Pectoris and Allied States, 1895; Lectures on Abdominal Tumors, 1893. It is Dr. Osler's distinguished honor to hold the Doctor of Laws degree from four leading institutions: the Universities of Edinburgh, Aberdeen and Toronto, and McGill University.

RANDALL, Burton Alexander, 1858-

Clinical Prof. Diseases of the Ear 1891-

Born in Annapolis, Md., 1858; graduated St. John's College, 1877; A.M., 1880; M.D. Univ. of Pa., 1880; Physician; Asst. Demstr. Normal Histology Univ. of Pa., 1880-83; Prof. Clinical Ear Diseases Philadelphia Polyclinic Hosp., 1888-; Clinical Prof. Diseases of the Ear, Univ. of Pa. since 1891; author of medical works.

BURTON ALEXANDER RANDALL, M.D., Ph.D., was born in Annapolis, Maryland, September 21, 1858, the son of Alexander and Elizabeth (Philpot Blanchard) Randall. On his father's side he comes from English stock resident in Virginia since 1716, while his mother's family, of French Huguenot extraction, came to Connecticut in 1634. His early collegiate training was received at St. John's College, Annapolis, where he took the degree of Bachelor of Arts in 1877 and that of Master of Arts in 1880. He then pursued the course auxiliary to Medicine after entering the Medical School of the University of Pennsylvania, from which he received the degrees of Doctor of Medicine and of Philosophy in 1880. After completing his course at the University, he studied a year abroad, principally at the Universities of Vienna and Paris. Returning to this country, he began the practice of his profession in Philadelphia. He was Assistant Demonstrator of Normal Histology at the University from 1880 to 1883, Eye and Ear Surgeon to the Episcopal Hospital from 1882 to 1892, has been since 1885 Eye and Ear Surgeon to the Children's Hospital, since 1888 Eye and Ear Surgeon to the Methodist Hospital, Professor of Ear Diseases at the Philadelphia Polyclinic, and since 1891 Clinical Professor of Diseases of the Ear at the University of Pennsylvania. Among his publications are Photographic Illustrations of the Anatomy of the Ear, a text-book on the Eye, Ear, Nose and Throat and many magazine articles, including Eyes in the Schools, Ophthalmoscopy, Anatomy of the Ear, etc. He is a member of the College of Physicians, the American Otological Society, the American Ophthalmological Society, the American Medical Association, the Faculty Club and the

Church Club. He was married, May 30, 1893, to Emma F. Leavitt, and has two children: Alexander Burton and Francenia Allibone Randall.

ROGERS, James Blythe, 1802-1852.

Professor Chemistry 1848-52.

Born in Philadelphia, 1802; attended William and Mary College, Va.; M.D. Univ. of Md., 1822; practicing physician in Little Britain, Pa.; Prof. Chem. Washington Medical College, Baltimore, Md.; Prof. Chem. Univ. of Cincinnati, 1835-39; Prof. Gen. Chem. Franklin Institute, Philadelphia, 1844-48; Prof. Chem. Univ. of Pa., 1848-52; died 1852.

JAMES BLYTHE ROGERS, M.D., was born in Philadelphia, February 11, 1802, son of Patrick Kerr Rogers, M.D., University of Pennsylvania 1802, and from 1819 Professor of Natural Philosophy and Mathematics at William and Mary College, Williamsburg, Virginia. In that institution Dr. James B. Rogers was educated in Academic subjects, and after preliminary study with Dr. Thomas E. Bond he entered the Medical Department of the University of Maryland, taking the degree Doctor of Medicine there in 1822. Beginning his active career as a teacher in Baltimore, he soon removed to Little Britain, Lancaster county, Pennsylvania, to engage in a practice of medicine. He found the profession uncongenial, however, and returning to Baltimore took up the occupation of chemistry in which he had a strong interest. Becoming Superintendent of a large plant for the manufacture of chemicals, he applied himself to a deep study of the subject, and was soon appointed Professor of Chemistry in Washington Medical College of Baltimore, lecturing at the same time before the Mechanics' Institute. In 1835 he was appointed to the Chair of Chemistry in the Medical Department of the University of Cincinnati, Ohio, and there continued until 1839, during that period devoting his summers to field work and chemical investigation in the employ of the Virginia State Geological Survey, of which his brother, William Rogers, was then in charge. In 1840 he was appointed Assistant State Geologist of Pennsylvania, in which state, his brother, Henry Rogers, held the position of State Geologist. From this time he lived permanently in Philadelphia and was chosen Lecturer on Chemistry at the Philadelphia Medical Institute, and Professor of General Chemistry at the Franklin Institute. The latter position he resigned in 1848 to succeed to the Chair of Chemistry at the University of Pennsylvania, made vacant by the resignation of Professor Robert Hare. He continued

in that Professorship until his death in 1852. Professor Rogers was a member of many scientific societies, and served as Pennsylvania representative to the National Medical Convention in 1847, and as delegate to the National Convention for the revision of the United States Pharmacopœia in 1850. Besides various writings contributed to scientific publications, he published in coöperation with his brother, Robert Rogers, an edition of Edward Turner's Elements of Chemistry, and one of William Gregory's Outlines of Organic Chemistry. Professor Rogers died in Philadelphia, June 15, 1852.

ROGERS, Robert Empie, 1813-1884.

Professor Chemistry 1852-77.

Born in Baltimore, Md., 1813; graduated Medical Dept. Univ. of Pa., 1836; Chemist to Pa. Geol. Surv., 1836-41; Prof. General and Applied Chem. and Materia Medica Univ. of Va., 1842-52; Prof. Chem. Univ. of Pa., 1852-77, and Dean of Medical Faculty, 1856-77; Prof. Chem. and Toxicology, Jefferson Medical College, 1877-84, and Emeritus, 1884; LL.D. Dickinson, 1877; engaged as expert in U. S. Mints; died 1884.

ROBERT EMPIE ROGERS, M.D., LL.D., was born in Baltimore, Maryland, March 29, 1813, son of Patrick Kerr Rogers, M.D., Professor of Natural Philosophy and Mathematics at William and Mary College. Educated at first under the instruction of his father and elder brothers, all of whom were eminent scientific scholars, he was prepared for the profession of civil engineering, and for a short time was engaged in the survey for the Boston & Providence Railroad. This work was abandoned in 1833, when he entered the Medical Department of the University of Pennsylvania, taking a full course of Chemistry under Professor Robert Hare. He received the degree Doctor of Medicine, 1836, but never practiced as a physician, accepting at once an appointment as Chemist to the Geological Survey of Pennsylvania and holding that position until 1841. In that year he was called to the University of Virginia, where, after a short term of service as Instructor, he was appointed Professor of General and Applied Chemistry and Materia Medica. Dr. Rogers was in 1852, invited to fill the Chair of Chemistry at the University of Pennsylvania, then recently made vacant by the death of his brother, Dr. James B. Rogers. In 1856 he was made Dean of the Medical Faculty, and in 1877 he withdrew from both these positions to enter the Professorship of Chemistry and Toxicology in Jefferson Medical College. There he continued until his

death in 1884, receiving the title Emeritus Professor during the last year of his life. He was made a Doctor of Laws by Dickinson College in 1877. Dr. Rogers was Acting Assistant Surgeon at the West Philadelphia Military Hospital during the Civil War in 1863. An important feature of his professional work as a chemical expert was his service on government commissions for the inspection of the various United States Mints; he also served on the annual assay commissions from 1874 to 1879. He was a fellow of the College of Physicians and Surgeons of Philadelphia, and a member of many leading scientific societies, including the National Academy of Sciences, of which he was one of the incorporators, and the Franklin Institute, of which he was President from 1875 to 1879. In addition to much valuable writing for the transactions of the societies and for scientific journals, he published in conjunction with his brother, Dr. James B. Rogers, an edition of Edward Turner's Elements of Chemistry, and brought out his own edition of Charles G. Lelman's Physiological Chemistry, 2 vols., 1855. Dr. Rogers died in Philadelphia, September 6, 1884.

SCHAEFFER, Charles Christian, 1821-1890.

Professor German 1858-1867.

Born in Darmstadt, Germany, 1821; graduated Univ. of Giessen, 1844; engaged in educational, religious and political work in Germany, 1844-51; came to U. S., 1851; introduced Kindergarten system; Prof. German Univ. of Pa., 1858-67; in Kindergarten work after 1867; died 1890.

CHARLES CHRISTIAN SCHAEFFER was born in Darmstadt, Germany, October 6, 1821, son of Louis Frederick and Regina (Grandhomme) Schaeffer. On the maternal side he was descended from a family of French Huguenots. His father occupied a governmental position in the Treasury Department in Darmstadt. Professor Schaeffer's early education was obtained in the Gymnasium in his native city where he was graduated with the honor of being chosen to deliver the Latin Valedictory. At a later date he entered the University of Giessen, and there graduated in 1844. After some experience as a teacher in the High School of Darmstadt he studied for the ministry and was ordained Assistant Minister in Greisheim. He entered the political and religious issues of the time with much interest and activity, at the same time devoting considerable attention to the study of educational questions. In 1851 he sailed for the

United States with the definite plan of introducing the Kindergarten system of instruction into this country. Settling in Philadelphia he at once engaged in teaching, both in the public schools and privately. He was called to the University in 1858 to take a Professorship in German, and remained in that work until 1867, when he resigned to re-enter the chief work of his life, the promotion of the Kindergarten system. Professor Schaeffer's life-work was not the promotion of the Kindergarten system only, but the investigation and simplification of the study of Languages. The abundant and invaluable results



CHARLES C. SCHAEFFER

of the introduction of this system need no description here; they are universally known. Professor Schaeffer was married, August 20, 1850, to Caroline Justina Cathrina Linss, and had one son, Ernest Louis Schaeffer. Professor Schaeffer died May 31, 1890.

SCHWATT, Isaac Joachim, 1867-

Asst. Professor Mathematics, 1897-

Born in Mitau, Provinz Kurland, Russia, 1867; attended Realgymnasium, Mitau; studied at Universities of Riga, Berlin and Pennsylvania; Ph.D. Univ. of Pa., 1893; Instr. Math., Univ. of Pa., 1893-97; Asst. Prof. since 1897.

ISAAC JOACHIM SCHWATT, Ph.D., was born in Mitau, Provinz of Kurland, Russia, June 18, 1867, son of Joachim and Doris (Niebur) Schwatt.

