

PART I
ORIGINS AND DEVELOPMENTS OF THE
AMERICAN CHEMICAL SOCIETY
1876-1926

CHAPTER I
THE PRIESTLEY CENTENNIAL
BY SAMUEL A. GOLDSCHMIDT

In the April, 1874, number of the *American Chemist*, Dr. H. Carrington Bolton, an instructor in the Columbia College School of Mines, suggested that appropriate notice be taken of the approaching centennial anniversary of the discovery of oxygen by Priestley, on August 1, 1774. Prof. Rachel L. Bodley, of the Women's Medical College of Pennsylvania, proposed that the celebration be held at Northumberland, Pennsylvania, where Priestley passed the latter portion of his life. He was an advanced Liberal, who, soon after the breaking out of the French Revolution, was driven from Birmingham, England, by a mob, which set fire to his house, destroying his laboratory and much of his library.

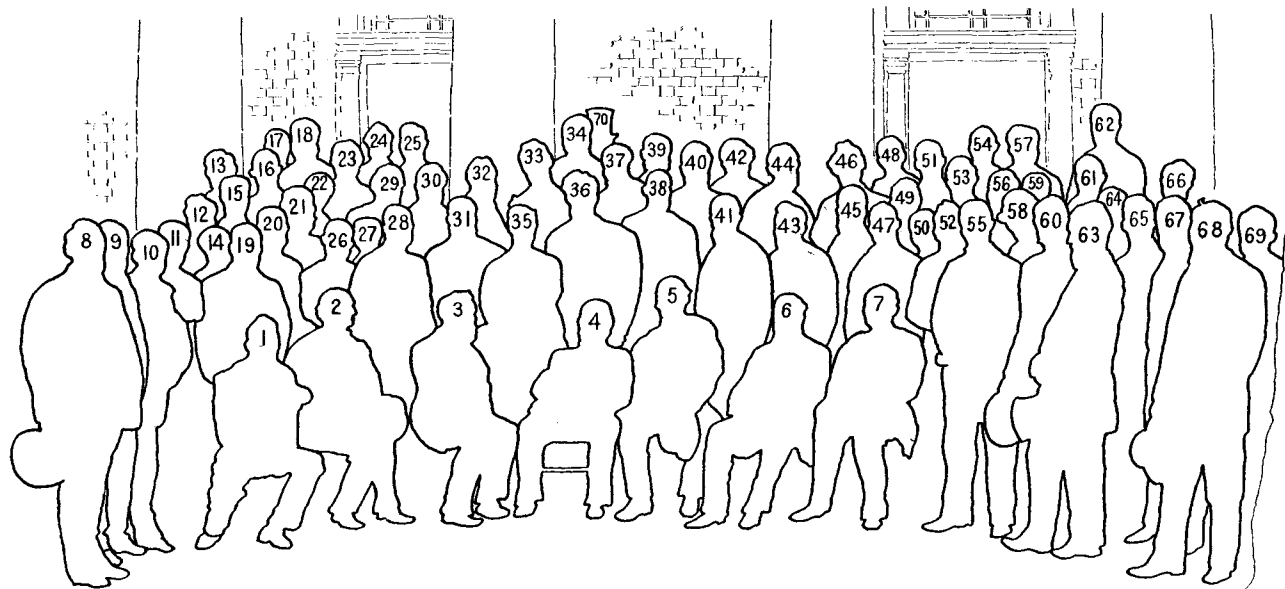
At a meeting on May 11 at the Lyceum of Natural History, the then leading scientific society of New York City, under the presidency of Prof. J. S. Newberry, appointed a committee of five members to take suitable action upon Dr. Bolton's suggestion. As a result, a circular, signed by thirty-seven of the leading chemists of the country, was issued, calling for a meeting to be held at Northumberland, on July 31, 1874.

At 9:00 A. M. on that day, seventy-seven chemists, many accompanied by ladies, met in the public school building of the little town upon the Susquehanna River. The organization was effected with Prof. C. F. Chandler as chairman and thirteen of the most distinguished chemists of the country as vice presidents. Dr. Chandler, conducted to the chair by Dr. Joseph Priestley, great grandson of the discoverer, made the opening address. Cablegrams were exchanged with Birmingham, where the unveiling of a statue took place the next day.

