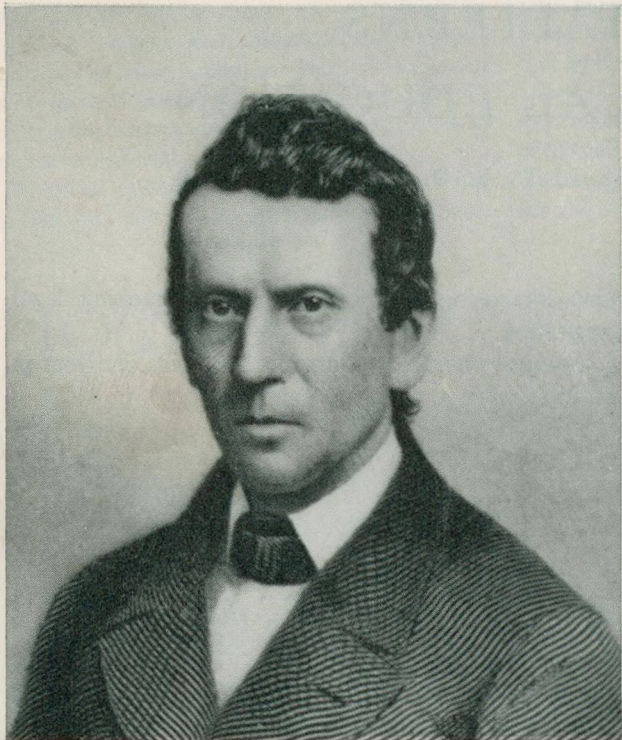


V. F. Proctor. — Hist

THE MERCK REPORT—JULY 1952



William Procter Jr. (1817-1874) was the first American pharmacist appointed to an American professorship of pharmacy.

in prodigious quantities, and with every unit made dependable through assiduous control. America would have a new conception of pharmacy if every citizen might have a chance to visit the research and manufacturing departments of the great American drug houses, to see the workers in action, to see the purpose of these fine establishments, and know the good that is being accomplished.

Should an epidemic come, such as came during the last war, and with so many of our physicians

and pharmacists called to the service, I am certain that those who are left behind would give as valiant and significant a service to their neighbors as was rendered during the terrible epidemic previously mentioned. And it is my hope that Pharmacy Week will arouse a greater public appreciation of the contribution of this profession day in and day out as it provides the community with the things that make the difference between civilization and savagery and, often, between life and death itself.

FOUNDER OF A. P. H. A. HONORED



WILLIAM PROCTER, Jr., founder of the AMERICAN PHARMACEUTICAL ASSOCIATION and famed for his drug standardization work, was paid tribute by the 250 distinguished pharmacists, medical men and scientists gathered in

Philadelphia on Nov. 5 for the unveiling of a painting depicting Procter at work in his laboratory. The painting, which is reproduced above, is the fifth in a series by Dean Cromwell on "Pioneers of American Medicine."

1941

PROCTER MEMORIAL UNVEILED

**TRIBUTE OF PHARMACISTS
TO LEADER OF ANOTHER
DAY IS DEDICATED IN
THE FOYER OF AMERICAN
INSTITUTE OF PHARMACY**

WILLIAM F. Simpson's classic statue of William Procter, Jr., Father of American Pharmacy, was unveiled at exercises held in the foyer of the AMERICAN INSTITUTE OF PHARMACY, Washington, D. C., headquarters of the AMERICAN PHARMACEUTICAL ASSOCIATION, on May 3rd. The statue was presented by James E. Hancock, chairman of the Committee which raised the money for the memorial and supervised its

Committee of the ASSOCIATION, addressed the exercises, and Dr. A. R. L. Dohme, of Baltimore, Secretary E. F. Kelly and W. F. Simpson, the sculptor, delivered extemporaneous remarks.

President Evans eloquently described the memorial and its setting with the statement, "I feel that the spirit of William Procter, Jr., is here around the bronze likeness of his physical being. That as he looks down upon this little gathering here in the foyer, friends of the profession he loved, and straight ahead through the beautiful entrance of our building to the memorial to the great Lincoln, and to the left the towering monument to the Father of Our Country, and to the memorials to the memory of those other great leaders through whose efforts this American Democracy of ours has been kept alive, I think he would say:

'I am happy to be at home here in this sacred building dedicated to those who have contributed of their knowledge and endeavor to the preservation of public health and to the further advancement of science in pharmacy.'