His parents were of German descent. Dr. Schwatt was first educated in private schools in Mitau, and after sufficient preparation he entered the Realgymnasium in that place, graduating in 1883, at the age of sixteen. His later study was performed in three Universities: Riga, Berlin and Pennsylvania; during this period of advanced work he devoted his attention chiefly to mathematics. In 1893 he was made a Doctor of Philosophy by the University of Pennsylvania. Dr. Schwatt first taught at the University in 1893, when he was appointed Instructor in Mathematics. He continued with that rank for four years, and in 1897 was advanced to his present standing as Assistant Professor. He is a member of various mathematical societies in Germany, Italy and America. Dr. Schwatt was married, August 31, 1896, to Rosa Julie Eichmann; their children are: Erwin Louis Eichmann and Irma Julie Eichmann Schwatt.

SHUMWAY, Daniel Bussier, 1868-

Instructor Germanic Languages 1895-1900, Asst. Prof. 1900-

Born in Philadelphia, 1868; graduated, B.S., Univ. of Pa., 1889; graduate study Univ. of Pa., 1889-92; Ph.D. Univ. of Göttingen, 1894; continued study in Germany, 1894-95; Instr. Germanic Languages and Lit. Univ. of Pa., 1895-1900, Asst. Prof. since 1900.

DANIEL BUSSIER SHUMWAY, Ph.D., was born in Philadelphia, May 5, 1868, son of Lowell and Anna Sarah (Bussier) Shumway. His ancestry in both lines is of French origin. On the paternal side he is descended from a family of French Huguenots who came to this country, as refugees from religious persecution, in the latter half of the seventeenth century. This family first settled in Massachusetts, where they remained until Lowell Shumway removed to Philadelphia about 1850, engaging in the wholesale boot and shoe business. The name Shumway was originally Chamoix. Dr. Shumway received his early education in the public schools of Philadelphia, including graduation at the Central High School of that city in 1886. He then entered the University of Pennsylvania and pursuing a course of scientific study, graduated as Bachelor of Science in 1889. Continuing his studies as a graduate student in English, Philosophy, and Comparative Philology, he was appointed to an Instructorship in English. In 1892 he obtained leave of absence and went to Germany to enter a course of Germanics at the University of Göttingen, where he took the degree Doctor of Philosophy in 1894, presenting a dissertation on *Das ablaute Verbum* in Hans Sachs. For another year he pur-

sued further studies in Berlin and at München, and in the fall of 1895 returned to the University of Pennsylvania to enter upon his present work as Instructor in the Germanic Languages and Literatures. Dr. Shumway is a member of the Philomathean Society, the Phi Delta Theta Fraternity, the Faculty Club of the University of Pennsylvania, and the Göttingen Society of Philadelphia. He was married,



DANIEL B. SHUMWAY

August 22, 1895, to Elizabeth Lorenz; their children are: Anna Elsa and Hildegard Bussier Shumway.

SMITH, Henry Hollingsworth, 1815-1890.

Professor Surgery 1855-71, Emeritus 1871-90.

Born in Philadelphia, 1815; graduated Univ. of Pa., 1834; M.D., 1837; studied abroad; practicing physician in Philadelphia; Surgeon to St. Joseph's, Episcopal, and Blockley hospitals; Prof. Surgery Univ. of Pa., 1855-71, and Emeritus, 1871-; Surgeon-General of Pa. during Civil War; medical author; LL.D. Lafayette College, 1858; died 1890.

HENRY HOLLINGSWORTH SMITH, M.D., LL.D., was born in Philadelphia, December 10, 1815, son of James S. and Lydia (Leaming) Smith. He graduated from the College Department of the University of Pennsylvania in 1834, and from the Medical Department in 1837. After

nearly two years of professional study in London, Vienna, and Paris, he returned to Philadelphia, where he established a successful practice. His attention was soon given particularly to the subject of surgery, and as Surgeon to St. Joseph's and the Episcopal hospitals, and as a member of the Surgical Staff of the Blockley Hospital, he became widely known for unusual ability. In 1855 he was appointed Professor of Surgery at the University of Pennsylvania, and continued to teach in that position until 1871, when he was made Professor Emeritus. Dr. Smith was chosen by the Government to organize the hospital system of Pennsylvania at the outbreak of the Civil War, soon afterward being appointed Surgeon-General of the State. He rendered valuable service in planning the removal of the wounded from the battle-field of Winchester, Virginia, to hospitals in Reading, Philadelphia, Harrisburg, and other cities; in initiating the custom of embalming the dead bodies on the field; in organizing and directing an efficient force of surgeons, and supplying them with steamers and floating hospitals, at the Siege of Yorktown; and in general surgical and medical service at the battles of Williamsburg, West Point, Fair Oaks and Cold Harbor. He resigned his commission in 1862, and returned to his work in Philadelphia. Dr. Smith's bibliography includes: An Anatomical Atlas, to illustrate William E. Horner's Special Anatomy, Philadelphia, 1843; Minor Surgery, 1846; System of Operative Surgery with a biographical index to the writings and operations of American Surgeons for two hundred and thirty-four years, 1852; The Treatment of Disunited Fractures by Means of Artificial Limbs, 1855; Professional Visit to London and Paris, 1855; Practice of Surgery, 2 vols., 1857 and 1863; a translation of Civiale's Treatise on the Medical and Prophylactic Treatment of Stone and Gravel, Philadelphia, 1841; an edition of The United States Dissector, 1844; an edition of Spenser Thompson's Domestic Medicine and Surgery, 1853; and many shorter articles, addresses, and reviews. He was allied with many important scientific organizations and has often held office in such societies. He was President of the Philadelphia County Medical Society, 1877-1879; President of the Medical Society of the State of Pennsylvania in 1884; Chairman of the Surgical Section of the American Medical Association in 1878; Chairman of the Executive Committee of the International Medical Congress in 1887, and also of the Military and Naval Surgical Section in the same year. He was made a Doctor of Laws by

Lafayette College in 1885. Dr. Smith married Mary Edmonds, daughter of Professor William Edmonds Horner, M.D. He died in 1890.

STENGEL, Alfred, 1868-

Instructor and Professor Clinical Medicine 1893-

Born in Pittsburg, Pa., 1868; M.D. Univ. of Pa., 1889; Instr. Clinical Medicine at the University, 1893-99; Prof. since 1899; Asst. Director Pepper Laboratory; Clinical Prof. Medicine Women's Med. College, 1896-99; Phys. to Philadelphia, University and Children's hospitals.

ALFRED STENGEL, M.D., was born in Pittsburg, Pennsylvania, November 3, 1868, son of Geoffrey and Frederica Suzan (Hertle)



ALFRID STENGEL

Stengel. He is descended from families native to Southern Germany. After a course of study in the High School of his native place he continued his studies and prepared for University work a year under private tutors, and at the age of eighteen years entered the Medical Department of the University of Pennsylvania. He received the Doctor's degree there in 1889. Dr. Stengel's first connection with the teaching body of the University was in 1893, when he was appointed Instructor in Clinical Medicine. He retained the Instructorship until being advanced to the position of Professor of Clinical Medicine and Director of the William

Pepper Laboratory in 1899. In the University Hospital where he is now Physician he was first appointed Assistant Physician in 1894. He is also Physician to the Philadelphia and Children's hospitals. From 1896 to 1899 he held the place of Clinical Professor of Medicine in the Women's Medical College of Philadelphia. Dr. Stengel is a member of the Pathological, Pediatric, County Medical and Neurological societies of Philadelphia; he is also a fellow of the American Medical Association and a member of the Association of American Physicians, the American Pediatric Society, the American Clinatological Association, the American Public Health Association, and the University and Rittenhouse clubs. He is Editor of the American Journal of the Medical Sciences.

WEBB, Walter Loring, 1863-

Asst. Prof. Civil Engineering 1893-

Born in Rye, N. Y., 1863; attended State Normal School, Cortland, N. Y.; graduated Cornell, 1884; practicing civil engineering; Prof. Drawing Baltimore & Ohio Technological School, 1885-87; Instr. Civil Engineering Cornell, 1888-92; Instr. Civil Engineering Univ. of Pa., 1892-93, and Asst. Prof. since 1893.

WALTER LORING WEBB was born in Rye, New York, June 25, 1863, son of Edward Dexter and Emily (Loder) Webb. He is descended from Christopher Webb, who came from England to America in 1628, settling in Braintree, Massachusetts, and through him traces a direct line of English ancestors as far back as 1350. He was first educated in a private school, and fitting for College at the State Normal School in Cortland, New York, he entered Cornell at the age of seventeen. He took the regular course in Civil Engineering, and at graduation in 1884 he received the degree of Bachelor of Civil Engineering, the degree of Civil Engineer being conferred on him in 1889. After some practical experience as civil engineer in the employ of the United States Government and of various railroad corporations, Mr. Webb accepted a position as Professor of Drawing in the Baltimore and Ohio Technological School, continuing in that relation until the B. & O. R. R. Co. closed the school in 1887. After a year of professional practice in West Virginia, he was called to Cornell as Instructor of Civil Engineering. In 1892 he was appointed to a similar position in the University of Pennsylvania, and was advanced to his present rank as Assistant Professor in 1893. He is a member of the Cornell Association of Engineers and the Engi-

neering Club of Philadelphia and an Associate Member of the American Society of Civil Engineers. He is also a member of the Sigma Xi Society, an association corresponding in scientific circles to the



WALTER LORING WEBB

position of the Phi Beta Kappa among classical students. Besides several scientific articles in technical journals and other periodicals, Mr. Webb has published: Problems in the Use and Adjustment of Engineering Instruments, and Railroad Construction, both through the firm of Wiley & Sons. Mr. Webb was married in 1886 to Mary Tremaine Hubbard.

WETHERILL, Charles Mayer, 1825-1871.

Professor Chemistry 1871.

Born in Philadelphia, 1825; graduated College Dept. Univ. of Pa., 1845; Ph.D. Univ. of Giessen, 1848; M.D., *gratiae causa*, N. Y. Medical College, 1853; Chemist to Agri. Dept., Washington, 1865; Prof. Chem, Lehigh Univ., 1866-71; Prof. Chem. elect Univ. of Pa., 1871; author; died 1871.

