

MUSEUM SERVICE

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Rochester Museum of Arts and Sciences

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Museum Commission

John R. Williams, M.D. <i>Chairman</i>			<i>Ex Officio</i>
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T. Carl Nixon	Mrs. F. Hawley Ward	Peter Barry	Robert L. Springer

* * *

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Rochester Museum Association

Chartered by the University of the State of New York

Rochester Museum Association is a sponsoring group of leading citizens who feel that a museum of science, nature and history has a distinct place in our community and is worthy of their moral and financial support. It is entitled to hold property and to receive and disburse funds.

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Cover Picture—

Carl S. Hallauer, Rochester Civic Medalist, 1961.

The Twenty-third Annual Convocation was held on November 15, at which the Rochester Civic Medal for 1961 was awarded to Mr. Carl S. Hallauer by Mayor Peter Barry, in appreciation for his contributions, on the local and national level, in "Industrial Achievement and Public Service." Another feature was the awarding of three Fellowships to residents of the community and three to non-residents who are cited elsewhere in this issue. Dr. Robert L. Springer, superintendent of schools, was the distinguished speaker on the topic "Education in a Scientific Age."

CONVOCATION CALLED TO ORDER

23rd Annual Museum Convocation, November 15, 1961

It is my privilege as Chairman of the Museum Commission and acting for the citizens of this community to welcome you to this unique ceremony. Unique, because, so far as we can learn, Rochester is the only city in the world which annually selects a citizen who has performed noteworthy public service and officially thanks and honors him. This procedure is carried out by a democratic method as free as possible from all bias.

Historical records had their beginnings 10,000 years ago. They disclose that in all ages there have been men gifted with remarkable mental and creative talents who laid the foundations for the great civilizations that followed. Relatively few of these have been remembered or honored. The oft occurring failure of peoples to appreciate the contributions of dedicated individuals to human welfare and the sacrifices entailed, is an age old sin. As it was in the long ago, so it is today.

Many of America's real benefactors have passed into oblivion unknown and unrewarded. Colleges and universities have been more thoughtful and appreciative. For achievements in the fields of scholarship they have conferred honorary degrees and made valuable awards. Military heroes, too, are widely acclaimed. In the decades preceding our Civil War there was a great migration to this country of young middle class people from the over populated lands of Europe. They came chiefly from the Scandinavian countries, Germany and the British Isles. They settled in various parts of America, several of them in Rochester. Their fresh young minds, originality and perseverance led to achievements which gave this city world-wide distinction. They founded monumental enterprises and taught thousands of workers unusual skills, a method of education in those early days not available in our school system. Thus they contributed materially to this phase of education and were public benefactors of the highest order. Their reward, of course, has been business success but there never was any expression of gratitude or appreciation on the part of the community for the widespread benefits they conferred. Our recently founded convocation efforts have made some belated amends for this.

Not all great ideas have had their origin in the minds of the learned or in the vast corporations of industry. An individual of humble birth and little education may possess an imagination and vision which eventually leads to astounding results. A good example of this occurred in Rochester years ago. A little known carpenter conceived the idea of the mail chute, now a necessary utility to be found in tall buildings everywhere. However, it was the genius and mental acumen of a great architect, James G. Cutler, which made it practical.

In the fields of the social sciences, education and medical care there have been numerous examples of unappreciated and unrewarded service and sacrifice. It was these failures that led the late Dr. Arthur C. Parker, twenty-four years ago, to propose the Civic Medal as an expression of public gratitude. It is our hope and prayer that the idea will gain in acceptance by our citizens, that it will grow and become a highly regarded procedure by our city fathers and an inspiring expression of civic appreciation. Again, I welcome you and thank you for your gracious presence this evening.

—JOHN R. WILLIAMS, SR., *Chairman*
Municipal Museum Commission

Read by T. Carl Nixon
Museum Commissioner

Citation of Civic Medalist, 1961

CARL SWIFT HALLAUER, business executive, leader in the field of industrial science, civic benefactor. For forty-two years identified with Bausch & Lomb Incorporated, he has devoted a generous share of his life to helping others of this community, unassumingly, unceasingly and with deep personal kindness. Born in Rochester, he was obliged to support himself at a very young age and after courses at West High School, attended evening sessions of the Rochester Institute of Technology and the Rochester Business Institute.