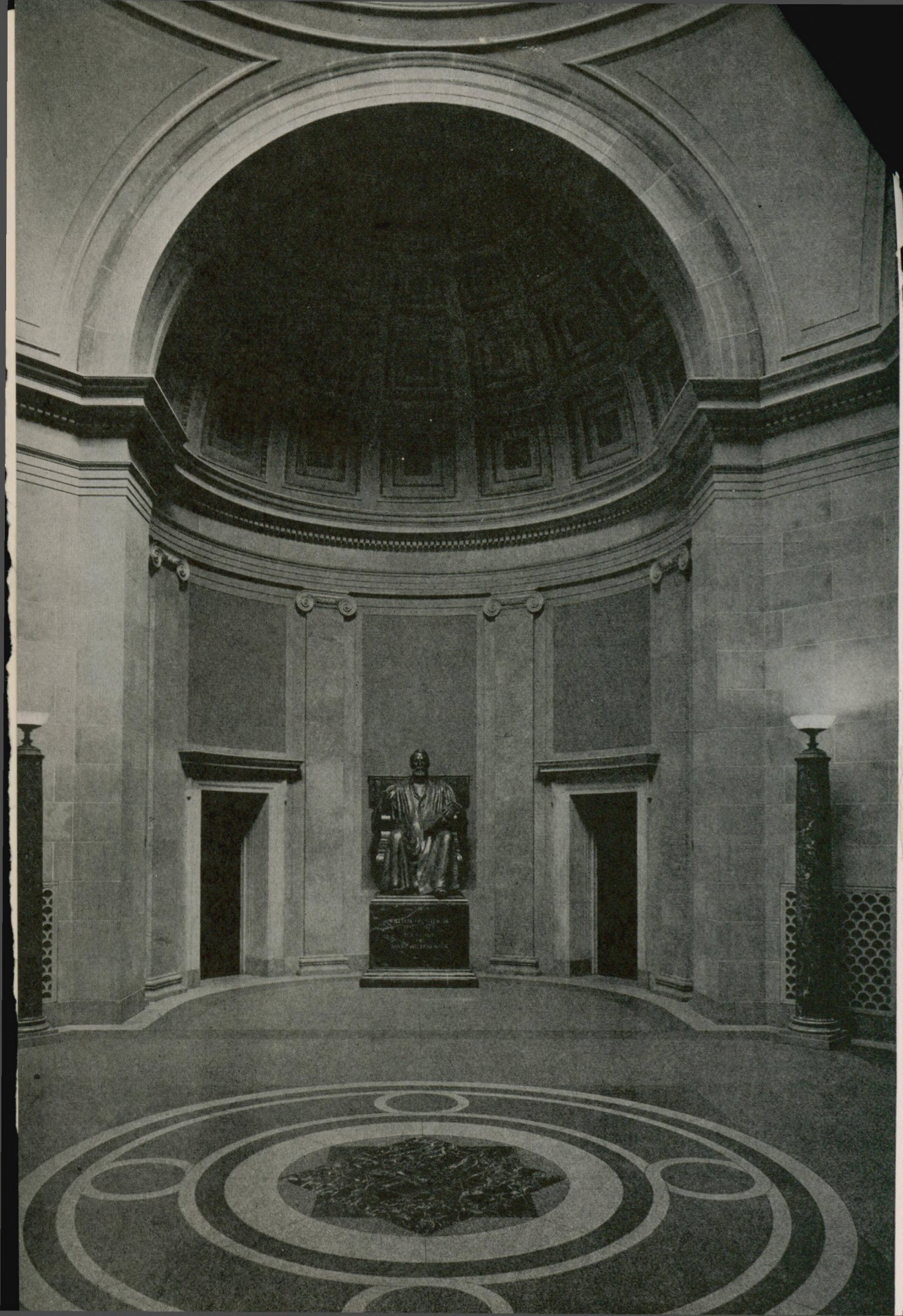
Dr. Ivor Griffith, President of the college where Procter taught, pays tribute.

erection. It was unveiled by Dr. D. M. R. Culbreth, of Baltimore, and was accepted for the ASSOCIATION by President Charles H. Evans.

Dr. Ivor Griffith, President of the Philadelphia College of Pharmacy and Science, where Procter taught, delivered an inspiring address on his life. Dr. Robert L. Swain, chairman of the Finance



President Charles H. Evans accepts the memorial for the A. Ph. A.



WILLIAM PROCTER, JR.

by IVOR GRIFFITH, Ph.M., Sc.D.