The following papers were then read: "The Life and Labors of Priestley," by H. H. Croft, of the University of Toronto; "The Century's Progress in Theoretical Chemistry," by T. Sterry Hunt; "A Review of Industrial Chemistry," by J. Lawrence Smith;



GROUP OF CHEMISTS AT THE JOSEPH PRIESTLEY CENTENNIAL OF CHEMISTRY, NORTHUMBERLAND, PA., AUGUST 1, 1874
(This first photograph of a group of American chemists was taken by L. H. Laudy of Columbia College School of Mines)



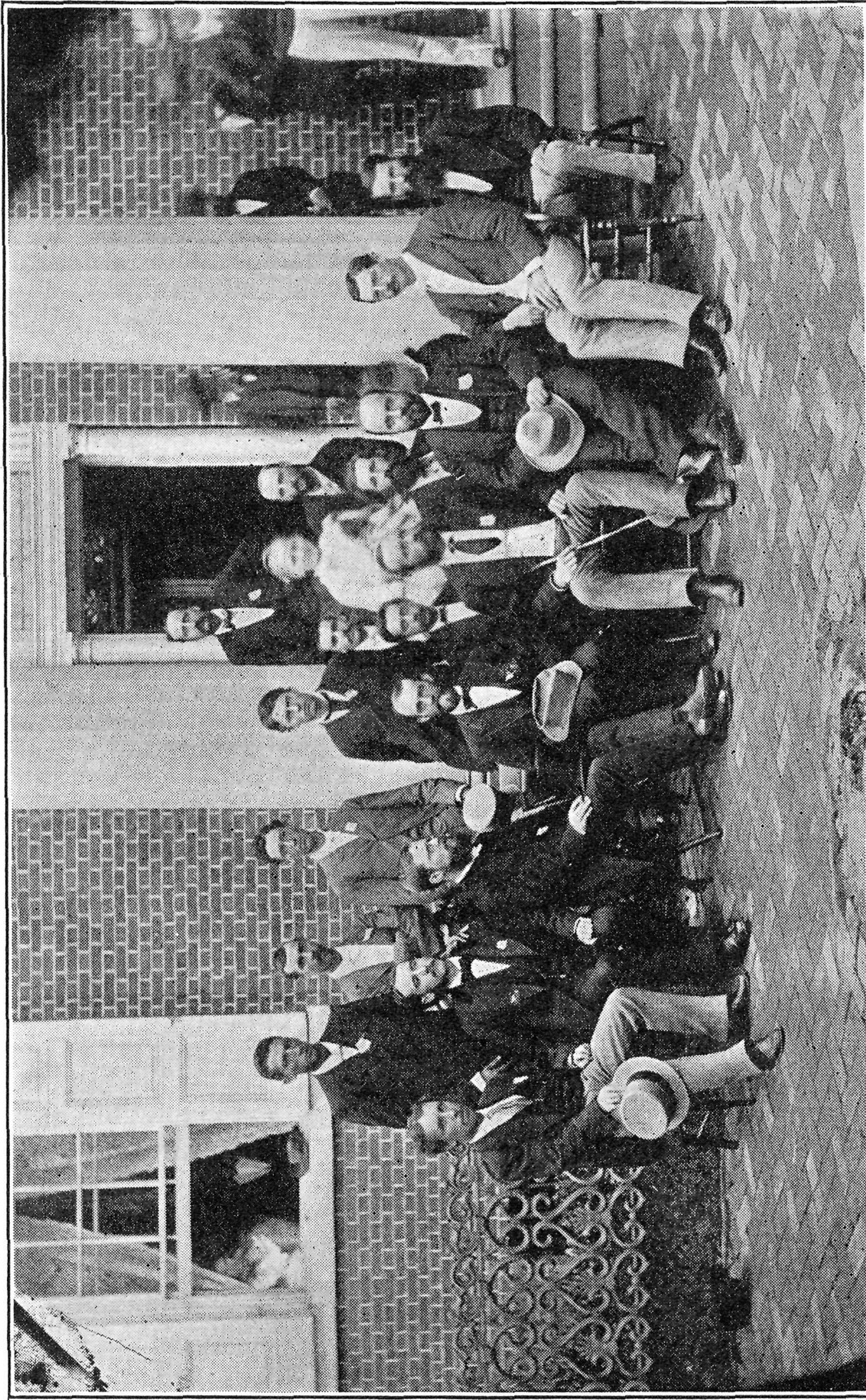
1—B. S. Hedrick
 2—E. N. Horsford
 3—T. S. Hunt
 4—J. L. Smith
 5—B. Silliman
 6—H. Coppée
 7—Rev. T. R. Pynchon
 8—Thos. Lyon
 9—Conyers Button
 10—
 11—
 12—W. M. Iles
 13—
 14—E. J. Hallock