In his first, full-time employment at the Kodak Park Plant of Eastman Kodak Company, he made a success of managing employee recreational activities. In 1919, he joined Bausch & Lomb Optical Co., progressing rapidly through production, personnel and sales, and in ten years assumed the office of a director. From there he advanced to vice-president, becoming executive vice-president in 1951. Three years later, he was elected president and is now chairman of the board. The precision manufacturing by this company of optical glass, lenses and instruments including those used by Space Age scientists symbolizes the service of the businessman and technologist in furthering our national scientific goals. It is highly fitting, also, that Carl Hallauer, a museum commissioner since 1938, has been closely identified with this institution which is now planning a great regional Science Center. For, as business associate and close personal friend of the late Edward Bausch, he was entrusted with the funds and negotiating authority for the construction of its present building.

Mr. Hallauer's contributions to civic and philanthropic causes are prodigious. He is at present director or trustee of thirty civic, cultural or welfare organizations, five of which he has served as president. He has given outstanding aid to the improvement of conditions for firemen and policemen and is probably one of the few men in history who, in addition to being able to wear the hats of fire chief and police chief, can also put on the feathered bonnet of an Indian of equal rank. His interest in higher learning is evidenced by his board memberships of two technical institutes, a trusteeship of Monroe Community College and honorary doctorates from Clarkson Institute of Technology and Alfred University. Experienced in politics, as delegate to eight national conven-

tions and presidential elector in four presidential years, the American Good Government Society recently appointed him to its committee on electoral college reform.

Because of all these singular contributions and particularly for his useful service and his inspired kindness to his brother man, I, therefore, by the authority invested in me as Mayor of the City of Rochester, confirm this citation and gladly present him with the Rochester Civic Medal for 1961.

Response of Civic Medalist

The Rochester Civic Medal is a real honor and one that I accept with sincere appreciation and gratitude.

Your bulletin, *Museum Service*, states that this is your 23rd Annual Convocation. It is interesting to recall that just about the time these convocations first started, Edward Bausch was discussing with me his dream of a finer museum as a gift to the people of Rochester. It was my privilege to work with him in making his dream come true. This splendid building, in which we are now assembled, is the result.

I have been thinking of the remarkable group of Rochesterians who, over the years, have received the Rochester Civic Medal. And I have been wondering by what fortunate circumstance I now find myself in such distinguished company. I think I have discovered the reason.

Confidentially, the secret is a hobby I have indulged in ever since I can remember. You may not know it, but I am a collector. Some people collect stamps or coins or antiques. And many of their collections are worth thousands of dollars.

But my collection is priceless. I would not part with it for all the wealth in the world. You will understand when I tell you that my hobby is making *friends*, and no one—anywhere in the universe—has a better collection.

Most of them are right here in Rochester, where I was born, in the company and community it has been my privilege to serve. Many are here tonight. And there are more throughout America who deserve all the credit for whatever success has come my way; they are the ones who have carried the loads on the many and various projects for which you honor me. If it were practical, I would like to make duplicates of your medal to give to each of them because they are the real and unsung heroes of this occasion.

So tonight I say to them, as I say to you, "Thank you for this award. Thank you for this occasion. And above all else, thank you for your friendship."

—CARL S. HALLAUER

Citation of Fellows, 1961

Resident Fellow—

MARK ELLINGSON, educator, college president, national leader in the field of technical education. As head for twenty-five years of the Rochester Institute of Technology, one of the chief institutions of its type, he has not only spearheaded the movement for education in the applied sciences but he has also added immeasurably to the industrial and community growth of greater Rochester. Born in Alberta, Canada, the son of American parents, he had an early life of zealous industry and soon devoted his energies unswervingly to teaching and educational administration.

Dr. Ellingson received his bachelor's degree from Gooding College, Idaho in 1926, his master's from the University of Rochester in 1930 and his doctorate from Ohio State University in 1936. Coming to the Institute in 1926 as instructor in economics, he rapidly advanced through several divisions, including color technology, and was inducted as president in 1936. During his regime, Rochester Institute of Technology has tripled its attendance in its day and evening schools from 2,278 to the present enrollment of 6,954. With the continued backing of industry, the school has pioneered in the field of cooperative education and has established courses of alternating study and employment. Several important educational units of other areas have been incorporated into its body including the Empire State School of Printing, the School for American Craftsmen and the McKechnie-Langer School of Commerce. RIT has community service as its watchword. Its purpose has always been closely related to the objectives of the business and industrial life of Rochester. Here, young men and women from high school have fitted themselves for career opportunities. To improve their competence in their occupational fields thousands more, already employed, have studied within its walls. In Mark Ellingson's words: "The Institute has long stood for education in making a living and living a life as a single, unified process. It is a product of free, enterprise economy."

