As we contemplate our hundredth anniversary, our Centennial, we may recall the words of the American tourist who said, as he stood by the columns of the Temple of the Castors in the Roman Forum, "I guess there must be quite a story behind all this."

Well, it seems there is. We meet precisely one hundred years after eight gentlemen of Germantown met in the laboratory of Henry Carvill Lewis on 22 October 1879 "to consider the project of forming a science club in Germantown."

It is not surprising that these men should have been thinking about Science, a subject much in the minds of the day, and much neglected in many a school. It used to be called "Natural Philosophy," and it was to further this that James Wills, an Overseer of Penn Charter, and founder of the Wills Eye Hospital, made a gift to the School for lectures in Natural Philosophy. This was in 1824.

Our same American tourist is depicted as walking along, guidebook in hand, in some spot which he has been led to believe is important, and asking, "How long before we come to something?" We come at once to the second meeting of these same gentlemen, on 4 November, when they adopted the name "Science and Art Club," planned for a membership of twenty-five, and adopted rules. It was not until 1881 that the membership limit was set at fifty.

Among other things, the rules specifically state that evening dress is not required at meetings, and clearly list exactly what is to be served for refreshments: " (They) shall be limited to ice cream, coffee, chocolate, tea, lemonade, sandwiches and cake."

Only ten years ago, when I was President, it was found that some
generous hosts were serving extra delicacies, such as toasted cheese sticks (delicious, and therefore fattening). So the Executive Committee took up the matter in solemn session. I pointed out that the original rule had been in effect for only ninety years, that it had met the test of time, and that an organization such as ours does not move hastily. The Committee agreed, and informed the members that the rule was still in effect and that "extras" were not approved.

But in memory of the original rule, we have tonight arranged to serve lemonade.

A centennial is an occasion for looking both forward and back, so let us glance back and not leave our history "safe" in the hallowed quiets of the past." (Lowell) Yet why is it that we choose a hundred years as the time for a special occasion? Simply because we have ten fingers. We are dictated to by the decimals which those ten digits have given us. We observe even fives, that is, a handful, or even tens, that is, two handsful, as well as the multiples of these amounts. In other cultures, the base is twenty, for we all have ten toes, too, and they can be counted.

But for better or for worse then, we are wedded to tens, and so dominant is this concept that after we count to ten, we use the word "eleven," which means simply "one more (than ten)," and twelve, which means "two more (than ten)." Thus, all through the 'teens (that is, the tens), we get to twenty, which shows by its ending -ty, for "ten" that it is two tens.

As to centennials in general, they tell us that Oxford University declined an invitation to attend ceremonies which marked the six-hundred-and-fiftieth anniversary of a European university, on the ground that Oxford observes only "centenaries."

Let us see what things were like in the year 1879. There were only thirty-eight states. Washington and the two Dakotas came in ten years later, in 1889; Idaho in 1890; Utah, in 1896 (after the Federal Government had invaded the right of privacy of its citizens by forcing them to renounce polygamy). Oklahoma became a state in 1906, but the geography book which I used in the Llanerch Public School still showed it on the map as "Indian Territory." I remember that it was colored green, and stood out with its panhandle, among it neighbors. Arizona and New Mexico joined in 1912; Alaska and Hawaii in 1959.

Charles Beard, in his famous History of the United States, says of the economy of the decades following the War Between the States, that most of the years were years of depression. As to politics, he adds that, "It was a rare year that didn't produce a fresh exposure (of corruption) in high places." Tammany was exposed in 1871. The terrible Credit Mobilier crash occurred in 1872 , while the famous Whiskey Ring scandal reached all the way into the office of President Grant to his personal secretary.

What did our founders see in the Western world? Germany, united and powerful under the Prussians after the defeat of France, had a Chancellor named Otto Bismarck.