CHARLES MAYER WETHERILL, M.D., Ph.D., was born in Philadelphia, November 4, 1825, son of Charles and Margaretta S. (Mayer) Wetherill. He graduated from the College Department of the University of Pennsylvania in 1845, receiving the Master's degree in course. For one year following graduation he worked as a

practical chemist in Philadelphia, and then went abroad for further study in his chosen branch of science. At first a student in the Royal College of France, he later entered the University of Giessen, Germany, where after one year of work in Organic Chemistry under Justus von Liebig, he received the degree Doctor of Philosophy in 1848. Upon his return to Philadelphia Dr. Wetherill equipped a private laboratory for his personal use, and there he was occupied for many years in special chemical investigations, the valuable results of which he reported in various writings in the publications of the societies with which he was allied. He was frequently engaged as Lecturer to the Franklin Institute. In 1865 he was appointed Chemist to the Agricultural Department in Washington, where he remained about one year. He became Professor of Chemistry at Lehigh University in 1866, and continued in that position until his death, five years later. At the time of his death he had also been chosen Professor of Chemistry in the College Department of the University of Pennsylvania. The honorary degree of Doctor of Medicine, *gratiae causa*, was



CHARLES M. WETHERILL

conferred upon him by the New York Medical College in 1853. Dr. Wetherill was a member of the American Philosophical Society, the Franklin Institute of Philadelphia, the Academy of Natural

Sciences of Philadelphia, the Maryland State Medical Society, and many other learned bodies at home and abroad. His writing, some forty papers in different scientific publications, notably the American Journal of Science and the Journal of the Franklin Institute, include many valuable contributions to chemical knowledge. Some of the more important are: Lecture Notes on Chemistry; Chemistry of Tannic and Gallic Acids; Adipocire and its Formation; Report on the Iron and Coal of Pennsylvania; Report on the Ventilation of Capitol Extension, Washington, D. C.; The Modern Theory of Chemical Types; Experiments on Ozone and Antozone; The Crystalline Nature of Glass. His one treatise in book form, The Manufacture of Vinegar, was published in Philadelphia in 1860. Dr. Wetherill died in South Bethlehem, Pennsylvania, March 5, 1871. His wife, who was Mary C. Benbridge, daughter of Thomas Truxton Benbridge, presented to the University of Pennsylvania the entire library of her husband soon after his death, thus founding the Wetherill Library of works on Chemistry.

WILSON, William Powell, 1844-

Prof. Anatomy and Physiology of Plants 1886-

Born in Oxford, Mich., 1844; attended High School, Battle Creek, Mich.; attended Mich. State Agricultural College; Asst. in Botany Harvard, 1874-78; S.B. Harvard, 1878; Sc.D. Univ. of Tübingen, Germany, 1880; continued study in Germany until 1882; Prof. Anat. and Physiol. of Plants Univ. of Pa., 1886-; Director School of Biology, 1891-95; Founder and Director Philadelphia Commercial Museum.

WILLIAM POWELL WILSON, Sc.D., was born in Oxford, Michigan, October 17, 1844. Much of his earliest education was received by home teaching, and later he attended the Grammar and High schools at Battle Creek, Michigan. In 1864 he entered the Michigan State Agricultural College in Lansing, where he made a special study of Mathematics, Chemistry and Natural History. At a later date, after having engaged to some extent in mercantile pursuits, receiving thorough, practical training in a large agricultural implement manufacturer's plant, he went to Harvard. There he was appointed Assistant in Botany in 1874, and so continued for three years, at the same time taking a course of study in Physics, Chemistry and other scientific branches in the Agassiz Museum of Comparative Anatomy and Biology. He received the Harvard Bachelor of Science degree in 1878. In that year

he went to Germany, where for four years he was occupied with scientific study and investigation, particularly in Plant Physiology, attending the Universities of Göttingen, Berlin, Naples and Tübingen. He took the Doctor's degree in Science at the University of Tübingen in 1880, and during the following two years, pursued original investigations there under the celebrated Dr. Pfeffer, now the foremost authority in Germany on Plant Physiology. In 1886 Dr. Wilson was appointed to the position of Professor of the Anatomy and Physiology of Plants at the University of Pennsylvania. He was also, after the



WILLIAM POWELL WILSON

death of Dr. Joseph Leidy in 1891, appointed Secretary of the School of Biology, and soon after, Director of the School. He continued in charge of the School of Biology until 1895. In 1893 Dr. Wilson devised a plan for founding a museum in Philadelphia which should receive the collections of raw products from all nations exhibited at the World's Fair in Chicago, and thus become an international bureau of commerce. Aided by the ready cooperation of the city, and the generous donations of the various nations, he was able to put into execution the entire plan of the Museum, and the Philadelphia Commercial Museum was thus organized and put into working order. Its advisory members number over two hundred in this country and as

many in foreign countries. In the interests of this museum Dr. Wilson has frequently visited the countries of Europe, South America and Mexico, studying national resources, trade relations and economic conditions.

WESSELHOEFT, Edward Charles, 1858-

Instructor in German 1892-

Born in Hamburg, Germany, 1858; attended Johanneum in Hamburg; A.M. Univ. of Pa., 1900; Instructor in German at the University, 1892-

EDWARD CHARLES WESSELHOEFT was born in Hamburg, Germany, August 10, 1858, son of George Nicholas and Henrietta Mary



E. WESSELHOEFT

(Vaughan) Wesselhoeft. His early education was received in the institutions of his native country, and upon coming to the United States he took up studies at the University of Pennsylvania, where he received the degree Master of Arts in 1900. Since 1892 Mr. Wesselhoeft has been an Instructor in German at the University. He is a member of the General Alumni Society of the University of Pennsylvania, and the Modern Language Association. He was married in April 1890, to Julia Alwina Heussner; their children are: Ethel Gertrude, born in 1891, and Edward Walter Edgecumbe Wesselhoeft, born in 1898.

FERREE, Barr, 1862-

Instructor Architecture, 1891-94.

Born in Philadelphia, 1862; attended public schools of Philadelphia; graduated B. S. Univ. of Pa., 1884; art critic and lecturer on art topics; Lecturer on Architecture at the University, 1889-91, and Instr., 1891-94; Pres. Dept. of Architecture Brooklyn Institute of Arts and Sciences.

BARR FERREE was born in Philadelphia, December 31, 1862, son of Samuel Patterson and Annie Appleton (Drown) Ferree, from French Huguenot ancestry. He was educated at first in the public and private schools of Philadelphia, and in 1881 entered the University of Pennsylvania in the second term of the Freshman year. His College course was directed with a view to taking the degree of Bachelor of Science, and was marked by a number of distinctions resulting from superior scholarship. In the Freshman year he won the Henry La Barre Jayne English Prize, and later he was awarded the Junior Philosophical Prize equally with W. Dewees Roberts; the Junior English Prize; the Senior English Prize; and the Joseph Warner Yardley Memorial Prize at graduation in 1884. He was elected Poet of the Class of 1884. Mr. Ferree is engaged in the publishing business, but gives much of his time to art work. He has been extensively engaged as a writer and lecturer on various art topics. Much of his time has been spent in study in European countries, where he retains membership in many art societies, notably: — the Royal Institute of British Architects, of which he is an honorary and corresponding member; the Académie d'Aix-en-Provence, France; the Société Archéologique d'Eure-et-Loir, Chartres, France; and the Société Archéologique du Midi de la France, Toulouse. In 1889 Mr. Ferree was appointed Lecturer on Architecture at the University, and was advanced to the position of Instructor in the same subject in 1891; he resigned in 1894. An important feature in his professional work has been the supervision, as President, of the Department of Architecture in the Brooklyn Institute of Arts and Sciences; in this connection he recently delivered a notable series of lectures on The Great Buildings of the World. He was the founder, and from 1888 to 1892 the Editor, of *Shakespeareana*; from 1895 to 1898 he was Secretary of the National Sculpture Society; he was also the founder of the Pennsylvania Society of New York and is its present Secretary. Mr. Ferree's writings consist of numerous contributions to the leading magazines and architectural papers.

WHITCOMB, Merrick, 1859-

Instructor European History 1895-1900.

Born in Nunda, N. Y., 1859; graduated Harvard, 1880; graduate study Univ. of Leipzig, Germany, Johns Hopkins Univ. and Univ. of Pa.; Ph.D. Univ. of Pa., 1897; Instr. Hist. and Economics Highland Park Normal College, Des Moines, Ia., 1894-95; Instr. European Hist. Univ. of Pa., 1895-1900; Prof. Hist. Univ. of Cincinnati, 1900-

MMERRICK WHITCOMB, Ph.D., was born in Nunda, New York, January 10, 1859, son of Walter B. and Fidelia Jane (Merrick) Whitcomb. His ancestors formerly resident in Massa-



MERRICK WHITCOMB

chusetts, settled in western New York early in the present century. After preparatory education at the Academy in Nunda and at the High School of Chelsea, Massachusetts, he entered the Academic Department of Harvard, graduating Bachelor of Arts with the Class of 1880. Then followed graduate study at the University of Leipzig, Germany, Johns Hopkins University and the University of Pennsylvania, the degree of Doctor of Philosophy being taken at University of Pennsylvania in 1897. In 1894 Dr. Whitcomb accepted an appointment as Instructor in History and Economics at the Highland Park Normal College in Des Moines, Iowa, and continued there one year until called to the University of Pennsylvania as Instructor in

European History in 1895. He received the appointment to his present position as Professor of History at the University of Cincinnati in 1900. Dr. Whitcomb is a member of the Association of Colleges and Secondary Schools of the Middle States and Maryland, and has been Secretary of that organization since 1899. He is a member of the Prairie Club of Des Moines, and of the Faculty Club of the University of Pennsylvania. He was married in 1887 to Zettie S. Fernald; his daughter, Eva Fidelia Whitcomb, was born in 1888.

TOWNE, John Henry, 1818-1875.

Trustee 1873-75 - Benefactor.

Born in Pittsburg, Pa., 1818; member of the firm of Merrick & Towne, 1842; member of the firm of I. P. Morris, Towne & Co., 1861-66; Trustee of the Univ. of Pa., 1873-75; died 1875.

JOHAN HENRY TOWNE, Founder of the Towne Scientific School in the University of Pennsylvania, was born in Pittsburg, Pennsylvania, on February 20, 1818, the son of John and Sarah (Robinson) Towne. He traced his paternal ancestry back to William Towne, who came from England in 1640. His mother, Sarah Robinson, was born in England. Mr. Towne moved to Philadelphia early in life, and studied engineering under Merrick and Agnew. In 1842 he became a member of the firm of Merrick & Towne, and in 1861, of the firm of I. P. Morris, Towne & Co., the great iron founders of their day in Philadelphia. From the latter firm he retired in 1866. In 1873 Mr. Towne was elected a member of the Board of Trustees of the University of Pennsylvania, and during the year that followed and almost to the time of his death on April 7, 1875, he took a warm interest in the development of the then new Department of Science. He provided liberally for the department in his will, his bequest amounting now to over \$400,000. In acknowledgment of his liberality and in tribute to his memory, the Board of Trustees passed resolutions declaring that the Department of Science should thereafter be known as the "Towne Scientific School of the University of Pennsylvania." Mr. Towne married, in 1843, Maria R. Tevis, and is survived by three children: Henry Robinson Towne, Helen Carman Jenks and Alice North Lincoln.

