
ALFRED UNIVERSITY

DEDICATION CEREMONIES

NEW BUILDING

New York State
College of Ceramics

THIRTY-THIRD YEAR

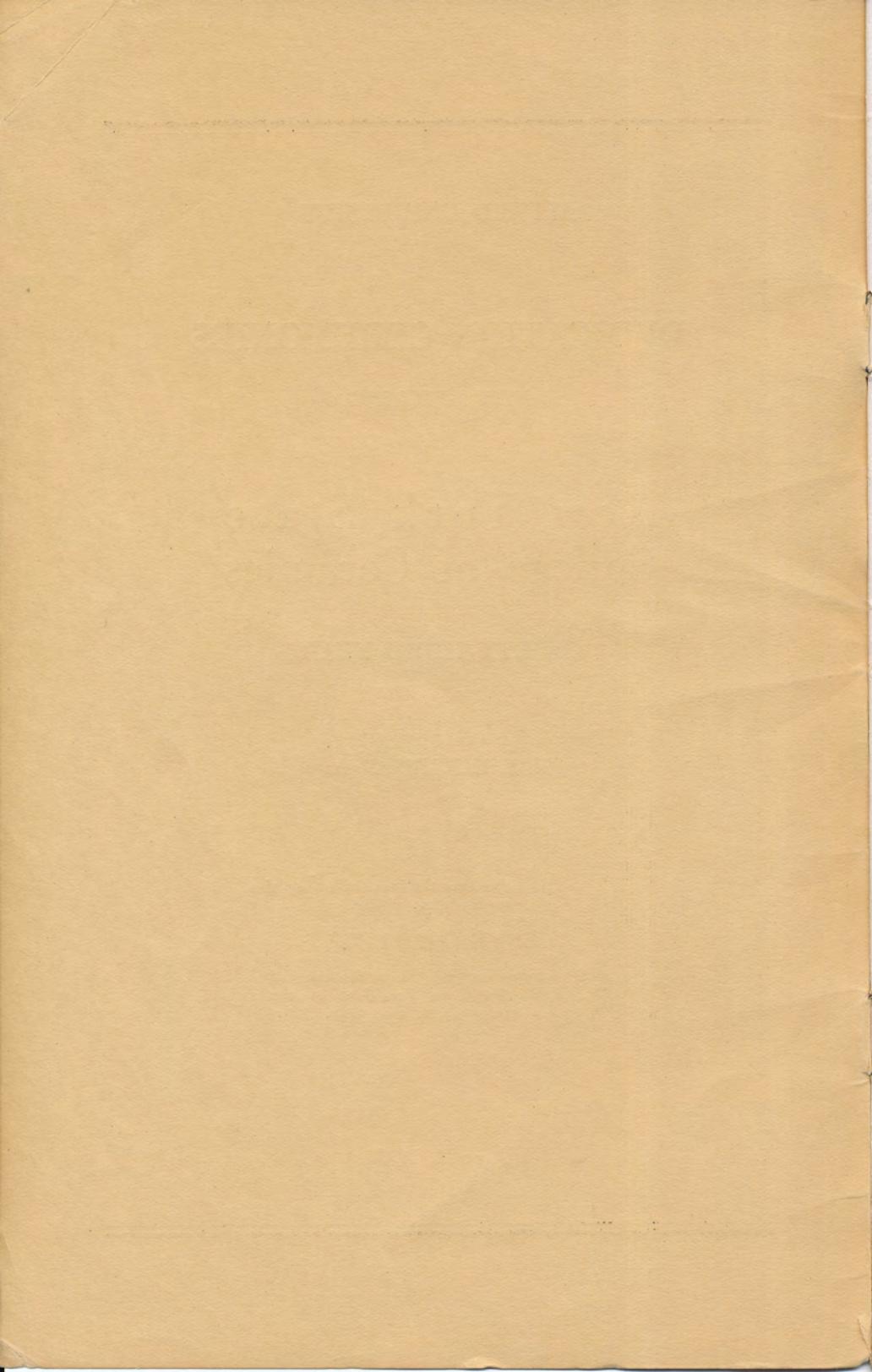
M. E. HOLMES, *Dean*

A record of the ceremonies dedicating the
new building of the

CERAMIC COLLEGE

and commemorating the retirement of
Dr. B. C. Davis as President of the
College since its inception.