For his achievements in the broad field of education at the national level and for his remarkable additions to the growth of this City and its surrounding region, the Rochester Museum of Arts and Sciences is glad to award him its Fellowship.

Resident Fellow—

BERNARD HARKNESS, botanist, horticulturist, landscape architect and educator. Born in Wetona, Bradford County, Pennsylvania, he completed high school in Moravia, New York and received his B.S. from the College of Agriculture, Cornell University. From there he developed the rock garden at the horticulturally famous estate of Anton Hodenpyl in Locust Valley, Long Island. Later he studied landscape architecture at Harvard University.

Subsequently, he was landscape architect for several New York State Parks and ran a landscape business in Wisconsin. During his wartime service with the U. S. Air Corps, he was sent to Chengtu, Szechwan Province, China as a weather cryptographer where he was able to study Chinese plants and gardens. After his military service, Mr. Harkness was landscape architect for the highway section of the New York State Department of Public Works. In 1948, he became plant taxonomist for the Bureau of Parks of Rochester, New York, now the Monroe County Park Department.

In Rochester, he has not only added to and managed the large herbarium of the parks but has given great assistance to the herbarium of the Rochester Academy of Science at the Rochester Museum of Arts and Sciences. In addition he has conducted courses in field botany and has led and given instructions at innumerable field trips of amateur and professional botanists. His own trips to Jamaica, Portugal, the Canadian Rockies and Kentucky have given him information of great value and interest.

In addition to being active in botanical and park organizations, he is a past president of the American Association of Botanic Gardens and Arboretums, currently vice-president of the Rochester Academy of Science and director of the American Rock Garden Society, guiding its seed exchange which enables botanical gardens and individuals around the world to get the seeds of rare plants easily and quickly.

Among his publications are several about the pioneers of American horticulture who lived in Rochester.

For his contributions to the botany of our countryside and our parks, for his additions to the history of famous horticulturists of this city, and especially for his willingness to pass on his knowledge through formal classes and as a leader and instructor in botany, the Rochester Museum of Arts and Sciences is pleased to name him a Fellow.

Resident Fellow—

GEORGE T. KEENE, photographic engineer, amateur astronomer, popularizer of science for the community. Apart from his professional activities, Mr. Keene has demonstrated unusual ability and leadership in interpreting astronomy and space science to the young people and adults of greater Rochester.

Born in New York City, he earned his bachelor's degree in chemical engineering at Texas A & M, a master's in the same subject at MIT in 1952 and an M.S. in Business Administration at the University of Rochester in 1959. Since 1952, in the employ of Eastman Kodak Company, he has worked on the development and improvement of color films and spent six months at the Atomic Energy installation at Oak Ridge, Tennessee.

Designer and builder in his leisure moments of six, ten and twelve inch telescopes, he has also done considerable astronomical photography. Besides being past chairman of the astronomy section of the Rochester Academy of Science, he organized its first public star party and is now aiding the Museum in the establishment of its own telescope for viewing by the public. In the spring of 1959, he conducted the TV astronomy program, "Out of This World" on WVET-TV, and will be the speaker and demonstrator on two of the Rochester Museum's forthcoming programs, "Worlds of Science" for adults and "Treasure Chest of Science" for young people.

Mr. Keene's papers on color photography have appeared in national photographic journals and on astrophotography in *Sky and Telescope*. His writings on astronomy and planetariums have appeared in the official publication of the Museum. Not without reason he is currently serving as president of the Rochester Academy of Science. Stating "science in general" as his hobby, he shows his versatility in also naming hunting, fishing, stamp collecting and a general interest in the earth sciences.

For these many reasons, the Rochester Museum of Arts and Sciences is delighted to name him a Fellow.

Non-Resident Fellow—

CARL CARMER, folklorist, poet, teacher, regional historian. As a distinguished author of essays, novels, poems and children's stories which charm and inspire a widening sea of readers of all ages, he has helped America remember its past.