WOOD, Richard, 1833-

Trustee 1873-

Born in Philadelphia, 1833; attended Univ. of Pa. Academic Dept., and Haverford College; engaged in

dry goods business and iron manufacturing; Trustee of the University since 1873.

RICHARD WOOD was born in Philadelphia, December 25, 1833, son of Richard D. and Juliana (Randolph) Wood. The progenitor of the American branch of the Wood family was Richard Wood, who came to this country from Bristol, England; he is said to have been a member of the first Grand Jury of Pennsylvania. On the mother's side, in the direct male line, the first American ancestor was Edward Fitz Randolph, born in Nottinghamshire, England, about 1615; he married Elizabeth



RICHARD WOOD

Blossom, who had come as a child to Plymouth Colony from Leyden in 1629. From them sprang the Randolph family of New Jersey, of which Juliana Randolph was a member. Richard Wood, the subject of this sketch, was at first educated in the West Town Boarding School of Chester county, Pennsylvania, and later he studied in the Academic Department of the University of Pennsylvania and at Haverford College. For many years he has been a business man of Philadelphia, occupying positions in several firms in the dry goods trade, and has dealt also in extensive iron manufacturing enterprises. Since 1873 he has been a member of the Board of Trustees of the University. He is also identified with various other institutions of an educational, charitable, or

financial nature, notably the Provident Life and Trust Company of Philadelphia. Mr. Wood is a member of the American Philosophical Society, the Academy of Natural Sciences of Philadelphia, and the Union League and University clubs of Philadelphia.

CULIN, Stewart, 1858-

Lecturer Ethnology and American Archæology 1900-

Born in Philadelphia, 1858; educated Nazareth Hall; merchant, 1875-89; Curator Asiatic and General Ethnology Sections Univ. Museum, 1892; Director Univ. Museum, 1892; Lecturer on Ethnology and American Archæology, Univ. of Pa., 1900-; President American Folk-Lore Society, 1897; author.

STEWART CULIN, intimately associated with the Archæology Museum of the University, was born in Philadelphia, July 13, 1858. Son of John and Mira (Barret) Culin, he is a lineal descendant of Johan van Culen, one of the early Swedish settlers on the Delaware. Educated as a child at a Friends' school, and afterwards at Nazareth Hall, he entered mercantile life in his father's office at the age of seventeen, at the same time developing an interest in scientific pursuits. In 1883 he became Recording Secretary of The Numismatic and Antiquarian Society of Philadelphia, and was brought into intimate relations with its President, Dr. Daniel G. Brinton, forming a lasting friendship which had an important influence upon his subsequent life. His first publications were a series of studies of the customs of the Chinese in America, the result of close personal observation. While engaged in the study of Chinese games, his attention was directed to games in general, and he abandoned his Chinese work to undertake an examination of the games of the world. The results of this investigation have been published in a number of books and papers, among which the most considerable are Korean Games, 1896, and Chess and Playing-Cards, 1896. In these works he opposed the generally accepted theory of the "festal" origin of games, and practically demonstrated their religious and divinatory origin, at the same time by systematic comparison, showing their high antiquity and universal diffusion. In 1893 he became associated with Frank Hamilton Cushing, and in collaboration with him, undertook the preparation of an exhaustive work on the games of the North American Indians for the United States Bureau of American Ethnology. This volume is now practically ready for publication. In 1889, upon the organization of

the University Archæological Association by Dr. William Pepper, Mr. Culin was appointed its first Secretary, and was active in the formation of the new Museum of Archæology, being appointed Curator of its Section of Asia and General Ethnology in January 1892. In July 1892, he was made Director of the Museum, and in this capacity was sent as the representative of the University to the Columbian Historical Exposition at Madrid, being at the same time Secretary of the United States Commission. At the Columbian Exposition in Chicago in 1893, in connection with his duties in



STEWART CULIN

arranging the University's exhibit, he acted as assistant in the Department of Anthropology, having charge of the collection of games which formed an interesting feature of the ethnological exhibit. In 1895, at the request of Secretary G. Brown Goode of the United States National Museum, he arranged a series of games of the world for exhibition by the National Museum at the Cotton States and International Exposition in Atlanta, Georgia. A catalogue of this collection, which received the gold medal and diploma of honor, was published by the Smithsonian Institution. In the summer of 1898 Mr. Culin visited the principal European Museums upon a tour of inspection. Upon the reorganization of the University Museum in 1900, he was

appointed Curator of its American Section, as well as of its Section of General Ethnology, and a department of instruction in Archæology being created by the Trustees, he was constituted Lecturer in American Archæology in the University. In the summer of the same year he made an extended trip through the Indian reservations of the western states in company with Dr. George A. Dorsey of the Field Columbian Museum, which resulted in large accessions to the American collections of the Museum. Mr. Culin has been actively interested in the various scientific societies in Philadelphia. In 1888 he organized The Oriental Club, in which he has since retained the position of Secretary. He was President of the American Folk-Lore Society in 1897. He is an honorary member of the Société Antonio Alzate of Mexico, and a corresponding member of the Royal Spanish Academy of History and of the Italian Anthropological Society. In 1893 he received the Order of Isabella the Catholic, in recognition of his services in connection with the Historic-American Exposition in Madrid. He married, March 13, 1893, Helen, daughter of Edward H. Bunker of Brooklyn, New York.

CARRUTH, John G., 1851-

Benefactor.

Born in Paisley, Scotland, 1851; came to Philadelphia, 1867; manufacturer; President Industrial Trust, Title & Savings Company; Director Ninth National Bank, United Security Life Insurance & Trust Co., etc.; contributed to Dormitories of the University.

JOHAN G. CARRUTH was born in Paisley, Scotland, February 25, 1851, the son of James and Jane (Greenlees) Carruth. He comes of a family which had for several generations been manufacturers, and after leaving school, he decided to enter the same field. In 1867, he came to America and immediately secured a position in one of the largest establishments in Philadelphia. After having been rapidly advanced to the post of General Manager of the company, he resigned in 1876 and entered upon the manufacture of woolen, worsted and cotton goods. In 1894, his business having outgrown the limitations of his plant, he removed to Indiana Avenue and Rosehill Street, Philadelphia, where he founded the Endurance Mills. In these mills the best lines of goods are manufactured, and distributed by means of branch offices in New York, Boston, St. Louis and Chicago, all over the world. Mr. Carruth has identified himself with many of the

foremost institutions of the city. He was one of the founders of the United Security Life Insurance and Trust Company; is President of the Industrial Trust, Title & Savings Company, and a Director of the Ninth National Bank. He was one of the originators of the Philadelphia Bourse, and one of the original subscribers to the Philadelphia Casualty Company, being now a Director in the latter company. He has been an active member of the Union League since 1878, and is a member of the Columbia Club, the Manufacturers' Club, and the Trades League. On November 5, 1874, he was married



JOHN G. CARRUTH

to Annie McAlpin Kerr, and has had three children, all of whom are now deceased. As a memorial to his daughter, Jean May, Mr. Carruth made a generous donation to the University for the erection of one of the Dormitory houses, to be known as "Carruth."

STEVENSON, Sara Yorke, 1847-

Lecturer and Investigator in Archaeology.

Born in Paris, France, 1847; educated in France, came to U. S., 1867; Lecturer on Egyptian Religion, in University Lecture Association Course, 1890-91; Sc.D., Univ. of Pa., 1894; Lecturer in course on Early Civilizations at Peabody Museum, Harvard, 1893; Vice-Pres. Internat. Jury for Ethnology, World's

Columbian Exposition, 1893; Pres. Civic Club of Philadelphia, 1894-99; Sec. American Exploration Society, 1897 and of Depart. of Archæology and Palæontology of the University, 1894; Curator of Egyptian and Mediterranean Sections of the University Museum, 1890; author of "Maximilian in Mexico," 1898; and of articles on scientific and municipal subjects, 1890-1900.

SARA YORKE STEVENSON, Sc.D., was born in Paris, France, February 19, 1847, the daughter of Edward and Sarah Hanna Yorke. She is a descendant of Thomas Yorke, who came to this country in 1728, and was Lieutenant-Colonel of the Philadelphia Associators in the French and Indian War. His son, Edward, served with honor during the Revolutionary War as Captain in the Navy of the United States. Mrs. Stevenson is also descended from the Stillé and Lippincott families, large property owners in Pennsylvania, New Jersey and Rhode Island, and among her fore-fathers are found a Chief-Justice of Pennsylvania, a Provincial Councillor, a Surveyor-General of the Province, and many others prominent in the local history of colonial days. Mrs. Stevenson was educated in France under the care of M. and Mme. Achille Jubinal. M. Jubinal was a member of the Corps Législatif, a distinguished antiquary and a man of wide attainments in the literary and scientific world, and Mme. Jubinal was a sister of Count Louis Phillippe de St. Albin, then Librarian to the Empress Eugénie. In 1862 Mrs. Stevenson left France for Mexico to join her family, and in 1867 came to the United States. She had always been a student of Ancient History and finally her interest became centered in the Archæology of the Nile Valley. In 1889 Provost Pepper asked Mrs. Stevenson to be one of a little group of pioneer workers who were eventually to establish the Museum of the University of Pennsylvania. In 1890 and 1891 she delivered lectures on the Egyptian Religion under the auspices of the University Lecture Association. When the Department of Archæology was established at the University in 1890, Mrs. Stevenson became associated with it, and it was at her instigation that the movement was begun which finally resulted in the erection of the Free Museum of Science and Art. Owing to her efforts large collections were obtained for the University from the Nile Valley, through a close co-operation with the Egypt Exploration Fund, the Egyptian Research Account, and Mr. W. M. Flinders-Petrie. In recognition of her scientific attainments and of her untiring and successful efforts, the University bestowed upon her in 1894, the honorary degree of Doctor of Science, the first it had

ever conferred upon a woman. In the preceding year she had been invited to lecture on Egypt at the Peabody Museum in Cambridge, Massachusetts, and hers was the first woman's name entered as Lecturer upon a Harvard Calendar. Mrs. Stevenson is Secretary of the American Exploration Society, and partly through her efforts a superb collection illustrative of ancient Etruscan civilization — now known as the Phebe A. Hearst Collection — was made by A. L. Frothingham and secured for the University. In 1893 Mrs. Stevenson was elected Vice-President of the International