15—W. H. S. Thorburn
 16—John A. Church
 17—
 18—S. St. John
 19—H. C. Bolton
 20—C. F. Chandler
 21—E. Waller
 22—Arthur Macy
 23—H. G. Torrey
 24—E. L. Youmans
 25—W. K. Kedzie
 26—C. A. Joy
 27—M. S. Thompson
 28—S. P. Sharples

29—
 30—
 31—J. Priestley
 32—S. H. Douglass
 33—J. M. Maisch
 34—R. C. Kelzie
 35—M. B. Priestley
 36—David Taggart
 37—F. Hoffmann
 38—E. T. Cnx
 39—C. G. Wheeler
 40—
 41—
 42—

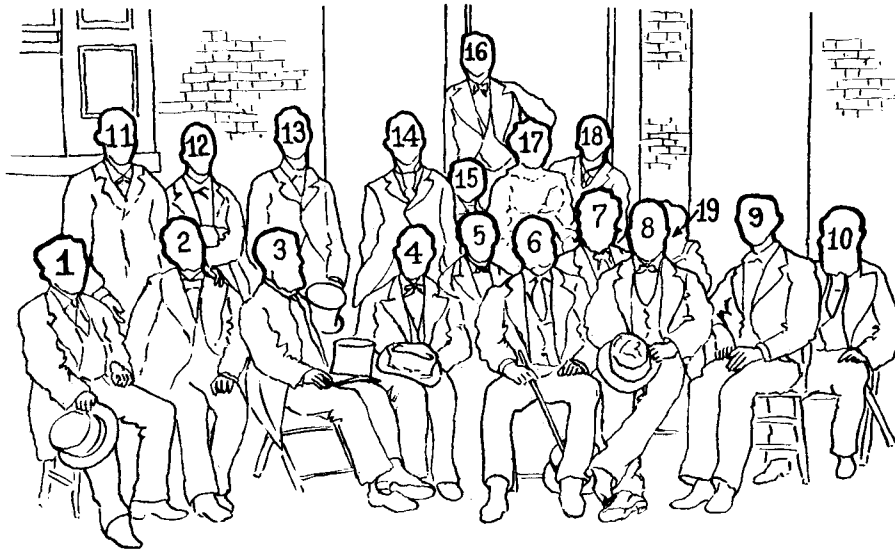
43—P. W. Bedford
 44—W. W. Daniels
 45—H. B. Nason
 46—A. P. S. Stewart
 47—T. G. Wormley
 48—F. W. Clarke
 49—A. A. Breneman
 50—C. S. Allen
 51—
 52—
 53—H. Endemann
 54—
 55—P. Frazer, Jr.
 56—A. H. Gallatin

57—C. H. Chamlier
 58—Traill Green
 59—
 60—W. H. Chamlier
 61—
 62—J. P. Renington
 63—
 64—E. W. Hilgard
 65—A. R. Leeds
 66—
 67—T. M. Drowne
 68—P. H. Vander-Weyde
 69—
 70—



COLUMBIA COLLEGE SCHOOL OF MINES GROUP AT THE JOSEPH PRIESTLEY CENTENNIAL OF CHEMISTRY,
NORTHUMBERLAND, PA., AUGUST 1, 1874

(Photograph by L. H. Laudy of Columbia College School of Mines)



1—A. H. Elliot	6—C. F. Chandler	11—C. A. Sniffin	16—Louis H. Landy
2—C. S. Allen	7—E. Waller	12—W. H. S. Thorburn	17—Margaret W. Chamf-
3—Rev. Chas. G. Adams	8—H. C. Bolton	13—W. M. Iles	ler (Mrs. Chas. Pellew)
4—C. A. Joy	9—John A. Church	14—Arthur Macy	18—S. A. Goldschmidt
5—E. J. Hallock	10—	15—Milton S. Thompson	19—Mrs. C. F. Chandler

and "American Contributions to Chemistry," by Benjamin Silliman. The latter contained a list of names and papers covering fifty-seven pages of the report of the meeting in the August-September and December numbers of the *American Chemist*.