In England, Queen Victoria had been declared Empress of India only two years before, and her Prime Minister was a man named Gladstone. Garibaldi was still on hand in Italy, which was now triumphantly called Italia Redenta ed Una, "Italy Redeemed and United," with Humbert I successor to Victor Emmanuel II (1871-1878) on the throne.

Things were normal in Russia. Sixteen revolutionists were executed in 1879, and terrorists tried to blow up that vicious monarch, Alexander II. He was successfully put away two years later.

The Irish Question was much in mind, and one Charles Stewart Parnell was actively promoting the Land League in an effort to alleviate the wretched condition of the Irish peasant.

Turkey had been put out of Europe as a Russian army entered Adrianople, while Stanley had emerged from Africa only the year before, turning the thoughts of European powers still more to the Dark Continent.

The British were said to have informed Russia that the Foreign policy of Afghanistan was to be predominantly British. That unhappy country has been fought over again and again, and is still a source of the same kind of trouble.

The British, by the way, had subjugated the Zulu Nation. Henry George published a book called "Progress and Poverty," Pavlov's dog salivated satisfactorily, one Mary Baker Eddy chartered the Church of Christ Scientist in Boston, and the famous Train Bleu made its first extended run.

But what about Science, of which the Club proposed to take special notice? There had been enormous expansion in the field of Chemistry, following upon the discovery of the principle of conservation of energy. Solar photography was just beginning, and the steamship Arizona made a new transatlantic record, crossing in 7 days, 9 hours, 23 minutes.

With the help of J. P. Morgan, the Edison Electric Light Company had just been formed, Schliemann was back digging at Troy, Woolworth opened its first five-and-ten-cent store, saccharin was accidentally discovered, and in the field of Music, Brahms' Concerto in D Minor had its first performance in Leipzig, and "In the Evening By the Moonlight" was composed for the Georgia Minstrels.

On 15 May 1879, Ferdinand deLesseps was elected President of an organization formed to build a canal across the isthmus of Panama,
and Laplace stated that the planets of the solar system were formed from the condensation of nebulae.

Right here at home, the Philadelphia Local Telegraph Co. had perfected an arrangement whereby its clients in various parts of the City could be put into immediate telephonic connection with one another. The "Scientific American" tells us that this was accomplished "by means of a walnut frame with bright strips of brass punctured with holes into which wires are fitted to make the necessary connection. It accommodates no fewer than 400 lines."

The Philadelphia Public Ledger of 22 October 1879 says there was a light rain, and the evening temperature was $58^{\circ}$. It also reported that the streets South of Chestnut Street were in better repair than those to the North. Were the powerful politicians of those days just where they now are? The front page is filled with tiny type in which John Wanamaker ran two columns of advertisements. You could buy a sewing machine for $\$ 15$.

In the Territory of New Mexico, Indians had killed a United States Collector, and a whole company of Indians had deserted from the United States Army. The Grand International Division of Locomotive Engineers, meeting in Kansas City, had elected one F. M. Arthur as Grand Chief Engineer.

Captain Boyle, of the British bark Carpione, bound from Baltimore to Bordeaux, had had to put in at Fortress Monroe because of a mutiny in his crew.

Rutherford B. Hayes (graduate of Kenyon and Harvard, by the way) was President during all this. He is possibly best known to fame as the winner, by one electoral vote, over Samuel T. Tilden. It was not until 2 March 1876 that a special committee, voting along strictly party lines, decided $8-7$ that Hayes was the winner.

What of the literary scene? It seems that great writers come along with great national expansion. For example, in the first century B.C., the Augustan Age of Rome, and in the first century A.D., the Silver Age, the greatest writers came along: Caesar, Catullus, Horace, Livy, Martial, Juvenal, Pliny the Elder, Quintilian, Vergil, Phaedrus. We see much the same phenomenon when we look at the writers of poetry who were alive in 1879. It was Emerson who said, "When duty whispers low, 'Thou Must,' the youth replies, 'I can.'" What does he say today?