PRESIDENT, PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE

**PHILADELPHIA PHARMACIST,
TEACHER, EDITOR, RESEARCH
CHEMIST, PIONEER IN THE
USE OF FLUID EXTRACTS, A
FOUNDER OF THE AMERICAN
PHARMACEUTICAL ASSOCIATION,
FATHER OF AMERICAN PHARMACY**

ON A gloomy morning in September, 1793, the good ship William Penn, slowly making its way through Delaware Bay and headed for Philadelphia, was stopped by a quarantine officer and the passengers were landed at Gloucester, New Jersey. This step was necessary because yellow fever was raging in Philadelphia. The travelers crossed the Delaware, skirting the center of the city, and proceeded to Germantown, thence to Morrisville, stopping on the first day of the week to attend a Friends' meeting at Fallsington. After the meeting they were invited to dine with one of the Friends. Such was the quiet hospitality of that day and age. Such too was the lavender and old lace romance of that period when one of the young men of that party, namely Isaac Procter, who had homespunned all the way from Yorkshire, England, met Rebecca Farquahar dressed in the unpretentious but sweet habilaments of the Quaker maiden. He forthwith fell in understanding love with the young lady, and on the third day of the eleventh month, six years later, Isaac and Rebecca were at long last duly wed at the same meeting house at Fallsington.

Together they moved to Baltimore, where they resided happily and prosperously, raising a large family, the ninth and youngest child of the union being William Procter, Jr., the Junior being added to distinguish him from his Uncle William. The boy was born on the third day of the fifth month, 1817. Thus William Procter, Jr., later to become an imposing figure in American Pharmacy,

An address delivered at the dedication of the William Procter, Jr., memorial in the American Institute of Pharmacy, Washington, D. C., May 3, 1941.

was born and brought up in the city of Baltimore, where this statue was chiselled in his likeness and to his everlasting memory.

When a little over three years of age, Procter lost his father who, strangely enough, was stricken with yellow fever, the very disease which occasioned his avoidance of Philadelphia years before. Although the family had been prosperous, unexpected claims were made upon the estate which, although considered by the family to be unjust, were not resisted. In consequence William was deprived of the liberal education which would have befitted a mind so well calculated to receive generous instruction and which would have given additional luster to his mature years. At an early age, therefore, he was taken from school and placed to earn a meager penny in a cooper shop where he acquired a knowledge of tools and a dexterity in the use of them which served him many a happy turn in after life.

APPRENTICE AT 14

In 1831, at the age of 14, he entered the drug store of Henry Zollickoffer bound by indenture as an apprentice and was extremely happy with his work. His mother in Baltimore continued, through correspondence, to inculcate into him a spirited and spiritual education. From one of her letters sent to him on the sixth day of the seventh month, 1831, we quote:

"Let it be thy study to endeavor to please (thy employer) not only when in the store about thy every-day business, but in everything. There are many ways of gaining the affection of those we are with by being kind and obliging to all, and if thee can lend a hand of help in any way, no matter how small the act is, never be backward, with cheerful alacrity be always ready; this will cost thee very little, and by a kind and courteous deportment in the store and out of it thou wilt gain the love and good will of all around thee. True politeness, my son, is a lovely accomplishment, but above all, never, never equivocate to screen thyself from censure, but if thou shouldst get into any difficulty be open and candid. Let honesty and integrity be visible in all thy actions, and thus, my son, I think, thou wilt

never want a friend in man, and thou wilt have a friend in thy Heavenly Father, who can, and will, if thou love Him as thou ought, do more for thee than all the world beside. Therefore, my dear boy, 'seek him now in the days of thy youth;' it is never too early to begin. There is another point on which I wish to remark—that of keeping everything thee may ever know relative to thy master's business entirely within thy own breast, sometimes by tattling or telling little matters to others it has often been a cause of a great deal of mischief and uneasiness, if not unhappiness; therefore thou wilt be guarded on this subject, never trust even thy own dear friends with anything relative to thy employer's business which thou might suppose he would not be willing for everybody to know; and always stand open to reproof, I have no doubt, if necessary, it will be administered in meekness and in love."

And what a training in human relationships is tabloided into this mother's letter to a son—and what a challenge to the modern parent who all too often forgets that Education, really, begins at home. And it is not trite to say that the good counsels of this Christian mother were received into good ground and brought forth goodly fruit.