Born in Cortland, New York, the son of two teachers, he has never lost his upstate New York essence and his love for conveying in words the character and humor of people and the flavor of their habitat. Graduated from Hamilton College, he took his M.A. at Harvard. He taught at both Syracuse University and at the University of Rochester. Here in our city, he was one of the founders and the first president of the Rochester Poetry Society. After a turn as chairman of the Public Speaking Department at Hamilton College, he became Professor of English at the University of Alabama and it was during his six years at Tuscaloosa that he produced his first successful book, *Stars Fell On Alabama*. In more recent years he has endeared himself to York Staters in various areas by his volumes, *Listen for a Lonesome Drum*, *Dark Trees to the Wind* and *Genesee Fever*, to name only a few of his substantial literary output. Of his twelve children's books which range from such titles as *The Screaming Ghost* to *Pets at the White House*, six have been illustrated by his wife. Editor of the *Rivers of America* series, of which he is the author of two, he is also responsible editorially for the Harper's series, *Regions of America*. Folklorists, as well as the general public, have been enriched by his contributions to radio and by the four Decca record albums which he collected and edited of regional songs and ballads.

Beyond all these multitudinous products, Carl Carmer continues to aid in a variety of state and community historical endeavors. He is now a councillor of the Society of American Historians, vice-president of the New York State Historical Association, honorary president of the New York Folklore Society and president of the board of directors of Boscobel Restorations, Inc. He has said: "From history we can learn courage, integrity and the ability to endure vicissitudes."

For these accomplishments and distinctions, we name him with pride a Fellow of the Rochester Museum of Arts and Sciences.

Non-Resident Fellow—

EDWIN HARRIS COLBERT, paleontologist, teacher, museologist. One of the world's experts in the field of fossil vertebrates. Dr. Colbert's investigations have centered on the ancient faunas of several continents, shedding light on the past distribution and intercontinental migrations of these animals. As a scientist he has the rare ability of making technicalities understandable. Furthermore, he has made innumerable contributions to the world of museums.

Born in Clarinda, Iowa, he received his bachelor's degree from the University of Nebraska in 1928, and later both his M.A. and Ph.D. from Columbia University. Veteran of many field expeditions to the American West and to Brazil and Argentina, he has added luster to the American Museum of Natural History where thirty-one years ago he came as collaborator of the famed Henry Fairfield Osborn. Starting as assistant curator in 1933, he rose to his present post as chairman of the Department of Vertebrate Paleontology. Simultaneously with his museum work, he has lectured at colleges and universities, and since 1945 has been Professor of Vertebrate Paleontology at Columbia University. In his more than two hundred scientific papers, he has described over fifty new species and ten new genera of animals. For these accomplishments he received the John Strong Newberry Prize from Columbia University in 1931, and in 1943 the National Academy of Sciences awarded him the coveted Daniel Giraud Elliot Medal.

Among Dr. Colbert's contributions to popular education has been his direction of the tasks of reconstruction at the American Museum of Natural History of the Brontosaurus Hall in 1952, and the Tyrannosaurus Hall in 1956. These exhibits of the giant and awe-inspiring ancient reptiles represent two of the largest and most complete displays of their type. On the museum profession, he has had profound and beneficent influence. Since 1958, he has served as editor and contributor to the magazine *Curator*, a publication of the American Museum of Natural History, which upholds and inculcates the highest standards for the practitioners of museology. His popular writings which include *The Dinosaur Book*, *Evolution of the Vertebrates* and *Millions of Years Ago* for the layman, child and adult alike, lift the veil from a complex science.

For all these achievements in science and in education, the Rochester Museum of Arts and Sciences is pleased to award him its Fellowship.

Non-Resident Fellow—

HAROLD K. HOCHSCHILD, mining executive, scholar, museum founder and trustee. He has spent many devoted years outside his business responsibilities to a broad spectrum of philanthropic enterprises. These range from hospitals and prison reform to race relations and museums.

Born in New York City, he earned his bachelor's degree at Yale in the class of 1912. Early days, living in China and India, implanted in him an international view which has been enhanced by his almost annual visits to Africa. For over four decades he was in the employ of the American Metal Company, Ltd. After the merger of that organization, he became director and honorary chairman of American Metal Climax, Inc. During World War II, he served in Europe as an Army intelligence officer with the rank of Lieutenant Colonel. Love of and familiarity with the Adirondack Mountain region, where he has a home, induced him to spend years of research on the local history of that area. His book on that topic won an award of the American Association of State and Local History.

In 1948, he initiated the movement which led to the formation of the Adirondack Historical Association and the founding of the remarkable museum at Blue Mountain Lake, which is a gem among museums of the State.

