It was Thursday, March 12, 1942, and the Thursday Club met...

No one is alive today who was a member on that day...

We don’t know who was the host, nor where they met, but wherever it was the black shades were tightly drawn as this day, March 12, 1942, probably was the darkest day of the entire war for our country.

The paper that evening was given by Mr. Chauncey J. Hamlin, a long-time member of the Thursday Club. He was a lawyer, having graduated from the University of Buffalo Law School in 1905. He fought as an army officer in the Mexican Border Wars and with the American Expeditionary Forces in France, particularly at Verdun, in World War I. He was a member of the law firm of O’Brien, Hamlin, Donovan, and Goodyear.

Ultimately his interests turned to finance and he became a partner in the financial firm of Woods and Trubee and Hamlin and Lunt, members of the New York Stock Exchange. His avocation was the Buffalo Society of Natural Science, the Buffalo Museum of Science, of which he had been President since 1920.

Mr. Hamlin disdained speaking on military matters; there had been enough of that at the dinner table. Instead, he diverted the thoughts of the evening by telling a remarkable story of how adversity can be turned to opportunity, of how the Buffalo Museum of Science, during the Depression, had been able to assemble the collection of invaluable first or early editions of the most important works of science from the beginning of time to the beginning of this century – that collection, without equal, which has become known as the Milestones of Science.

In the Spring of 1937, a young man seeking to establish himself as a rare book dealer approached Mr. Hamlin and offered to sell some books for what must have been a remarkably low price. Among the books was one purported to be an early edition of a work by Copernicus. Indeed it was. It was a first edition, printed in 1543. But more than that, it was the great work of Copernicus, \textit{De revolutionibus orbium coelestium}, announcing and demonstrating the revolutionary theory that the sun is the center of the universe about which all planets, including the earth, rotate.
Copernicus, a Slav, living in what is now Poland, had spent a lifetime in the study of astronomy and mathematics, and thirty years preparing this work, postulating his theory, and presenting his proof. He had to overcome 15 centuries of acceptance of Ptolemy’s doctrine, embraced by the Church, that the earth was the center of the universe about which the heavens rotated (the geocentric theory). Copernicus had hesitated to publish his findings, perhaps fearing civil or religious reprisals. When he finally was persuaded to publish it, the first copy was delivered to him on the date of his death, May 24, 1543.

It earned its place on the Church’s Index liborem prohibitorum. The Museum’s very rare First Edition earned a place of special exhibit at the New York World’s Fair in 1939.

That was the first purchase.

How could such a treasure be available and at such a price? Had he taken advantage of that young man? No, it was the times.

During a prolonged depression period such items went begging. Mark Twain had written that during the panic of 1893 he couldn’t raise a dime on all his copyrights. Some of you may remember from a paper I read six years ago, that James Fraser Gluck (in whose trunk was found half of the Huckleberry Finn manuscript, missing for over a hundred years), was purported to have the greatest private library in Western New York. After he was wiped out in the railroad collapse of the early 1890s, it disappeared without a trace.

Great fortunes were lost and creditors disposed of the assets. Many institutions, financially pressed by loss of investment funds, sold off what they didn’t need for what they could get, and there was no demand for rare books. The bottom had fallen out of the rare books market.

Mr. Hamlin recognized that the worst of times was the best of times to attempt to acquire such treasures. Times of adversity were times of opportunity, and he would take advantage of it for the benefit of the Museum and Buffalo. If the First Edition of that great work of Copernicus fell into his lap so easily, what else was out there?

He visited Scribner’s & Co. of New York City, which was known to have a substantial number of first editions of works of science. He was able to negotiate a fair number of additional purchases.

By that time he had developed an idea and had formulated its dimensions. He would attempt to assemble for the Museum of Science and for Buffalo a collection of first or very early editions of the great books of science which announced new discoveries and thus meet the description Milestones of Science; as he put it, "a sort of Hall of Scientific Fame."
To qualify it had to be a work that was published prior to this century. He thought that matters after 1900 might be too controversial. He preferred the evaluation of time. The Nobel Prize Committee could take care of this century.

It had to be a first printed edition or a very early edition which itself had some special significance. Prior to the invention of the Gutenberg Press in the year 1455, books first appeared in manuscript and were hand copied by pupils, professors, monks, and later by professional scribes who exhibited great and elaborate artistic skills in the case of important works. Of course there were frequent errors and a lack of uniformity in the copies.

After the introduction of the Gutenberg Press, printing presses sprang up in every commercial capital of Europe. These competed with each other and with the professional scribes, who for a while did not give up the struggle. The result was that these very early printings contained exceptional "illuminations" from woodcuttings, and were known as incunabula, that is, books printed in the infancy of the press from 1455 to 1500. Those books printed later, but still first editions of works published before the printing press, are known as editio princeps.