SARA Y. STEVENSON

Jury for Ethnology at the World's Columbian Exhibition, and in 1894 she was appointed by ordinance of City Councils the only woman member of the Board of Trustees of the Philadelphia Museums. In the same year she became President of the Civic Club of Philadelphia and served till 1899. In 1896 she was appointed a member of the Advisory Board of prominent citizens to advise with the Mayor of Philadelphia with regard to the raising and expending of a twelve million dollar loan for permanent improvements. She was also appointed by the Mayor Chairman of a Ladies Reception Committee to extend the honors of the city to the ladies accompanying the President of the United States, on the occasion of the opening of the Commercial Museum

in 1897, and again at the Peace Jubilee in 1898. She was asked to officiate in the same capacity when the foreign delegates to the International Postal Congress visited Philadelphia in 1897, and more recently during the National Export Exposition in 1899. In 1897 she was sent by the Department of Archæology of the University on a special mission to Rome, and in 1898 she represented the American Exploration Society in Egypt. Mrs. Stevenson has published reports of the Department of Archæology and Palæontology of the University, and as President of the Civic Club, several addresses on municipal subjects. She is the author of papers published in the Proceedings of the Numismatic and Antiquarian Society of Philadelphia, of the Anthropological Congress, Chicago, 1893, of the Oriental Club of Philadelphia, and of the American Philosophical Society; also in the American Journal of Archæology and in various magazines, and in 1898 she published a volume of Reminiscences under the title of Maximilian in Mexico, (Century Publishing Company). Besides the offices mentioned, Mrs. Stevenson is Secretary of the Department of Archæology and Palæontology of the University; Curator of the Egyptian and Mediterranean Sections of the same Department; President of the Pennsylvania Branch of the Archæological Institute of America; fellow of the American Association for the Advancement of Science; and member of the American Philosophical Society, the American Oriental Society, and the New Century Club. She is also President of the Acorn Club, and of the Joint Executive Board of the Depository and Philadelphia Exchange for Woman's Work, and Secretary of the Art Federation of Philadelphia. She was married, June 30, 1870, to Cornelius Stevenson, a member of the Bar, and has one son, William Yorke Stevenson.

McMASTER, John Bach, 1852-

Professor American History 1883-

Born in Brooklyn, N. Y., 1852; graduated College of the City of New York, 1872; Instr. Civil Engineering Princeton, 1877-83; Prof. American Hist. Univ. of Pa. 1883-; author of historical works.

JOHN BACH McMASTER, Litt.D., was born in Brooklyn, New York, June 29, 1852, and was educated as a boy in the public schools of New York city. His graduation at the College of the City of New York in 1872 was followed by an appointment as Fellow in English in that institution. After one year in that work he took up studies in

Civil Engineering, a subject which he afterwards taught at Princeton, where he was appointed Instructor in Civil Engineering in 1877. In the meantime he had devoted several years from 1870 to the collection of material for his notable work on American History entitled *History of the People of the United States from the Revolution to the Civil War*. The first volume of this work, published in New York in 1883, attained an immediate success; and has since been followed by four more. Since 1883, Mr. McMaster has been Professor of American History at the University of Pennsylvania, and in connection with his work in this relation he has continued to produce historical writings which have appeared as magazine articles and otherwise; of particular importance among these is his *Life of Benjamin Franklin*, printed in the *Men of Letters Series* of 1887.

FARIES, Randolph, 1862-

Physical Director 1890-

Born in Williamsport, Pa., 1862; graduated Univ. of Pa., 1885; M.D., 1888; A.M., 1892; studied at Univ. of Berlin, Germany, 1889; entered practice in Philadelphia; Resident Phys. to Presb. Hosp., 1889; Director of Physical Education at the University since 1890.

RANDOLPH FARIES, M.D., Director of Physical Education, was born in Williamsport, Pennsylvania, June 25, 1862, son of Robert and Emma Janette (Canfield) Faries. He entered the University of Pennsylvania in 1881 and became prominent in athletics, holding the championship for the mile run in 1884, 1885 and 1886 and that for the eight hundred and eighty-eight yards in 1887. He graduated Bachelor of Arts in 1885, and in 1888 received the degree of Doctor of Medicine. After one year of service in the Presbyterian Hospital as Resident Physician Dr. Faries went abroad, and in 1889 was a student at the University of Berlin, Germany. Returning to Philadelphia he was made Director of Physical Education in the University. The University conferred upon him the honorary degree of Master of Arts in 1892. He is a member of the Phi Kappa Upsilon Fraternity and the Philadelphia County Medical Society. He married Marie Louise, daughter of William Weightman, Jr., of Philadelphia.

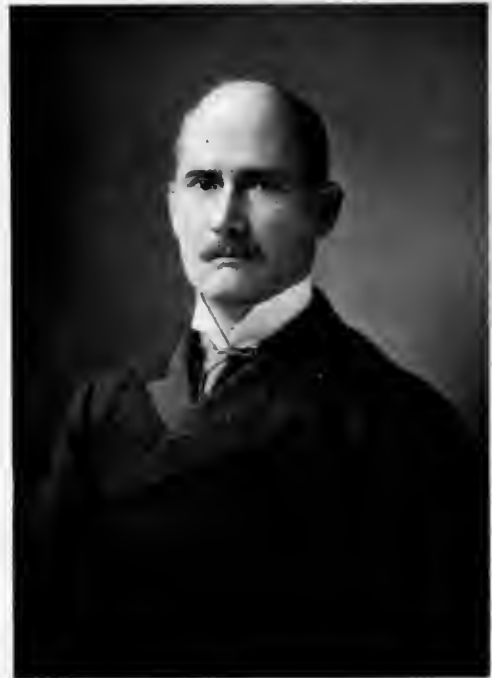
McPHERSON, John Bayard, 1846-

Professor Law 1899-

Born in Harrisburg, Pa., 1846; educated at private schools in Harrisburg and public schools in Sidney, O.; graduated Princeton, 1866; studied law, and was

admitted to Bar, 1870; practicing lawyer in Harrisburg; Dist. Atty., 1875-77; Judge of Common Pleas, 1882-99; U. S. Dist. Judge for Eastern Dist. of Pa. since 1899; Prof. Law Univ. of Pa., since 1899; LL.D., Univ. of Pa., Princeton, and Franklin and Marshall College, 1899.

JOHAN BAYARD MCPHERSON, LL.D., United States District Judge in Philadelphia, was born in Harrisburg, Pennsylvania, November 5, 1846, son of William Carrick and Elizabeth (Wallace) McPherson. Besides the McPhersons and Wallaces (Scotch-Irish), he is descended from the Cumminses (also of that race), and from the Len-



JOHN B. MCPHERSON

harts and Harbachs (German), and the Hoges and Evanses (Welsh). Having pursued primary studies in Harrisburg private schools, he prepared for College in the public schools of Sidney, Ohio, and entering Princeton with Class of 1866, was graduated prior to his twentieth birthday. He read law in Harrisburg and Chicago, commencing and completing his studies in the first-named city, where he began to practice after his admission to the Bar in January, 1870. From 1875 to 1877 inclusive he served as District Attorney for Dauphin County, and was appointed Judge of the Court of Common Pleas in February 1882, to serve for the remainder of the year. He was elected to that post by popular vote in the following November for

the full term of ten years without opposition, and re-elected in 1892 under the same circumstances. In March 1899 he was appointed by President McKinley United States District Judge for the Eastern District of Pennsylvania. Later in the year he was appointed to his present position as Professor of Law in the University of Pennsylvania. In June 1899 he received the degree of Doctor of Laws from the University of Pennsylvania, from Princeton, and from Franklin and Marshall College. Judge McPherson was President of the Central Pennsylvania Princeton Alumni Association from 1890 to 1900; Vice-president of the Dauphin County Historical Society from 1895 to 1900; and has been a Trustee of Wilson College for Women since 1893. He is a member of the Pennsylvania Bar Association, the Forestry Association, the Sons of the American Revolution, the Pennsylvania Scotch-Irish and German societies, the League of American Wheelmen, the Shakespeare Society, the Presbyterian Social Union, the Princeton Club, and the University Club of Philadelphia. In politics he is a Republican. He married, December 30, 1879, Annie Cochran, daughter of Judge David Watson, and Mary Reigart (Slaymaker), Patterson of Lancaster, Pennsylvania. His children are: Mary Patterson, born October 16, 1880; and Elizabeth Wallace McPherson, born October 13, 1882. His residence is in Philadelphia.

EVANS, Henry Brown, 1871-

Instructor in Astronomy 1895-

Born in Dayton, O., 1871; graduated in Mechanical Engineering Lehigh Univ., 1893; Instr. in Math. and Astronomy Lehigh, Univ., 1894-95; Instr. in Astronomy Univ. of Pa., 1895-

HENRY BROWN EVANS was born in Dayton, Ohio, July 2, 1871, son of Lewis Girdler and Frances Eliza (Brown) Evans. He was prepared for College in the public schools of Dayton, and after entering Lehigh University elected the course leading to the degree of Mechanical Engineer, with which he graduated in 1893. Before coming to his present position as Instructor in Astronomy at the University of Pennsylvania in 1895, Mr. Evans had been for one year Instructor in Mathematics and Astronomy at Lehigh University. He is a member of the American Mathematical Society, the American Association for the Advancement of Science and the Astronomical and Astrophysical Society of America.

CHILD, Clarence Griffin, 1864-

Instructor in English 1896-

Born in Newport, R. I., 1864; A.B. Trinity College, 1886; Ph.D. Johns Hopkins, 1895; Asst. Editor in revision of Worcester's Dictionary 1895 to date; Instr. in English, Univ. of Pa., 1896 to date; non-resident lecturer in Anglo-Saxon Bryn Mawr College, 1900-01.

CLARENCE GRIFFIN CHILD, Ph.D., Instructor in English, University of Pennsylvania, was born in Newport, Rhode Island, March 22, 1864, the son of Rev. William Spencer Child, S.T.D., and Jessie Isabella Davis. Dr. Child received his early education at St. Johns House,



CLARENCE G. CHILD

Newport. Entering Trinity College he graduated in 1886, and received his Master of Arts in 1891. He was Instructor in Mathematics and English at Trinity 1890-1891. He studied at the University of Munich 1891-1892, passing in the latter year to Johns Hopkins University where he remained until 1895. He was University scholar there in 1894 and University Fellow in 1895. From 1895 to date Dr. Child has been engaged as Assistant Editor in the revision of Worcester's Dictionary. In 1896 he became Instructor in English at the University of Pennsylvania, which position he still holds, and in 1900 he was appointed non-resident Lecturer in Anglo-Saxon in Bryn Mawr College. He has published John Lyly and Euphuism in the

Münchener Beiträge zur romanischen und englischen Philologie, and various technical papers and magazine articles. Dr. Child was married on June 20, 1899, to Elizabeth Reynolds.