Mr. Hochschild is a valued member of the Council of the American Association of Museums and of the Regent's Advisory Board on Historic Sites. Currently serving as chairman of the Committee on Museum Resources, appointed by the New York State Commissioner of Education, he is aiding in a state-wide museum survey and adoption of measures to raise museum standards. His range of interests and benefactions is evidenced by the fact he is a board member of the New York City's United Hospital Fund, the Prison Association of New York, Valeria Home and the Institute for Advanced Studies at Princeton. He is also chairman of the board of the African-American Institute, concerned with scholarships and educational exchanges.

For his staunch assistance to the museum movement and for his unceasing efforts to help humanity, the Rochester Museum of Arts and Sciences is proud to name him a Fellow.

Education In A Scientific Age

By Robert L. Springer, *Superintendent of Rochester Schools*

23rd Annual Convocation Address, November 15, 1961

Necessity is said to be the mother of invention. Progress and the achievement of national greatness are often the outgrowth of calamity or national emergency. In the past, national emergency has sometimes expressed its symptoms in terms of war.

Today, no civilized nation can afford the luxury of war as a means of rallying its citizenry to meet an emergency. What is the urgency of our time? Is it a race between education and catastrophe? Is it the cold war? Is it the ideological conflict between democracy and communism? Is it the social awakening of the under-developed and under-educated countries of the world? Or is it the challenge to make full use of the material progress of science as a tool to enable America to achieve the educational quality essential to cope successfully with all these urgent problems in a period of continual change?

Walter Lippman writes that "The wave of the future is not Communist domination of the world. The wave of the future is social reform and social revolution driving toward the goal of national independence and equality of personal status. In this historic tendency, Mr. Khrushchev will be 'the locomotive of history' only if we set ourselves up to be the roadblocks of history."

In an address at the 44th Annual Meeting of the American Council on Education, Abraham A. Ribicoff, Secretary of Health, Education and Welfare, said that "In these past months, not in Berlin, not in Laos, not in our sister nations to the south, but right here at home we have inadvertently set up just such a roadblock of history, for we have failed to improve the education of our young people. Inadvertently, because American people want their children to receive an excellent education. The American people want their boys and girls to achieve the highest potential of which they are capable. They want their boys and girls to cultivate the talents they have and put these talents to constructive use.

"But the issue is not in sharp focus for the individual American father and mother. The American people do not connect the improvement of our schools and colleges with the world crisis which now confronts us. True, the concept of 'education' is an intangible one. It is difficult to see schools and teachers as a first line of defense, like guns or missiles."

We have just celebrated American Education Week with its theme "A Look at Our Schools—A Progress Report." When we look into the history of our schools, we find that they have their roots deep in the political philosophy of the early leaders of our country. Such an expression of a national philosophy is found in the Ordinance of 1787: "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged."

What we are today, as a people and a nation, we owe to the belief our founding fathers had in education. Our future will depend on the value we place on public education and our willingness to invest more of the nation's wealth and talent in making this education an even more effective tool. We need to recognize our shortcomings; but, even more important, we need to rekindle our dedication to making public schools stronger with each generation.

We are not alone in the discovery that education is a powerful tool in molding the character of individuals or society as a whole. Witness the use made of education by competing nations. Civilization is more than "a race between education and catastrophe." It is a race between competing countries as to how effectively education can be used to accomplish each nation's goals. The responsibility for determining how effective education will be in the United States lies with the people and will find its expression in the efforts made to support education at the local, state and federal levels of government.

Just a century ago the Land-grant colleges were authorized under the Morrill Act. Local tax support for public secondary education was made a requirement by the decision in the Kalamazoo case carried to its conclusion in 1874. These two decisions, one a product of the Civil War, were necessitated by the great national need of that day to provide the means to feed better and supply the people through improved agriculture and mechanization of industry and transportation.

Following World War I, what is the story of progress in American public education? In the 1920's, the educational attainment of the average adult was the seventh grade level. The basic theory of learning was to teach the mind. Thirty percent (30%) of the students graduated from high school and only one in ten went on to college.

In the 1940's, the educational level of the average adult was the ninth grade. The "life adjustment" theory prevailed. About forty percent (40%) of high school students went on to graduate and one in five continued his education beyond high school.

In the 1960's, the educational attainment of the average American adult is the eleventh grade level. The general education theory is to teach the whole child to achieve to the maximum of his capability. Sixty percent (60%) graduate from high school and one graduate in three continues his education at the collegiate level.