Procter continued to the end of his apprenticeship, manifesting much interest in the outposts of chemistry and physics and pharmacy. In March 1837 he submitted to the Philadelphia College of Pharmacy his thesis on "Lobelia Inflata," a paper of great merit in which he demonstrated for the first time the presence of the alkaloid "Lobeline," and passed a successful examination as a candidate for the diploma of the college. He even anticipated the graduate studies of the modern curriculum by attending lectures given by Doctors Hare, Mitchell and Bache in the winter of 1840, and somewhere in his writings expressed his amazement at the solidification of carbonic acid. Thus over a hundred years ago that commodity, which now as "dry ice" functions serviceably as a refrigerant, was known and manufactured by this young worker in pharmacy. He was also greatly interested in electricity, and himself constructed an electro-magnet capable of supporting several ounces.

HIS OWN PHARMACY

In 1844 he opened a pharmacy, and a circular issued on opening day, bearing the date of the thirteenth day of the fifth month, carries this announcement: "In reference to that important branch of the business embracing the compound-

ing of medicines and physicians' prescriptions, I believe that a regular education at the Philadelphia College of Pharmacy and my twelve years of experience in one of the first establishments of this city will enable me to give satisfaction." In October 1847, he became Professor of Pharmacy at his Alma Mater and thus initiated his active contacts with the institution and with the profession of pharmacy, contacts which he zealously and fruitfully followed to the day of his death.

For twenty-eight years Procter was associated with the *American Journal of Pharmacy* as co-editor and editor, and how successfully his management was conducted is testified by the volumes issued during that period. The original matter from his pen and his judicious selections of the foreign literature gave to the journal a value and standing among American pharmacists and made it the most complete history extant of that period of progress in pharmaceutical science in the United States. His versatility and his industry in the direction of research and in recording research are attested to by the fact that the index of the journal numbers some five hundred and fifty separate articles of his contribution, and this is exclusive of abstracts and editorials. No man of the time had such an outlook commanding the horizon of pharmaceutical literature, or whose heart was more thoroughly engaged in the work, and who was gifted with quicker perceptions or better judgment. William Procter's name will ever be associated with the progress of pharmacy in the United States, and the twenty volumes of the journal which bear his name as editor will remain an everlasting monument to his genius and zeal. He was active in so many phases of pharmaceutical practice in these fallow days that it seems impossible in the time allotted to me to cover the whole terrain of his activities.

A FOUNDER OF THE A. PH.A.

He was one of the prime movers in the organization of the AMERICAN PHARMACEUTICAL ASSOCIATION. Its formative convention in the old college building on Zane Street found William Procter, Jr., active, and, indeed, from the time of the inception of this organization, he enlisted all his activity in promoting its welfare. In 1852 he was a member of its first Executive Committee, and went through several measures of service, as Corresponding Secretary, First Vice-President,

and ultimately President at the session of the Association which convened in Philadelphia in 1862. Yet despite all of his association work, his editorial work, caring for his business and his teaching commitments, he always found time for research. Indeed much of his work in this direction was pioneering, and had he been less backward and less modest, his reputation as a chemical researcher might have transcended his magistracy in pharmacy. He was recognized in the contemporary literature of the continent as one of the outstanding American pharmaceutical chemists, and his contributions were in the diversified fields of plant and animal and metallic chemistry. In evidence of this wide-spread scope of his work, a brief list of his papers is herewith printed:

In 1838, a paper, "Demonstrating the Existence of Amygdalin in Several Species of the Genera *Prunus* and *Amygdalus*."

In 1839, "Observations on Dextrin and Diastase," and "On *Lobelia cardinalis*," showing the presence in that plant of an alkaloid different in some respects from the alkaloid found in *Lobelia inflata*.

In 1840, a paper, "On the Power of Saccharine Substances in Protecting from Decomposition Solution of Protiodide of Iron."

In 1841, an essay, "Supplementing His Thesis on *Lobelia inflata*, and Showing that the Alkaloid Therein Described Represents the Plant in Medicinal Qualities."

In 1842, "Observations on the Volatile Oil of *Gaultheria procumbens*, Proving It to Be a Hydracid Analogous to Salicylic Acid."

A year later, M. August Cahours took up the same subject, and arrived at the same results by a proximate analysis of the oil, but in his paper, published in the *Journal de Pharmacie et de Chimie*, March 1843, he makes no allusion to Mr. Procter's previous publication, leaving us uncertain whether he had seen Mr. Procter's paper, or whether the investigation made by him was coincident with that of Mr. Procter.