BATES, William Nickerson, 1867-

Instructor Greek and Classical Archæology 1895-

Born in Cambridge, Mass., 1867; attended Cambridge Latin School; graduated Harvard, 1890; A.M., 1891; Ph.D., 1893; Instr. in Greek Harvard, 1893-95; Instr. in Greek and Classical Archæology Univ. of Pa., 1895-

WILLIAM NICKERSON BATES, Ph.D., was born in Cambridge, Massachusetts, December 8, 1867, son of Charles and Anna P. (Nickerson) Bates. For about two hundred years his ancestors on the paternal side have been residents of Cambridge, having previously lived in Weymouth, Massachusetts, where the first representative settled in 1638. The maternal family is one of the oldest identified with New Bedford, Massachusetts. Several ancestors were prominent in the early history of Massachusetts, especially during the Revolution. After instruction in a private school Dr. Bates entered the Cambridge Latin School, graduating in 1886. From Harvard he holds three degrees: Bachelor of Arts received at graduation in 1890; Master of Arts received in 1891 after a year of graduate study; and Doctor of Philosophy received 1893 in recognition of his studies in classical Philology. An important part of his research study was performed in travel in Greece and the East. Dr. Bates held a position as Instructor in Greek at Harvard from 1893 to 1895, in the latter year entering his present position at the University of Pennsylvania as Instructor in Greek and in Classical Archæology. His writings have appeared chiefly in the form of magazine articles on philological or archæological subjects. He is Secretary and Treasurer of the Pennsylvania Society of the Archæological Institute of America.

MERRICK, James Hartley, 1869-

Asst. Sec. of Board of Trustees 1894-

Born Philadelphia, 1869; graduated Univ. of Pa., 1890; Clerk, Southwark Foundry & Machine Co., 1890-92; Assist. to the Dean of the College 1892-94; Assist. Sec. of the Board of Trustees 1894-

JAMES HARTLEY MERRICK was born in Philadelphia, September 6, 1869, the son of John Vaughan and Mary Sophia (Wagner) Merrick.

He graduated from the Arts Department of the University of Pennsylvania in 1890, having been a member of the Phi Kappa Sigma Fraternity and Class Historian. At his graduation Mr. Merrick became clerk in the Southwark Foundry and Machine Company, where he remained until 1892 when he was appointed Assistant to the Dean of the College. In 1894 he became Assistant Secretary of the Board of Trustees which office he still holds. Mr. Merrick is a Life Member of the Franklin Institute, the Zoological Society of Philadelphia, the Pennsylvania Academy of the Fine Arts, and the Houston Club, and a member of the Philadelphia Barge Club, the Mask and Wig Club, the Rittenhouse Club, the Historical and Genealogical Societies of Pennsylvania; and is a Manager of St. Timothy's Hospital, Roxboro, and Vestryman of the Protestant Episcopal Church of the Transfiguration. He is also a member of the Executive Committee of the Philadelphia Charity Ball Association. Mr. Merrick was married October 27, 1897, to Edith Lovering, of Taunton, Massachusetts.

FLEXNER, Simon, 1863-

Professor Pathology 1899-

Born in Louisville, Ky., 1863; educated in Louisville schools; graduated in medicine Univ. of Louisville, 1889; studied in Univ. of Strassburg, Germany, 1893; taught Pathology in Johns Hopkins University, 1892-98, and Prof. Pathological Anatomy there, 1898-99; Prof. Pathology Univ. of Pa., 1899-

SIMON FLEXNER, M.D., was born in Louisville, Kentucky, in 1863, son of Morris and Esther (Abraham) Flexner. His family is of German origin. Dr. Flexner was at first educated in the public schools of Louisville, and at the age of twenty-six was graduated in medicine from the University of Louisville. His subsequent studies were in Johns Hopkins University of Baltimore, where he held a Fellowship in Pathology in 1891-1892, and in the German University of Strassburg in 1893. Dr. Flexner became Associate in Pathology at Johns Hopkins in 1892, and Associate Professor of the same subject in 1895. From that position he was advanced to the Professorship of Pathological Anatomy in 1898, which chair he resigned in 1899 to accept a call to his present position as Professor of Pathology in the University of Pennsylvania. He is a member of the Association of American Physicians; a Fellow of the College of Physicians of Philadelphia; a corresponding

member of the Societa Medico-Chirurgica di Bologna; and a member of the University Club of Philadelphia.

HIRST, Barton Cooke, 1861-

Professor Obstetrics 1889-

Born in Philadelphia, 1861; attended Academic Dept. of the University, and graduated Univ. Medical School, 1883; studied abroad, 1883-85; Demstr. and Lecturer Obstetrics Univ. of Pa., 1886-88; Associate Prof., 1888-89; Prof. since 1889; practicing physician and medical writer.

BARTON COOKE HIRST, M.D., was born at Chestnut Hill, Philadelphia, July 20, 1861, son of William Lucas and Lydia Barton (Cooke) Hirst. In 1878 he entered the College Department of the University, but at the end of the second year transferred to the Medical Department. After graduating Doctor of Medicine in 1883 he went abroad for advanced study, and for two years pursued medical courses at the Universities of Berlin, Heidelberg, and Vienna, in the latter part of 1885 becoming Interne of the Royal University Hospital in Munich, Germany. From the positions of Demonstrator and Lecturer in Obstetrics Dr. Hirst has advanced to his present relation of Professor of that subject, having been Associate Professor of Obstetrics from 1888 to 1889, and full Professor since 1889. His professional labor in addition to his personal practice, has also included hospital service as gynecologist to the Howard and Orthopædic Hospitals and Obstetrician to the University Maternity and Philadelphia Hospitals. Of his literary productions two are particularly notable: *American Systems of Gynæcology and Obstetrics*, prepared in joint editorship with Dr. Matthew D. Mann; and *Human Monstrosities*, which was written in co-operation with Dr. George A. Piersol, Professor of Anatomy in the University Medical School. His bibliography includes also many writings contributed to American and foreign medical journals. Dr. Hirst married Elizabeth Haskins Dupuy, daughter of Thomas Graham of Philadelphia.

ROBINSON, James Harvey, 1863-

Associate Professor History 1892-1894.

Born in Bloomington, Ill., 1863; graduated Harvard, 1887; graduate study at Harvard and in Germany; Ph.D., Univ. of Freiburg, 1890; Univ. Lecturer in European Hist. Univ. of Pa., 1891-92; Associate Prof. Hist., 1892-94; Prof. Hist. Columbia, 1894-; Acting

Dean of Barnard College, 1900-01; teacher, author and editor.

JAMES HARVEY ROBINSON, Ph.D., was born in Bloomington, Illinois, June 29, 1863, son of James Harvey and Latricia Maria (Drake) Robinson. On both sides his ancestry is of English origin, coming to Massachusetts in the period between 1620 and 1630. On the paternal side the descent is directly from John Robinson, the Puritan Pastor of Leyden. From his tenth to his nineteenth year, Dr. Robinson was educated in the schools of Bloomington and in the High School of the State



JAMES HARVEY ROBINSON

Normal University, and then after one year of travel and one of business, he entered Harvard, graduating in three years with the Class of 1887. Graduate study was then commenced at Harvard and after one year continued in the German Universities of Strassburg and Freiburg, the degree Doctor of Philosophy being taken at the latter institution in 1890. Dr. Robinson spent one year in northern Germany and in Paris, and in 1891 upon his return to the United States, he was appointed University Lecturer in European History in the University of Pennsylvania. From that position he was advanced to the place of Associate Professor of History in 1892, but resigned in 1894 to accept his present office at Columbia as Professor of History in the Faculty of

History and Political Science. He has also been, since January 1900, Acting Dean of Barnard College. From 1891 to 1893 Dr. Robinson was associate editor of the *Annals of the American Academy of Political and Social Science*. He has shown great interest in forwarding and improving the instruction in European History in our schools and colleges and was a member of the sub-committee of ten appointed by the committee of the National Educational Association in 1892 to consider that subject. With his colleagues in the University of Pennsylvania he began in 1894 the publication of the "Translations and Reprints from the Sources of European History." He performed further literary work as the author of: *The Original and Derived Features of the Constitution of the United States*, Philadelphia, 1890; *The German Bundesrath*, Philadelphia, 1891, and in joint authorship with H. W. Rolfe, *Petrarch, The First Modern Scholar and Man of Letters*, Putnam, New York, 1899. Dr. Robinson is a member of the Century Association and the Barnard Club of New York City. He was married, September 1, 1887, to Grace Woodville Read.

SEAGER, Henry Rogers, 1870-

Assistant Professor Political Economy 1897-

Born in Lansing, Mich., 1870; graduated Univ. of Michigan, 1890; studied at Johns Hopkins Univ. and at Universities of Halle, Berlin and Vienna; Ph.D. Univ. of Pa., and appointed Asst. Prof. Political Economy, 1897; Assoc. Editor *Annals of the American Academy* since 1898.

HENRY ROGERS SEAGER, Ph.D., was born in Lansing, Michigan, July 21, 1870, son of Schuyler Fisk and Alice (Berry) Seager. After attending the public schools of Lansing for a time, he entered the Michigan Military Academy, where he remained from 1884 to 1886. Having thus fitted himself for College he matriculated at the University of Michigan and was graduated in 1890. His interest in political economy led him to go to Johns Hopkins University for graduate study and subsequently to Europe to enjoy contact with foreign economists. For a period he was a student at Halle and Berlin and then spent a few months in Vienna, interesting himself in the Austrian School of Political Economy. Returning to the United States he continued his studies at the University of Pennsylvania under Professor Patten, receiving the degree of Doctor of Philosophy there at the conclusion of four years of graduate work in 1894. Dr. Seager

was at once appointed to the position of Instructor in Political Economy in the Wharton School and has since become Assistant Professor of Political Economy. He has been a frequent contributor to the *Annals of the American Academy of Political and Social Science*, of which he has been an Associate Editor since 1898, and he is Vice-President of the Free Library of Economics and Political Science of Philadelphia, an institution which he helped to organize. He is also a member of the Contemporary Club and the Faculty Club of Philadelphia. He married Harriet Henderson of Philadelphia in 1899.

STEELE, John Dutton, 1868-

Instructor Clinical Medicine 1899-

Born in Sterling, N. Y., 1868; graduated A.B. Williams College, 1888; M.D. Univ. of Pa., 1893; studied in Univ. of Heidelberg, 1895; Asst. Demonstrator of Morbid Anatomy Univ. of Pa., 1895-99; Instructor in Clinical Medicine, 1899 to date.