Let's take a look at the current senior class in college. In 1950, they entered the fifth grade. For each 1000 pupils who entered the fifth grade in 1950, there were 885 who entered high school (9th grade) in 1954. Four years later, 1958, only 584 graduated from high school and 308 entered college that fall. Approximately 155 of the 1000 fifth graders in 1950 are in their senior year of college in 1961.

If these figures appear to be discouraging, let us remember that since World War I the standard of the educational attainment of the average American adult has increased one year, on the average, every decade. Should

every student now enrolled in the elementary and secondary schools today continue in school one year longer, on the average, during the decade of the 1960's, there will be an increase of 40,000,000 years of education—not counting the increase in the number of children who will be entering school. Using a class size average of 25 pupils, it will take 1,600,000 teacher years or 160,000 new teachers every year just to maintain our past rate of educational progress during this decade.

Where will we get the teachers? How will we pay for the quality demanded of these teachers? How will the teachers we have now keep up with scientific progress? We are told that ninety percent (90%) of the prescriptions written by doctors today were not known prior to World War II. It has been said that fifty percent (50%) of the mathematics used in launching a space missile was not in textbooks in 1950. With such rapid progress in science and technology on the one hand, and with our nation facing such unprecedented challenges on the other, how can we be sure that education in America will not be a roadblock of history?

First, we must reduce to a minimum the time lag between successful experimentation and general implementation in the classroom.

Second, technological and electronic devices must be used as tools to improve the quality of education—we must be the master of the tools of science, not be mastered by them.

Third, superior teachers must teach more students than ever before.

Fourth, the skills essential to learning must be taught more thoroughly than ever before.

Fifth, to cope with the ever-increasing body of knowledge, the rate of learning must be stepped up and the quality improved simultaneously.

1. This will require a reorganization of the grouping of students into large groups part of the time, small groups part of the time and individual study part of the time.
2. It also means improved and extended use of the media of mass communication.
3. It means that the transmittal of information may be accomplished by mechanical devices much of the time.
4. It means that the content to be learned must be programmed in detail by experts in the content subject in cooperation with experts in the psychology of learning.
5. It means also that the responsibility for learning will be transferred from the teacher to the pupil.

Sixth, the teacher will become a counselor of learning rather than the dispenser of facts.

Seventh, we will become more concerned with what the student thinks about the knowledge he has acquired than with the amount of information he can give back on a test.

Eighth, schools and colleges will join hand-in-hand to continue the education of teachers in service so that instruction will be as up-to-date as the latest model car.

Ninth, all community agencies concerned with the child will join forces with the school to provide one tremendous, comprehensive, consistent, meaningful program designed to nurture the talents of every individual to maximum fruition. Fragmentation of learning will give way to a composite body of knowledge welded together with character built on the strongest moral, spiritual and ethical fibers.

Tenth, motivation and purpose are essential to all worthwhile accomplishments. We must not be modest nor bashful in teaching our heritage, the values of free enterprise and our form of government, nor in pointing out the satisfactions of personal achievement and service to one's fellow man.

Tonight, the Rochester Museum of Arts and Sciences has paid honor to men who have brought distinction to their community, to themselves, and to the arts and sciences. Does the Museum have a place in education in a scientific age? The answer is a resounding "yes." It is one of those agencies in the community we referred to earlier. It provides the medium by which the student of any age can experience a third dimension of learning, as it were, of the world as it is today and as it was through the ages. It makes the record of man live again for every generation. The expert personnel brings the visual image on display to life for the observer and conveys an understanding of people, customs and nature that fires the imagination. The film showings give cohesion and continuity to the pageantry of history.

The Museum can provide the understanding of space through the projected planetarium. What a revelation it is to the budding scientist to see the sun, stars, and planets in their relationship to the movement of the earth with a twenty-four hour period compressed into a mere half hour.

The Museum is a resource, too, as the traveling exhibits are brought to the classroom. To have the facilities of the Museum available to a community is important. To have the trained personnel to make these exhibits come alive for people to really understand and appreciate them is imperative.

As the Museum, typical of the community resources for education, becomes an ever-increasing, integral part of the larger educational effort, then will the separate and individualistic educational efforts change from fingers of light through a cloud of learning to one solid burst of sunlight on one horizon of knowledge and remove, forever, any educational roadblock to history.

Christmas Is Many Things

By Gladys Reid Holton, *Curator of History*

CHRISTMAS IS MANY THINGS.

It is the *traditions* carried on in the millions of homes all over the Christian world.

It is the *customs* blended in America from the many national customs of other lands.