But, most importantly, he was not interested in books by famous scientists, but only in those works of science that announced new and great discoveries or breakthroughs in science so as to deserve the caption of a *Milestone of Science*. This would be the uniqueness and significance of the collection. There was no other institution in the world that would have such a collection.

He retained agents, advertised, consulted scientists, and traveled to rare book dealers, with extraordinary success.

Among many books acquired by the collection were some by Galileo. His discovery of sun spots confirmed that the sun had a rotary motion around a fixed axis. The Museum acquired a first edition of this work, published in 1613.

Of the three works of Galileo which the Museum acquired, the most famous was the *Dialogo*, printed in 1632, in which he not only defends but conclusively proves the hypothesis of Copernicus. That was the end of Ptolemy’s geocentric hypothesis, but not the Church’s spite.

As the familiar legend is told, he was called before the Inquisition, imprisoned and tortured. Finally in his old age, his spirit was broken and on his knees he pleaded to the ten Cardinals, "Enough. I recant. I adjure. I curse my heresy. What more can I do?" "Sign!" shouted the Cardinals. As he rose to sign he whispered, "E pur si mouve."
All of the First Edition was ordered sent to Rome and burned. But one First Edition, so extremely rare, was acquired for the *Milestones*.

Despite his broken health and spirit, Galileo published one more work, *Discorsi dimonstrazioni matematiche*, which is said to be the foundation of modern mechanics, describing the law of motion, cohesion, the pendulum, and the definition of momentum. Mr. Hamlin acquired a first edition of this work, published in 1633.

Mr. Hamlin’s success was so great and so rapid that he began to look forward to making the public announcement of *The Milestones of Science*. But there was a disturbing development, something he hadn’t thought about. A newspaper report told of a museum in the Midwest that had purchased a sculpture of an ancient Egyptian cat at a favorable price. The museum was boycotted and vandalized by the people for having spent money for such a thing while people starved.

What would be the reaction of the people of Buffalo to the acquisition of these books during the Great Depression? How crass and unfeeling to purchase things of interest only to the elite while the city was suffering such hardship! How like the rich to take advantage of the economic distress of others in order to acquire things that are only of benefit to themselves! What good are these books to us? They’re mostly in foreign languages that we can’t read, and anyway we wouldn’t understand. We want jobs, we want food and milk for our children. The fact that much of the cost was borne by him personally, and some of his still well-to-do friends, would make no difference.

Mr. Hamlin attended a dinner of the Florentine Society, an Italian cultural organization, at which time there was a discussion of this concern. Someone, noting the disparity of the nationalities of the scientists – Copernicus-Polish; Galileo-Italian; Archimedes and other Greeks; Tycho Brahe- Danish; Kepler-German – that perhaps the public should be introduced to this on the basis of pride in their nationality.

The idea was adopted and a great all-nation Mardi Gras was arranged to be held at the Broadway Auditorium in celebration of the contribution of their countrymen in the field of science. The ethnic groups were enthusiastic, probably because it was a positive thing at such a negative time. Over 5,000 people participated, from 20 different nationalities. The Italians singing in praise of Galileo and Marconi; the Polish dancing in celebration of Copernicus; and the Greeks putting on an elaborate pageant to the honor of the ancient Greek scientists. The assembling of the books was adopted by the people of the City of Buffalo as a grass roots project. Despite the times, they even insisted on raising additional money that permitted the completion of the acquisition of the *Milestones of Science*.
And so the collection of the *Milestones of Science* was rapidly completed by the middle of 1938, announced, celebrated and transformed into an enthusiastic community project.

At the New York World’s Fair in 1939, the *Milestones*’ first editions of Copernicus and Newton were a featured exhibit.

In closing remarks on March 12, 1942, Mr. Hamlin brought the Thursday Club back to the reality of the war:

> “With the present state of affairs in the world, it would be impossible today to either initiate or complete any such program. None of us know what is going to become of the great libraries of the world. Many of the great booksellers from whom we obtained items have since been bombed out and the end is not yet. Many of the items in our collection may never be obtainable again. Perhaps it will be found that one of the greatest values inherent in our collection was the speed exercised in assembling it.”

But economic change came to Buffalo by the end of the century. World competition had struck severely on heavy manufacturing communities. Institutions, largely reliant on public support, such as the Buffalo Museum of Science, struggle in an urban location where many of the affluent have moved away. The great collection, the *Milestones of Science*, lay unnoticed and unremembered in the vault of the Museum of Science.

And so it was that a couple of prominent and pragmatic Trustees of the Buffalo Society of Natural Science, realized that the best of times was the best of times to sell – to sell the *Milestones of Science*!