JOHAN DUTTON STEELE, M.D., was born in Sterling, New York, February 21, 1868. In 1884 he entered Williams College from the Hill School, Pottstown, Pennsylvania, and graduated Bachelor of Arts, in 1888. In 1893 he received the Doctor of Medicine degree from the University of Pennsylvania. He passed the next year as Resident Physician at the Philadelphia Hospital, and then went to the University of Heidelberg to continue his medical studies. Returning to Philadelphia in 1895, he became Assistant Demonstrator of Morbid Anatomy at the University. He is now Instructor in Clinical Medicine, having been transferred from his previous position in 1899. Since 1897 Dr. Steele has been Bacteriologist at the Presbyterian Hospital, Philadelphia. He is a Fellow of the College of Physicians, and a member of the Philadelphia Pathological Society, the County Medical Society, the Neurological Society and the University Medical Society. He is also a member of the Delta Kappa Epsilon Society of Williams, and a member of the University Club of Philadelphia.

WOOD, Horatio C., 1841-

Prof. *Materia Medica, Pharmacy and General Therapeutics*, and Clinical Prof. *Nervous Diseases* 1875-

Born in Philadelphia, 1841; graduated Medical Dept. Univ. of Pa., 1862; practicing physician in Philadelphia; Prof. Botany at the University, 1866-75; Clinical Prof. *Nervous Diseases* since 1875, and Prof. *Materia Medica, Pharmacy and General Therapeutics* since

1876; Visiting Physician to University Hosp. since 1870; LL.D. Lafayette, and Yale, 1889; author and editor.

HORATIO C. WOOD, M.D., LL.D., was born in Philadelphia, January 13, 1841. He graduated in Medicine at the University of Pennsylvania in 1862, and at once commenced practice in Philadelphia. His professional work was increased in 1866 by his appointment to the Chair of Botany in the auxiliary Medical Faculty of the University, and he retained that position until 1875, when he entered the regular Medical Department as



H. C. WOOD

Clinical Professor of Nervous Diseases. One year later he received a second appointment as Professor of Materia Medica, Pharmacy and General Therapeutics; he has continued in an efficient discharge of the duties of these positions through twenty-five years of an exceedingly busy and fruitful career. Dr. Wood's hospital work has been performed chiefly as Visiting Physician to the Philadelphia Hospital from 1872 to 1887, and in the same capacity to the University Hospital since 1870. His professional work has become distinguished by his extensive contributions to the literature of medicine. At the head of a notable bibliography may be mentioned three prize essays: Experimental Researches in the Physiological Action of Nitrite of Amyl,

which won the Warren Prize at the Massachusetts General Hospital in 1871; Researches upon American Hemp, for which he received a special prize from the American Philosophical Society; and Thermic Fever, or Sunstroke, for which he was awarded the Boylston Prize of Harvard University in 1872. Other published writings are: Treatise on Materia Medica and Therapeutics, 1875 and eleven later editions; United States Dispensary, chief editor since January 1883, 5 editions; Brain-Work and Over-work, 1879; Nervous Diseases and their Diagnosis, 1886; Practice of Medicine, in conjunction with Professor Fitz, 1896; and monographs on the following topics: The Myriapoda of North America; The Phalangidæ of North America; The Fresh-Water Algæ of North America; and Fever, a Study in Morbid and Normal Physiology; the two last named being issued by the Smithsonian Institution in 1872 and 1880 respectively. Dr. Wood was engaged editorially in conducting The Therapeutic Gazette from 1884 to 1890; he also edited New Remedies from 1870 to 1873, and The Philadelphia Medical Times from 1873 to 1880. He was elected a member of the National Academy of Sciences in 1879, and was honored with the Doctor of Laws degree by Yale in 1889.

YOUNG, James Kelly, 1862-

Instructor Orthopædic Surgery 1888-

Born in Trenton, N. J., 1862; graduated Univ. of Pa. Medical Dept., 1883; studied abroad; connected with Philadelphia hospitals; Instr. Orthopædic Surgery Univ. of Pa. since 1888; Prof. in Philadelphia Polyclinic; Clinical Prof. in Women's Medical College of Pa.; Expert Surgeon Bureau of Commissions.

JAMES KELLY YOUNG, M.D., was born in Trenton, New Jersey, April 29, 1862, son of William and Ellen Eliza (Kelly) Young. He is descended maternally from James Kelly of Philadelphia and on the paternal side, from William Young, his grandfather, who was an English subject, a manufacturer of porcelain, and gold printer to Her Majesty, the Queen. Dr. Young's medical studies commenced in 1879 under the tutelage of Dr. David Warman of Trenton. He later read with Dr. William G. Porter of Philadelphia, and followed a course of study at the University of Pennsylvania, where he was made a Doctor of Medicine in 1883. He was connected with the Philadelphia Dispensary in 1883-1884, and during the next year, with the Philadelphia Hospital. Other appointments have been with the University Hospital, where he is now

Assistant Orthopædic Surgeon; and with Wills Eye Hospital from 1886 to 1890. In 1888 he attended Professor Albert's Clinic in Vienna. Dr. Young has been Instructor in Orthopædic Surgery at the University of Pennsylvania since 1888. He has also been Professor of the same subject at the Philadelphia Polyclinic since 1885; Clinical Professor at the Women's Medical College of Pennsylvania since 1885; and Surgeon to the Home for Crippled Children from 1894 to 1899. In civil life he holds the position of Expert Surgeon to the Bureau of Commissions. Dr. Young is a member of the American Orthopædic Association, the American Medical Association, the Association of Physicians and Surgeons, the Pennsylvania State Medical Society, the Philadelphia County Medical Society, the Pediatric Society, the College of Physicians, and the University Club. He was married, June 7, 1899, to Mary Thornton Wilson, M.D.

NORRIS, William Fisher, 1839-

Prof. Ophthalmology, and Clinical Prof. Diseases of the Eye 1873-

Born in Philadelphia, 1839; graduated Univ. of Pa., 1857, M.D. 1861; practicing physician in Philadelphia; Clinical Prof. Diseases of the Eye Univ. of Pa., 1873-91; Prof. Ophthalmology, and Clinical Prof. Diseases of the Eye since 1891; Asst. Surgeon U. S. Army, 1863-65; medical writer.

WILLIAM FISHER NORRIS, M.D. was born in Philadelphia, January 6, 1839, son of Dr. George Washington and Mary Pleasants (Fisher) Norris. Like his father, he graduated from both the Academic and Medical Departments of the University of Pennsylvania, receiving the Bachelor of Arts degree with the Class of 1857 and his Doctor's degree in 1861; the Master of Arts degree was conferred upon him in course. His practice, which has been chiefly devoted to the specialty of Diseases of the eye, has been from the first in Philadelphia, where he has been Resident Physician to the Pennsylvania Hospital and Surgeon to the Wills Eye Hospital. Dr. Norris first entered the service of the University in 1873, when he was appointed Clinical Professor of Diseases of the Eye, a position which he has since continued to occupy with distinguished success. He has also been since 1891, Professor of Ophthalmology. In the second year of the Civil War Dr. Norris entered the service of the United States Army in the capacity of Assistant Surgeon, and during one of the two years of his service he had charge of the Douglas General Army Hospital in Washington, District of Columbia;

for the efficiency of his service he received the brevet rank of Captain. He has published in joint authorship with Dr. Charles A. Oliver, A Text-book of Ophthalmology, and independently a large number of writings on Medical topics contributed to various journals and to the Transactions of the Societies of which he is a member. Later in collaboration with Dr. Oliver, Dr. Norris edited a System of Diseases of the Eye by American, British, French, German and Spanish Authors in four volumes, Dr. N. contributing from his own pen the article on Cataract. In these organizations Dr. Norris has



WM. F. NORRIS

occupied a prominent position for many years, serving frequently in official capacities, notably as Vice-President of the Pathological Society of Philadelphia in 1877; Vice-President of the American Ophthalmological Society in 1879, and its President from 1885 to 1889. He is also allied with the Philadelphia Academy of Natural Sciences, the American Philosophical Society, and the College of Physicians of Philadelphia. He is a member of the Phi Beta Kappa Society. Dr. Norris married Rosa C. a daughter of Hieronymus Buchmann of Vienna, Austria and after her death Annetta Culp Earnshaw, daughter of George A. Earnshaw of Gettysburg (late Captain-Brevet Colonel of 138th Regiment Penna. Volunteers.)

HARGER, Simon Jacob John, 1865-

Prof. Veterinary Anatomy and Zootechnics 1890-

Born in Hecktown, Pa., 1865; graduated Vet. Dept. Univ. of Pa., 1887; Demstr. Vet. Anatomy Univ. of Pa., 1887-90; Prof. Vet. Anatomy and Zootechnics, 1890-

SIMON JACOB JOHN HARGER, V.M.D., was born in Hecktown, Northampton county, Pennsylvania, June 18, 1865, son of John and Annie Caroline (Reinheimer) Harger. His ancestors, members of Pennsylvania German families, have been for several generations resident in the eastern part of the state. His preliminary education was received from the public schools and from the Key-



SIMON J. J. HARGER

stone State Normal School of Pennsylvania. Professionally, he was educated at the Veterinary Department of the University of Pennsylvania, of whose first graduating class he was a member in 1887. His graduation was immediately followed by an appointment in the University as Demonstrator of Veterinary Anatomy, which position he held until advanced to his present standing as Professor of Veterinary Anatomy and Zootechnics in 1890. Dr. Harger has as a member of the State Board of Veterinary Medical Examiners of Pennsylvania, accomplished valuable results in the promotion of a higher degree of efficiency in his profession. He originated the bill for the creation of a State Board of Veteri-

nary Examiners, and, chiefly through his personal efforts, secured its passage through the Legislature. He is a member of the Keystone Veterinary, the Pennsylvania State Veterinary and the American Veterinary associations. His political affiliations are with the Republican party.

DaCOSTA, Jacob Mendes, 1833-1900.

Trustee 1899-1900

Born in the Island of St. Thomas, West Indies, 1833; educated in Germany and the United States; graduated M.D. at Jefferson Medical College, 1852; spent two years in hospitals of Europe; appointed Lect. in Jefferson College, 1864; Prof. of Practice of Medicine and of Clinical Medicine, 1872; and Emeritus Prof., 1891; author of works and treatises on medical subjects; a Trustee of the University 1899-1900; died 1900.