It is *celebrating* Jesus' birth in our own way.

It is putting a *lighted candle* in the window to invite the Savior and the wayfarer into our hearts and homes.

It is a *tree*, decorated or undecorated, the symbol of good will to others.

It is gaily wrapped *gifts*, representing those given to the Christ Child by the Wise Men as they came to Bethlehem to honor His birth.

It is *bells* calling us to worship.

It is *carols* sung by groups for our enjoyment and to inspire a re-dedication of our ideals and hopes for others and is one of the layman's most beautiful contributions to his religion.

It is the *creche* in France, or the *Nacimiento* in Spain, or the *putz* of the Pennsylvania Dutch, or the *Krippe* in Germany, or the *Praesepio* in Italy or the *Nativity Scene* reminding us again of the real meaning of Christmas.

It is *stockings* hung by the chimney, to help us relive the times long ago when as children this started off our most important day.

It is *gay, colorful lights on the lawn* telling all who pass that we remember.

It is *Santa Claus* the mythological Spirit of Christmas.

It is *cards* sent to those we love and it is *seals* placed on them to say in another way that we care.

It is *special food* prepared from old family recipes, reminiscent of the Roman banquets in honor of the ancient gods.

It is *memories* brought back by the use of trimmings in the house and the greeting of old friends once more.

It is *toys and games and dolls* and the happy voices of children as they receive them.

This theme will be interpreted in a special exhibition of toys, books, games, dolls and other articles from the Museum's collection during the month of December. We hope it will help you enjoy this most important holiday of the year just a little more as it reminds you of the many things that go to make up a joyful holiday season.

News and Events . . .

MRS. GLADYS REID HOLTON, curator of history, attended the meeting of the Early American Industries Society which was held in Lancaster, Pennsylvania, November 2-4.

MISS GLORIA C. GOSSLING, head of the school service division, took part in the Conservation Education Forum conducted by the Natural Science for Youth Foundation in New York City, November 29-December 1. She participated on the panel of "Demonstrations in Science and Conservation for the Space Age."

THE ROCHESTER MUSEUM HOBBY COUNCIL is sponsoring a contest "Making a Mosaic with Eggshells." Instructions and entry blanks may be obtained from the chairman, MR. ARTHUR C. BARNES.

Material is being supplied almost every week to teachers who appear on the Rochester Area Educational Television Association (RAETA) programs. As an educational special for grades 5, MISS GLORIA C. GOSSLING, head of the school service division and MR. DAVID T. CROTHERS, senior Museum exhibits designer presented a program on November 27 and will again on December 4 at 1:30 p.m. on WVET-TV. The first was a behind-the-scenes tour of the Museum and a demonstration on how a diorama is made. The second program will give details of diorama

making and how collections can be assembled into a home or school museum display.

A "STAR PARTY" at the Museum on November 14, marked the official dedication of a new telescope. The telescope was presented to the Museum by MRS. HOMER A. HARVEY, of Canandaigua, New York, and had been used by her late husband, Dr. Harvey, who had added special devices. It will be known as the "Harvey Refractor." The telescope was put into condition by MR. GEORGE T. KEENE and MR. RALPH DAKIN, members of the astronomy section of the Rochester Academy of Science. BAUSCH & LOMB INCORPORATED polished the tube to complete the reconditioning of the instrument for public use.

Copies of the booklet entitled "WHY A PLANETARIUM FOR ROCHESTER" are available upon request. This comprises a series of four articles by MISS GLORIA C. GOSSLING, head of the school service division, which appeared in *Museum Service*, with an introduction by MR. W. STEPHEN THOMAS, director and an editorial "A Planetarium, Please" by MR. EDWARD P. HARRISON, editor of *Greater Rochester Commerce*. How "A Recent Newcomer Contemplates The Planetarium" by MR. JAMES G. SUCY is also featured in this illustrated booklet.



Seasons Greetings
to All

JUNIOR MUSEUM PROGRAM

Audubon Screen Tour - - -

ROVING THREE CONTINENTS — Bristol Foster

Africa! Asia! Australia!

Saturday, December 9, 10:30 a.m.

PARENTS' DAY

Junior Museum Club Activities

Saturday, December 9, 2 - 4 p.m.

Treasure Chest of Science - - -

MEET THE IROQUOIS — Charles F. Hayes, III

Colored Slides and Demonstration of Indian Artifacts

Saturday, December 16, 10:30 a.m.