June 12, 1933



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Volume XXXI

June, 1933

No. 6

*Published monthly by Alfred University. Entered as second class
matter at Alfred, N. Y., under act of Congress, July 16, 1894
Accepted for mailing at special rate of Postage provided for in Section
1103, Act of Oct. 3, 1917, authorized on July 3, 1918*



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The Commencement of June, 1933, at Alfred University was doubly significant since it marked the retirement of President Boothe C. Davis and also the dedication and official opening of the new ceramics building. The importance of the occasion was emphasized by the presence of the Governor of New York State and many prominent men from the ceramic industries. The ceremonies in honor of these special events occupied one day in the Commencement festivities.

During the formal program which was held in Alumni Hall, Mr. A. V. Bleininger of Homer-Laughlin China Co., Newell, West Va., delivered a Doctor's oration and Governor Lehman presented the keys of the new building to President Davis and Dean Holmes. The ceremonies were concluded with the presentation of honorary degrees to Mr. Bleininger and Governor Lehman.

Thru the cooperation of Station WGR of Buffalo, a considerable part of the program was broadcast as well as descriptive remarks about the College in general.

Following the dedication ceremonies a luncheon was served in the dining room of "The Brick," the recently remodeled Girls' Dormitory, with Governor and Mrs. Lehman in attendance.

During the afternoon the new ceramic building was open for inspection and President and Mrs. Davis presided at a reception in Susan Howell Social Hall in honor of the many important guests.

Messages of congratulation were received from many people who were unable to attend the festivities. Among these messages were the following:

Dr. S. R. Scholes

Dean M. E. Holmes

I rejoice with you on opening of new building and particularly on leading the way in U. S. A., in providing systematic courses in Glass Technology. May your work prosper.

W. E. S. TURNER,

*Department of Glass Technology,
The University, Sheffield, England.*

Dean M. E. Holmes

Sorry that a slight illness prevents me from attending the dedication. Congratulations and best wishes for the future.

V. E. ECKARDT ESKESEN,

*Federal Seaboard Terra Cotta Co.,
New York City.*

The program of addresses and felicitations is printed in detail in this booklet.

PROGRAM

Dedication of the new building, New York State College of Ceramics, at Alfred University, Alfred, N. Y., Monday, June 12, 1933, 10:30 A. M., Eastern Standard Time, Alumni Hall.

Processional

Invocation

REV. CHARLES FERGUS BINNS
Director Emeritus

Greetings

DR. BOOTHE C. DAVIS
President of Alfred University

Introductory Remarks

DR. M. E. HOLMES
Dean New York State College of Ceramics

Felicitations

From the Legislature of 1930

JUDGE JOHN KNIGHT
Federal Judge of the Western District

From the State Education Department

MR. A. K. GETMAN
Chief Education Bureau

From the American Ceramic Society

J. C. HOSTETTER
President American Ceramic Society

From the Fellows of the American Ceramic Society

DR. G. A. BOLE
Ex-Chairman of the Fellows

From the University of Illinois

PROF. C. W. PARMELEE
Head of the Department of Ceramic Engineering
University of Illinois

From the Ceramic College Board of Managers

HON. J. J. MERRILL
State Tax Commissioner

Dedicatory Address

“THE BASIC STRUCTURE OF THE CERAMIC INDUSTRY”

MR. A. V. BLEININGER
Chief Ceramist, Homer-Laughlin China Ware Co.
East Liverpool, Ohio