On August 1 ceremonies were held at Priestley's grave. Owing to the illness of Joseph Henry, President Henry Coppée, of Lehigh University, made the address.



CHEMICAL APPARATUS OF JOSEPH PRIESTLEY (1733-1804) EXHIBITED AT THE CENTENNIAL OF CHEMISTRY, NORTHUMBERLAND, PA., AUGUST 1, 1874

(Photograph by L. H. Laudy of Columbia College School of Mines)

In the afternoon, Persifor Frazer, Jr., of the University of Pennsylvania, suggested that steps be taken to bring together all the chemists of the country in an "American Chemical Society." After a lively debate with J. Lawrence Smith, F. W. Clarke, E. N. Horsford, E. T. Cox, Benjamin Silliman, and P. H. Vander-Weyde in opposition, mainly upon the supposition of the lack of a sufficient number of chemists in the country to support such a society, Dr. Bolton offered as a compromise that the American Association for the Advancement of Science be requested to form a chemical section. The subject, however, laid quiescent for quite a time but, owing to Dr. Chandler's constant efforts, a meeting of chemists was held in New York in April, 1876, at which the AMERICAN CHEMICAL SOCIETY was organized.

Among the interesting exhibits shown at the centennial meet-

ing in Northumberland was much of Priestley's apparatus, together with letters from Lavoisier and others relating to the discovery of oxygen.

After the adjournment of the meeting to August 1, 1974, an album with photographs and signatures of those present was sent to Northumberland for preservation until the next centennial should be observed. Photographs were taken by L. H. Laudy, of the Columbia College School of Mines, of views in the town, Priestley's house, apparatus, and grave, as well as of the assembled chemists, the original plates of which are now in the Columbia University library.

There was no hotel in the little town, so the visitors were entertained in the homes of the residents. No efforts were spared to make their stay agreeable and the occasion a memorable one. Memorable, indeed, as from this meeting sprang the present SOCIETY, the largest and strongest scientific organization in the world.

[EDITOR'S NOTE.—A short time before his death, Prof. Stephen P. Sharples (1842–1923) of Cambridge, Massachusetts, a charter member of the AMERICAN CHEMICAL SOCIETY, mailed the editor a few reminiscences of the Priestley centennial of chemistry compiled from notes which were written down by him immediately after the meeting in Northumberland. His recollections give a vivid picture of the gathering and are here inserted with a few slight editorial changes.]

In April, 1874, Dr. H. Carrington Bolton, of the Columbia School of Mines, proposed that the chemists of the country should hold a reunion that summer, it being just one hundred years since Dr. Joseph Priestley discovered oxygen and prepared the way for the many brilliant discoveries that have been made in modern times. Chemists over the country seemed to unite with the idea, and finally, at the suggestion of Prof. Rachel L. Bodley of Philadelphia, Northumberland was chosen as the place of meeting.

Wishing to join in this tribute of respect to one of the pioneers of our science, I took my seat in the car of the Pennsylvania Railroad on July 30, 1874, and was soon traveling westward over their splendid road. On the cars I found plenty of friends who, like myself, were bound for Northumberland. At Harrisburg we were joined by still others. An interchange of greetings and renewals of old acquaintances, for some of us had not met for ten years, made the way seem short. About seven o'clock we arrived in Northumberland where we were met by a committee of the citizens who hospitably threw open their doors and invited us to their houses.

On the next morning, July 31, the first meeting was held. This was opened by an address of welcome from Col. David Taggart, and was followed by some routine business. Then came the address of the morning by Prof. H. H. Croft, of University College, Toronto, who gave us an account of the life and labors of Dr. Priestley.