SPECIAL EXHIBITIONS

- 1st floor — **NOAH'S ARK** — welded sculpture by Judith S. Brown, of New York City.
On exhibit through January
- 2nd floor — **SMALL WORLD THROUGH THE LOOKING GLASS** — color photograph enlargements of micro-organisms by Roman Vishniac. *On exhibit through December*
- CHRISTMAS IS MANY THINGS** — Toys, games, dolls, books and other articles from the Museum's collections. *On exhibit through December*
- Library — **CHILDHOOD FAVORITES** — *Nursery Rhymes and the ABC's.*
On exhibit through December and January
- 3rd Floor — **THE ROCHESTER SOLDIER GOES TO THE CIVIL WAR** — uniforms, accouterments, documents, diaries, photographs and other personalia from the Museum's collection.

1961 • DECEMBER • CALENDAR

- 1 Friday Rochester Academy of Science—Astronomy — 8 p.m.
Rochester Amateur Radio Code — 8 p.m.
- 3 Sunday **FILM PROGRAM — 2:30 and 3:30 p.m. — STORY OF PALOMAR, THE HONEYBEE: A Social Insect**
- 5 Tuesday Rochester Rose Society — 8 p.m. Rochester Numismatic Ass'n — 8 p.m.
Optical Society of America — 8 p.m. Rochester Opportune Club — 8 p.m.
- 6 Wednesday **Illustrated Lecture — THE UNIVERSE, by George T. Keene —**
Adult Series, Rochester Museum Ass'n — 8:15 p.m.
Genesee Cat Fanciers Club — 8 p.m. Rochester Aquarium Society — 8 p.m.
- 7 Thursday Rochester Cage Bird Club — 8 p.m. Rochester Dahlia Society — 8 p.m.
- 8 Friday Rochester Amateur Radio Code Class — 8 p.m.
Morgan Chapter, N.Y.S.A.A. — 8 p.m.
- 9 Saturday **AUDUBON SCREEN TOUR — ROVING THREE CONTINENTS, by Bristol Foster,**
Youth Series, Rochester Museum Ass'n — 10:30 a.m.
PARENTS' DAY — Junior Museum Activities — 2 to 4 p.m.
- 10 Sunday **FILM PROGRAM — 2:30 and 3:30 p.m. — THE LITTLEST ANGEL, LOUISA MAY ALCOTT, THE CHINESE VILLAGE**
- 12 Tuesday Rochester Museum Hobby Council — 8 p.m.
Rochester Academy of Science—Botany — 8 p.m.
Rochester Antiquarian League — 8 p.m.
- 13 Wednesday Seneca Zoological Society — 8 p.m.
Rochester Academy of Science—Ornithology — 8 p.m.
- 14 Thursday Junior Philatelic Club — 7 to 9 p.m. Rochester Philatelic Ass'n — 8 p.m.
Rochester Amateur Radio Ass'n — 8 p.m.
Genesee Valley Quilt Club — 10:30 a.m.
- 15 Friday Rochester Amateur Radio Code Class — 8 p.m.
Rochester Academy of Science—Weather—8 p.m.
Junior Numismatic Club — 7:30 p.m.
- 16 Saturday **TREASURE CHEST OF SCIENCE 10:30 a.m. — MEET THE IROQUOIS by Charles F. Hayes, III, Associate Curator of Anthropology**
- 17 Sunday **FILM PROGRAM — 2:30 and 3:30 — CHRISTMAS THROUGH THE AGES, WENDY'S FIRST CHRISTMAS CARD, TOCCATA FOR TOY TRAIN**
- 19 Tuesday Rochester Numismatic Ass'n — 8 p.m. Rochester Button Club — 1 p.m.
Bergen Swamp Preservation Society, Inc. — 8 p.m.
Rochester Opportune Club — 8 p.m.
- 20 Wednesday Rochester Print Club — 8 p.m.
- 21 Thursday Genesee Valley Gladiolus Society — 8 p.m.
- 22 Friday Rochester Archers — 8 p.m.
- 24 Sunday **MUSEUM CLOSED**
- 25 Monday **CHRISTMAS DAY — MUSEUM CLOSED**
- 31 Sunday **MUSEUM CLOSED**

—All bookings subject to change and substitution without notice.



LOOK TO THE STARS ★ ASTRONOMY TODAY

Illustrated Lecture by George T. Keene, F.R.M.

Wednesday, December 6, 8:15 p.m.

Worlds of Science Adult Lecture Series

Sponsored by the Rochester Museum Association