In 1843, "On the Volatile Oil of *Betula lenta* (Sweet Birch) and on Gaultherin"—a Substance Playing a Part Similar to Amygdalin—and Which, by Its Decomposition, Yields an Oil Identical with Oil of Gaultheria.

In 1847, "On the Reduction of Oxide of Iron by Hydrogen."

In 1849, "Remarks on the Oleo-resinous Ethereal Extracts, Their Preparation, and the Advantages They Offer to the Medical Practitioner."

In 1851, among numerous contributions, we have an essay, "On the Botanical and Chemical Character of Sassy Bark (the Doom Plant) of Western Africa."

In 1852, a continuation of the essay on sassy bark, and "Observations on the Volatility and Solubility of Cantharidin, in View of an Eligible Pharmaceutical Treatment of Spanish Flies."

In 1853, fluidextracts began to attract attention, and in this and the succeeding year he contributed several papers on that subject; also, one "On the Pharmacy of the Phosphates."

In 1858, "An Essay on the Hypophosphites."

In 1859, "On Polygalic Acid," and "On the Existence of Nicotine in Green Tobacco." In the same year, he read before the AMERICAN PHARMACEUTICAL ASSOCIATION, in Boston, an elaborate essay on fluidextracts, suggesting formulas for their preparation, and presented specimens of over thirty fluidextracts prepared according to his suggested formula.

Indeed in the entire field of American Pharmacy, throughout the decades of its existence,



no one has presented the many faceted talents that were present in this one man, and it is scarcely strange that, because of his unceasing industry and constant mental exercise, his rather frail physical vessel did not long endure. He died at the early age of fifty-six, mourned by all who knew him. On a Tuesday afternoon in February 1874, with the wild winds of winter hurling snow against the window panes on the second floor of the small new school on Tenth Street, Dillwyn Parrish, in somber Quaker garb, addressed the College membership. Said he: "On Tuesday morning, the 10th inst., the intelligence was spread among us that Professor Procter had died during the night. So overwhelming was the sense of the loss we had sustained, that our hearts were mute with grief.

"Slowly, but not with less impressiveness, comes to us the realization that the voice, so lately heard in instruction and in counsel within these walls, is now sealed in death. While mourning a loss which seems to us almost irreparable, it is fitting that we should call to remembrance the many benefits which the life of our brother has bestowed upon us. For a quarter of a century his name has been inscribed on our banner, and we have found it a talisman of strength.

"His life was characterized by earnestness of purpose, single-minded in pursuit of science, sincere, in all his relations in life, loving Truth for Truth's sake; his enemies are unknown, but friendship is claimed wherever his name is spoken.

"The record of his life is engraved on the character of this institution, whose journal is an enduring monument of the activity and ability of his genius. His name comes back to us from beyond the Atlantic in pharmaceutical literature with acknowledged authority. Well may the drapery of mourning be hung upon these walls, and our eyes turn in depressing sadness to the vacant chair."

THE QUAKER WAY

William Procter, Jr., had lived in those staid and steady Philadelphia days when, in between the cobble stones, the grass grew green on High Street—and the wood thrush still maintained his nest—and sent his merry song winging through the blue above the crystal Schuylkill creek.

It was the golden, quiet Quaker age of Philadelphia town—when even progress moved on silent wheels and the gentle hand of peace was on the land and people.

They were the days, before the whirlwind—those mellow, fallow days when art was strangely short and time not half so fleeting.

Such were the days—and there the place, where William Procter worked, in serious Quaker company—with diligent and forward-looking minds—not merely marking time of day and strengthening their present, but striving, earning rich to-morrows for us, their children yet unborn.

How unlike now, when government by man promptly views bad debts—instead of better deeds—to pile against posterity.

The Quaker way was a different way, and Procter was a Quaker.

Here in Washington, this day, while the dust of Procter rests in a quiet New Jersey green acre of God, we meet to make solid his memory, and it is meet and right to erect statues to our honored dead, lest we forget, yet Procter's greatest monument must ever be his great and various services to Pharmacy, and to the other sciences serving Public Health.

And may I conclude this note of a great man's life and his entitlement to a long remembering with this inspiring, inspired challenge from the pen of the great Carlyle:

"Could each here vow to do his little task as the one whom we now honor did his great one—in the manner of a true man—not for a day, but for the ages; to live as he counseled, not commodiously in the Reputable, the Plausible, the Half; but resolutely in the Whole, the Good, and the True."