Longfellow told us that "Life is not an empty dream," and was convenient to quote in the celebrated Roosevelt-Churchill communication, "Sail on, O Ship of State / Sail on, O Union Strong and Great!"

Tennyson wrote of "the garden where the firefly wakens on a summer night," and gave us epics about Sir Richard Grenville, Ulysses, and King Arthur. Browning cried, "The year's at the spring / And day's at the morn," and sighed, "O to be in England / Now that April's there."

Walt Whitman heard America singing, and announced that "Life shall be capricious, vehement, spiritual, and bold," while Matthew Arnold insisted that "The will is free / Strong is the soul, wise and beautiful," and hoped for "the endless extinction of unhappy hates."

Emily Dickinson exclaimed, on behalf of all of us, "A precious moldering pleasure 'tis / To meet an antique book / In just the dress his century wore." She, too, it was who said, "Indeed, there is no frigate like a book / To take us to lands away."

Edward Fitzgerald had translated Omar Khayyam into splendid quatrains, with wise words about a Book of Verses underneath the bough. One wonders how much of all this was Omar and how much Fitzgerald.

Yet by 1893, every one of these writers was dead, and a kind of era was ending. Another troupe of performers was coming on the scene. Trollope was already 64 , George Eliot 60 . Huxley was 54 , Lord Lytton 48, Mark Twain 44, Bret Harte 40, Henry James 36, and Swinburne 42. Lewis Carroll was 47: "Tut, tut," said the Duchess, "Everything's got a moral if only you can find it." Our moral, we find, is that great writers accompany great times.

And now for a look at our own past, and some of our anniversaries. On the tenth anniversary, only five of the original twenty-five founders still belonged to the Club. As for this decade, of our fifty members of 1970, only twenty-nine still belong today.

At that tenth, Henry Hartshorne spoke, and inquired about the origin of the word club. Well, it is the same word as the one which means "stick," and which, as a verb, meant, "gather into a mass." This meaning is archaic, but we keep it in the expression "clubbed hair." So here we are, gathered into a mass, it seems, and we note with embarrassment that our word is also seen in clump.

We fall somewhat into the happy tradition of the Mermaid Tavern, Wills' Coffee House in Covent Garden, the Mitre, and the Turk's Head, where Burke, Goldsmith, Reynolds, Boswell were members. It was from another club, Benjamin Franklin's Junto, that the American Philosophical Society sprang. We have a good example of this sort of thing in the Franklin Inn Club of Philadelphia, which was founded in 1902.

Our sixtieth anniversary, in 1940 , brought us the first of the fine brochures which list all the programs, the officers, and members from the beginning. Charles Francis Jenkins was the speaker on that occasion. He said that two programs stood out in his memory, the one of March 1915, when Alfred Noyes read his poems, including "The Highwayman"
and "Come Down to Kew in Lilac Time." The other was the visit of Robert Frost. But Jenkins at the same time declared, with something of the viewpoint of Oxford, that no anniversary of anything should be celebrated between the fiftieth and the hundredth.

There does not seem to have been any special celebration of our Seventy-fifth, but another fine brochure was printed in 1955. The Ninetieth Year was likewise passed over.

What, then, of the programs of old? Most of us have heard or read of the famous first meeting, held on 5 February 1880, at the home of Charles W. Chandler, when the Reverend H. E. McCook spoke on "The Honey Ant and the Garden of the Gods." What a happy subject for the first program! Perhaps the honey ant might be Club mascot or symbol.

In those days, the Club met oftener than it does now. In 1880, for instance, meetings were held twice in February and in March and April and May. Here began the tradition of a long interval between the last meeting of the spring and the first of the fall. In 1880 the interval lasted from 15 May to 26 November, and that was the last meeting of the year.

In 1881, there were nine meetings; none between 31 March and 23 November. In 1883, there were twelve. It was not until 1945 that the current custom was adopted, with a total of seven regular meetings, skipping the months of June, July, August, September and December.