The collection known as the *Milestones of Science* was sent to Christie’s in New York, first for appraisal, but with the probability of sale by auction.

Other Trustees, who seemed to have forgotten, or at least not to have missed the *Milestones* for many years, now disagreed and felt that the *Milestones* belonged at the Museum or at least in Buffalo.

And the people of the community, now more than two generations after the collection, most of who had never heard of the *Milestones*, were upset by the thought of losing such a treasure. The newspaper, after reviewing how the ethnic groups had participated in the collection, editorialized that the *Milestones of Science* belonged to the people of Buffalo and should not be allowed to leave town.
Someone with a long memory recalled that the Buffalo and Erie County Public Library had a quite valuable, though incomplete, set of Audubon’s *Birds of America*. The incomplete set of the elephant portfolio, consisting of 300 plates bound together in three volumes, had been acquired a hundred and sixty years ago by the Young Men’s’ Association, from which the Buffalo and Erie County Library descended. In 1836, four years after Buffalo was incorporated, these young men had formed a library "so that the intellectual and cultural growth of the City would keep pace with its industrial and commercial growth." They had subscribed for a complete set, but with the economic panic of 1837 they were unable to pay for more than about three quarters, and that is all that they received.

None the less this incomplete set was a treasure of the Library for almost a hundred years. However, in 1931, Mrs. Frederic Pratt, Jack Wickser’s great aunt, gave the Grosvenor Library a fine, complete set of the *Birds of America*.

Might the Museum be willing to trade the *Milestones of Science* for the incomplete *Birds of America*? The Museum could sell the partial Audubon, but both the *Milestones of Science* and the complete set of the *Birds of America* would be preserved for Buffalo. Of course the *Milestones* were very much more valuable than the incomplete *Birds*, but the *Birds* would still bring a handsome price and the Museum would avoid public criticism.

While certainly not uncontroversial, the majority of the members of the Museum Trustees showed interest, and the board of the Library Foundation was supportive of the exchange.

The Buffalo and Erie County Public Library already had what has been said to be the finest rare book and manuscript collection of literature and history of any institution of its kind in the country – over 40,000 volumes, including the Gluck collection, and the rare books of the Grosvenor Library which was merged into the B&ECPL in 1954. Its crown jewel is the complete original manuscript of Mark Twain’s *Adventures of Huckleberry Finn*.

The addition of the *Milestones of Science* would make the Rare Book Department the envy of every institution in the country.

However the then-Director of the Library issued a strong formal statement, in which all of his senior staff joined, that the collection of books known as the *Milestones of Science* had no place in the Library, thereby raising the important question of the relevance of these books to the mission of a public library as it moves on the information highway into the twenty-first Century.

He called these books "antiques" and compared them to “fossils,” and said that they belonged in archives, or at best in research libraries, adding: “Our Science Department neither wants nor
needs *Milestones*. What we need is up-to-the-minute resources (computer work stations, CD-ROMS, online data bases), to satisfy the needs of both business people and students....”

He said that the *Milestones* do not appeal to the general public; that most of them are in foreign languages, some old Latin and Greek, and contain no pictures. What the public wants is immediate answers that can be made available by network electronics. He called the *Milestones* a "white elephant" and ownership of it an unwelcome responsibility.

The then-Director of the Library retired, as had been scheduled. And despite the strong negative position taken by him and his staff, negotiations were opened between the Library and the Museum looking to arranging the exchange of the *Milestones of Science* for the incomplete set of Audubon’s *Birds of America*.

Significantly, through the persuasion and encouragement of the Library Foundation, of which George Zimmermann is President, and the efforts of Michael Smith, the Director of the Museum, these negotiations were successful and an agreement was reached, which was approved by both Boards of Trustees, and the exchange was consummated.

There is presently exhibited on the ground floor of the Rare Books Room of the Library several of the *Milestones of Science*, including Copernicus’ *De revolutionibus*, Newton’s *Principia*, and that magnificent large volume of Andreas Vesalius, with the woodcuts of the human anatomy, *De humani corporis fabrica*.

These books are not merely physical objects, nor even just the learning of their contents. They are the story of how they happened to be, of what they’ve done, of the capacity of humans to achieve, of the value of objectivity in the search for truth, of man building upon the platforms of others, of the triumphs of the intellect, the dedication to the task, "figure and platform, not figure and six pence".

Together the collection is the paths, the dirt roads and the cobblestone of civilization along the route marked by the *Milestones*. They are the chain of the existence of once living human beings with the environment and society of their times. They are precisely why we are here today in our environment and society.

Our generation in this last decade of this millennium has at least preserved the *Milestones* for our community and perhaps beyond.

The challenge now is to make them meaningful in all of their great lessons.