JACOB MENDES DACOSTA, M.D., LL.D., Emeritus Professor of Medicine in Jefferson Medical College, was born in the Island of St. Thomas in the West Indies, February 7, 1833. He was educated partly in the United States and partly in Europe. He spent some years in boyhood at the Gymnasium in Dresden, Saxony, and returning to this country entered the Jefferson Medical College in Philadelphia, from which he was graduated in 1852. Going again to Europe with the purpose of finishing his medical education he spent two years in the hospitals and Universities of Paris and Vienna. On his return to the United States he settled in Philadelphia and at once began the active practice of his profession, devoting much attention to internal diseases, especially to those of the heart and lungs, in which field of investigation he soon attained high eminence. For six years from 1859 he was a Visiting Physician to the Philadelphia Hospital. In 1864 he was appointed Lecturer on Clinical Medicine in Jefferson Medical College, and in 1872 succeeded Professor Samuel Dickson as the occupant of the Chair of Practice of Medicine. In this position he continued until 1891, when he resigned, becoming Emeritus Professor. Dr. DaCosta has been associated with many hospitals during his long career as a physician. He was engaged in important hospital service during the Civil War. He has been Physician at the Pennsylvania Hospital for more than thirty years. He is a member of a large number of medical and other learned societies in this country and in Europe, notably the Association of American Physicians, of which for a time he was the President; the College of Physicians, of which he was also the

President in 1884-1885 and again in 1895-1898; the Academy of Natural Sciences of Philadelphia and the American Philosophical Society. He was elected a Trustee of the University of Pennsylvania in 1899. He received the degree of Doctor of Laws from the University of Pennsylvania in 1891, and Harvard conferred the same honor upon him in 1897. Dr. DaCosta has been an industrious writer all his life, contributing to the principal medical magazines the results of his valuable researches. He has also written a number of works and monographs on different forms of disease. Among these are a work entitled *Inhalation in the Treatment of Diseases of the Respiratory Passages*, published in 1867; *Internal Complications of Acute Erysipelas*, 1877; and *The Albuminuria and Bright's Disease of Uric Acid and of Oxaluria*, 1893. The latter essay treated of a form of disease which had previously been little understood and as a result of Dr. DaCosta's investigations it is now generally known as *Morbus DaCostae*. Similarly his observations in regard to the "irritable heart" have led to this disease being named the "irritable heart of DaCosta." His most important work, however, in point of circulation, is his *Medical Diagnosis with Special Reference to Practical Medicine*. It was first published in 1864 and has now reached its ninth American edition, has also passed through several editions in Germany, and, besides German, has been translated into Russian and Italian. On subjects other than strictly professional, his more notable works are *Harvey and his Discovery*, 1879, and *The Scholar in Medicine*, 1897. Dr. DaCosta was married in 1860 to Sarah, daughter of George Brinton of Philadelphia. He had one son, Charles F. DaCosta, now a member of the Philadelphia Bar. Dr. DaCosta died suddenly of heart failure at his country home, Ashwood, Villa Nova, Pennsylvania, September 11, 1900. He left a bequest to the University to found a retiring fund for Professors of long service.

SHINN, Owen Louis, 1871-

Instructor Chemistry 1893

Born in Philadelphia, 1871; attended Central Manual Training School; graduated B.S. Univ. of Pa., 1893; Ph.D., 1896; Instr. in General Chemistry at the University, 1893-

OWEN LOUIS SHINN, Ph.D., was born in Philadelphia, July 30, 1871, son of Frederick and Anna S. (McCabe) Shinn. His ancestry,

which is of Welsh origin on the paternal side and of Irish in the maternal family, antedates the Revolution in this country. He was a student in the public schools and in the Central Manual Training School before entering the University. He received the Bachelor's degree in Science in 1893, and was at once appointed to his present position as Instructor in General Chemistry. For three years he was also a student in the Department of Philosophy, receiving the Doctor's degree in 1896. Dr. Shinn is a member of the Alpha Chi Rho and Sigma Xi fraternities and the American Chemical Society. In joint authorship with Dr. Edgar F. Smith he has published *Action of Ammonia Gas on Wolframyl Chloride*; and *Action of Molybdenum Dioxide on Silver Salts*. He was married, November 9, 1897 to Edith May Stringer, and has one child, Eleanor Anna Shinn, who was born July 20, 1900.

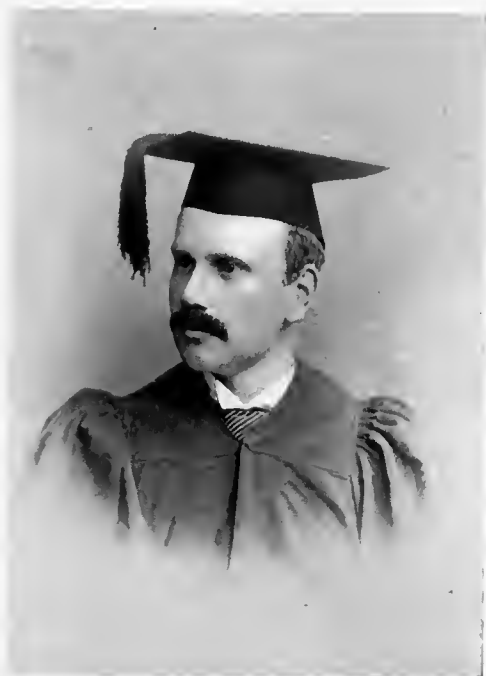
HARSHBERGER, John William, 1869-

Instructor in Botany 1893-

Born in Philadelphia, 1869; graduated B.S. Univ. of Pa., 1892; studied in Arnold Arboretum of Harvard, 1890; Ph.D. Univ. of Pa., 1893; Asst. in Botany Univ. of Pa., 1890-93; Instructor, 1893-; Lecturer, editor and author.

JOHN WILLIAM HARSHBERGER, Ph.D., was born in Philadelphia, January 1, 1869, son of Dr. Abram and Jane Harris (Walk) Harshberger. Of his ancestors, those on his father's side (the Hirschberger branch) immigrated to Pennsylvania from the neighborhood of Coblenz, Rhenish Prussia, in 1735. In this family his grandmother, Nancy Jane Rhone, married David Harshberger. Colonel Harshberger, a great-great-uncle was a drill-master at West Point while General Grant was a student there. John Rhone, the founder of the Rhone family in America, was born in Hamburg in 1698; he immigrated to Berks county, Pennsylvania, in 1720, and died there at the advanced age of one hundred and twenty-five years. On the maternal side the ancestry is Scotch-Irish (Brown and Oliver, landed gentry of Scotland and Ireland); English (Harris); and Slavic (Walk). In this line Allan Brown, the great-great-grandfather, came to Pennsylvania in 1755, and served in the early Indian wars under Braddock and also in the Revolution; the grandfather, Rev. Frederick Walk, was a German Reformed minister. The present subject received early education in the public schools and entered the University of Pennsylvania as the holder

of a City Scholarship, where he graduated in science in 1898. His study has also included special researches at the Arnold Arboretum of Harvard University; botanical work in Mexico, California, Europe, Maine, Canada and the eastern portion of the United States; a study of the most important Universities and botanical establishments in Europe; and a pedagogical training as a member of the University Extension Seminar. His degree of Doctor of Philosophy was conferred by the University of Pennsylvania in 1893. Dr. Harshberger first became connected with the instruction staff of the



JOHN W. HARSHBERGER

University in 1890, while still an undergraduate; he was then for three years an Assistant in Botany, and in 1893 was appointed to his present position as Instructor in Botany, General Biology and Zoölogy. He was also a Lecturer in the University's Department of Lectures, having formerly been a Lecturer in the Society for the Extension of University Teaching. He is the author of the following books and pamphlets, his writings numbering in all sixty-two titles: *Maize: A Botanical and Economic Study*, 1893; translated into Spanish under the title *El Maiz; Estudio Botanica y Economica*, 1894; *The Purposes of Ethno Botany*, in the *Botanical Gazette*, Volume XXI, p. 146; *A Botanical Excursion to Mexico*, in the *American Journal of Pharmacy* for

1896, p. 588; translation of the same, *Una Excursion botanica á Mexico*, 1896; *The Vegetation of Yellowstone Hot Springs*, in the *American Journal of Pharmacy* for 1897, p. 625; *Botanical Observations on Mexican Flora*, in the *Proceedings of the Academy of Natural Sciences* for 1898, pp. 372-413; *The Botanists of Philadelphia and Their Work*, 1899; *Thermotropic Movements in the Leaves of Rhododendron Maximum*, in the *Proceedings of the Academy of Natural Sciences* for 1899, p. 219; *An Ecological Study of the New Jersey Strand Flora*, in the *Proceedings of the Academy* for 1900, pp. 623-671. Dr. Harshberger is the editor of the botanical matter in the revised edition of Worcester's Dictionary soon to be issued by J. B. Lippincott & Company. He has been Secretary and President of the University Field Club; and was Treasurer of the Botanical Society of Pennsylvania in 1898-1899; Secretary of the Biological Club of the University of Pennsylvania in 1898; and Treasurer of the Delaware Valley Naturalists' Union in 1896. At present he is Recorder of the Botanical Section of the Academy of Natural Sciences of Philadelphia and besides retaining membership in the societies mentioned is also a member of the Graduate Club, the Pennsylvania Forestry Association, the Society for Plant Morphology and Physiology and the Philadelphia Botanical Club.

WILSON, Albert Monroe, 1841-

Messenger.

Born in Philadelphia, 1841; entered the service of the University in 1854, and has been continuously engaged in the College to the present time.

ALBERT MONROE WILSON, one of the men longest in the service of the University, most faithful to its interests, and best known to its students and graduates, was born in Philadelphia, on Spruce Street, between Eighth and Ninth, in October 1841. His parents were both residents of Philadelphia and had been for at least their generation. At the age of thirteen, in June 1854, he was engaged by the University, at the Ninth Street Building, as an errand boy and cleaner. This was at the same time as the appointment of Mr. Vethake as Provost. Some time afterward he served for two or three years as night-watchman of the two Ninth Street buildings. Subsequently he helped Professors Frazer, Morton and Barker in the preparation of their chemical and physical apparatus and materials for lectures. The nature of his work has

changed from time to time as the organization of the various College offices has required, but he has



ALBERT M. WILSON

always been a trusted and intelligent employe. To ring the bell, open the building, the chapel, the

classrooms, to distribute mail, carry letters and messages from room to room and from building to building, to clean and keep in order the Dean's rooms and others to which he has the only access, except the officers themselves, and to give a thousand and one points of varied information more or less trustworthy to all inquirers, has been his occupation during the latter part of the half century to which his period of service in now approaching. No Professor is now living who was in the Faculty when "Pomp" began his connection with it, and Mr. Fraley is the only surviving member of the Board of Trustees. The students of forty-five successive classes have known him and to the oldest men who are now in the Faculty, as well as to far the greatest number of alumni who revisit the University, he is one of its most permanent and characteristic features. He has been absent from his duties for but two periods, one of three weeks and one of two weeks, both due to an attack of the grip in a recent winter, during the whole time of his service, and his hours are usually from about seven in the morning to seven in the evening. "Pomp" has never been married, having always lived with his "folks," and finding companionship enough, as he states, in the students. He deserves the credit and respect due to a man who has through a long life been faithful to all the duties entrusted to him.

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