The farther back we go, the fewer the meetings at which the host (or his wife) was in charge of the programs. From 1880 to 1919 , only three percent had the host as speaker. But from 1920 through 1929, the percentage was seventeen. A big change occurred in the 1950-1959 decade, when thirty-six percent were the responsibility of the host.

In 1960-1969, 33\%, and thus far, in 1970-79, of the seventy-eight meetings, thirty-eight or $49 \%$, have been given by our hosts. Can it be that we have become a more versatile and learned group?

Let us see what subjects have engaged our interest? In a rough breakdown of programs, we find that Geography and Travel figure in about $17 \%$, Music in $14 \%$, Literary topics in $12 \%$, History and Science in $7 \%$ each, Political Science and Art in $6 \%$ each.

But our interests ranged far and wide, and included programs dealing with Medicine, Biography, Education, Sociology, Birds, the Theatre, Law, Astronomy, Photography, and no less than five dealing with city water supplies.

Since the hosts in earlier decades so rarely provided programs of their own, many distinguished speakers were brought to meetings. In addition to Alfred Noyes and Robert Frost, already mentioned, other literary figures were F. Hopkinson Smith, Agnes Repplier; Catherine Drinker Bowen, and Elizabeth Gray Vining.

Among the educators were three Presidents of Haverford College: Isaac Sharpless, William W. Comfort, and Gilbert White; also Edward Magill and Frank Aydelotte, Presidents of Swarthmore, and Marion Park of Bryn Mawr.

Among the artists were Lady Gregory of the Irish Players;
Nicola D'Ascenzo, Philadelphia stained-glass expert; Edna Phillips and Thaddeus Rich of the Philadelphia Orchestra, Victor Herbert and Sigmund Spaeth.

Other well-known visitors were Admiral Peary, Discoverer of the North Pole; Rudolph Blankenberg, Mayor of Philadelphia; and Clarence Pickett, of the American Friends Service Committee.

Among the well-known members of old, we may mention the following:

Samuel Chew
Thomas P. Cope, Jr.
Philip C. Garrett
Cornelius Weygandt
Edward T. Stotesbury

Joseph Wharton
Justus Strawbridge
John C. Winston
Samuel T. Bodine
William G. Warden

William T. Tilden
Morris L. Cooke
Joseph F. Perot
C. Cresson Wistar

So much, then, for a century gone. What of today and tomorrow? We have held to ideas of old, and tonight we meet just as did those original members. The rules in effect at the first program, which took place on 5 February 1880, are in effect right now. We are a kind of refuge from the stormy blast of modernity, a place where the winds of change do not blow, a welcome refuge, indeed.

For today nothing is so permanent as change. Our natures are not equipped to assimilate the torrent of new things which confront us; things which often quickly give way to others quite as astonishing. It is no longer the old conservative fellow who throws up his hands in dismay, who wants to stop the world and get off; he has plenty of company.

Emily Dickinson's frigate now often turns out to be a gaudy rowboat, often quite dirty, and those it carries away land in a swamp where it self-destructs, as modern books will surely do, and as most of them surely should, along with current "popular songs."

There is an everlasting ephemerality about it all. For instance, books now stay on best seller lists for a much shorter time than they did only a few years ago.

But though our authors of 1879 have lasted, who reads them for fun or in an English class? Shall they not be forgotten except for some rummaging scholar?

Horace said, "I shall be quoted as long as the pontifex ascends the Capitol with the silent Vestal." His fame outlasted Rome. Will the same be said of Tennyson, Emerson, and the rest?

Let us then apply to our Club a principle so proudly put forth by Quintus Ennius, writing about 200 B.C., who said, in a fine hexameter:
"Moribus antiquis res stat Romana virisque." "Broad-based upon her ancient ways and men standeth the Roman State."

Let us proudly say, "Holding to customs of old, endureth the Science and Art Club."