Dr. Priestley was one of the most remarkable men of his time. He was a theologian, politician, chemist, and physicist, and as a linguist has been surpassed by few. In all that he did he displayed the same restless energy, the same disregard of the opinions of others, and the same determination to insist on what he believed to be the truth. His quarrels with others were innumerable and were the occasion of a vast amount of discomfort. While his theoretical views in regard to chemistry have been abandoned by modern chemists, his discoveries yet remain as some of the most brilliant ever made. He was driven from his home at Birmingham, England, by a mob which destroyed his library, and came to this country to find the liberty he could not enjoy at home. One of the most moral and upright men in the community, he was, on account of the opinions he held or was supposed to hold, one of the

most unpopular, and persecution did not cease even in this country, although he was not personally molested.

After the close of the address Prof. E. N. Horsford read some exceedingly interesting letters from Priestley to Judge Thatcher of Maine, in which theology and chemistry are strangely mixed.

Following this, some time was spent in inspecting the house built by Dr. Priestley and in looking at some of his apparatus. The group of attending chemists was then photographed by L. H. Laudy, of the Columbia College School of Mines. In the afternoon we again assembled to listen to an address by T. Sterry Hunt upon theoretical chemistry and the different phases which it has undergone in the last one hundred years.

After an early tea the party proceeded to Priestley's grave, which is beautifully situated on the hill overlooking the valley of the Susquehanna. Dr. H. Coppée, president of Lehigh University, here delivered an eloquent address summing up the results of Priestley's life. It has rarely been our good fortune to listen to an address that was so appropriate. His closing remarks were as follows:

This is an unusual celebration, and this particularly is the strangest scene of this singular drama. This peaceful field, an acre of God, at this most charming evening hour, happily suggested by a lady chemist; these surrounding hills, this gleaming river, which lend breadth and beauty to the landscape; this distinguished assemblage standing reverently, but not mournfully, around a grave: these do not tell us of death, but of life; breathing, varied, sunny life; not of decay, but of resurrection; not of oblivion, but of immortality. They tell us that in the inexorable past there is but a semblance of imprisonment; that the good and the true, the magnanimous and the noble, break the flimsy bonds, and come back to gladden the hearts of men, and to flourish in perennial beauty.

Such are the pleasant thoughts, fancies, and yet living facts which cluster around the grave of Joseph Priestley.

In the evening Prof. J. Lawrence Smith gave an address on the progress of technical chemistry, which was listened to with great attention by a large audience from the town. The next morning (August 1), which was the centennial or "Oxygen Day," Professor Silliman delivered an address upon the history of chemistry in America, which brought the exercises to a close. The Committee on Telegraphing reported that they had sent two dispatches to England to the chemists who were assembled at Birmingham to unveil the statue of Priestley and had received one in reply. The meeting then adjourned to meet again in 1974.

It is but rarely that every circumstance unites to make as pleasant an occasion as was this centennial meeting; all personalities and all prejudices were laid aside, and all met on a common ground to do honor to the name of Priestley. The event is one that will be long remembered by those who took part in it.

I wrote this account immediately after returning to West Chester, Pennsylvania. J. Lawrence Smith went with me and spent the next day (Sunday, August 2) visiting the Battle Field of Brandywine and the Serpentine Quarries near it.

As a result of the Priestley Centennial the AMERICAN CHEMICAL SOCIETY was founded a little more than a year afterwards, nearly twenty persons who were present at the meeting becoming original members of the SOCIETY and a number of others joining afterwards.

Of those present at the Centennial the following are still living (1921): A. A. Breneman, who was with me at Penn State; S. A. Goldschmidt, of New York City; C. F. Chandler, who studied at the Lawrence Scientific School; Frank W. Clarke, my desk-mate at the Lawrence Scientific School; W. G. Levison, of Brooklyn, N. Y.; Charles W. Roepper, student under me at Lehigh; S. P. Sharples.

We all continue to take an interest in chemistry and are all still acquainted. I spent a year at Lehigh under Dr. Coppée as instructor in chemistry. Professor Horsford's daughters were with him at Northumberland and one of them is living here in Cambridge.

S. P. SHARPLES