Presentation Address

GOVERNOR HERBERT H. LEHMAN

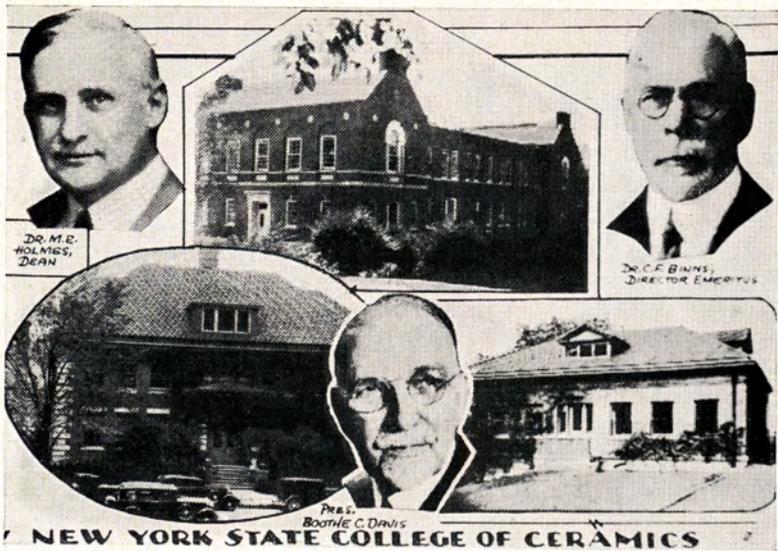
Conferring of Honorary Degrees

Doctor of Science—MR. A. V. BLEININGER
Doctor of Laws—GOVERNOR HERBERT H. LEHMAN

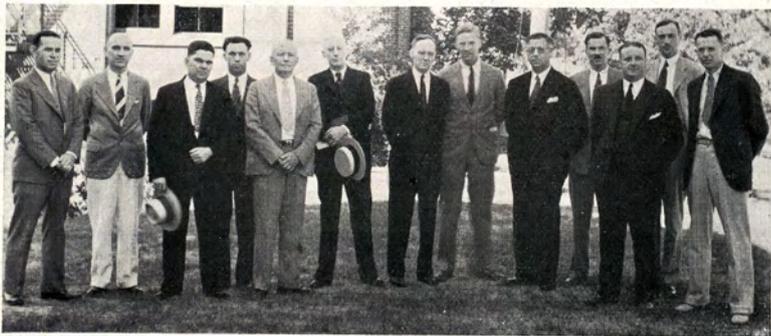
Alma Mater

Benediction

Luncheon—Dining Room of the Brick	12:30 P. M.
Inspection of the new building	2:00—4:00 P. M.
Reception—Susan Howell Social Hall	4:00—600 P. M.



Students Working on Potter's Wheels in the New Building of the Ceramic College



Prominent Ceramic Men Who Attended the Dedication Exercises

INVOCATION

REV. CHARLES FERGUS BINNS

Director Emeritus

New York State College of Ceramics

Almighty and Eternal God, in Whom we live and move and have our being, we offer today our most earnest thanks for the kind Providence which has watched over our enterprise during the past years.

We thank Thee for the unselfish devotion of the men and women which has made possible the successful outcome of our endeavor.

We thank Thee too, for the new and enlarged opportunities which are opened before us.

Give to those who teach, we pray Thee, wisdom, sympathy and vision, and to those who study an earnest desire and an open mind so that all may work together for mutual advancement and for the benefit of mankind and to Thee, most Blessed God and Father, be all Honor, Glory and Worship, world without end—Amen.

GREETINGS

DR. BOOTHE C. DAVIS

President, Alfred University

It is a very pleasant duty assigned to me by the Program Committee to say a word of welcome and greeting today on the occasion of the dedication of the new building of the New York State College of Ceramics.

We have been looking forward with keen anticipation for many months to this dedication. When three years ago the appropriation was made for this building, we did not realize that it would take so long to have it completed and equipped ready for dedication. While there have been necessary delays, it is gratifying to feel that the building has been well planned, well built, and well equipped for its purpose.

At one time we hoped to dedicate it in the fall of 1932. As it turned out, however, it is much more satisfactory to have the dedication now, when equipment and grading are well along, and when the spring weather is much more favorable for such a gathering.

It is a matter of supreme satisfaction that Governor Lehman, who has shown keen interest in this building and its equipment, can be with us and participate in this service. Alfred welcomes the Governor and appreciates the great honor his presence bestows.

We had hoped to welcome also Judge Knight, who was president pro-tem of the Senate in 1930, when the appropriation was made,

and who introduced and fathered the bill through the legislature which gave us the building. He is unavoidably detained.

This occasion has brought together a large number of distinguished men of the ceramic profession. We extend a most hearty welcome and our greetings to all of these, as well as to alumni and friends who have assembled to do honor to this occasion.

In behalf of the Trustees of Alfred University; in behalf of the Director Emeritus, Doctor Binns, who long ago dreamed of this day; in behalf of the Board of Managers and the Dean of the State College of Ceramics, the Faculty and the student body, I welcome you, one and all, and extend our best wishes that you may have a pleasant and profitable day.

INTRODUCTORY REMARKS

DR. M. E. HOLMES, DEAN

New York State College of Ceramics

I should like to call attention to the background of these dedication ceremonies which our friends have made it possible for us to arrange for today.

The New York State College of Ceramics recently elevated to that status from the status of a school, is the only institution in New York devoted to higher education in ceramics. For the current year its enrollment is 247, this figure representing a 40% increase over that of the preceding year. There is a staff of twelve instructors, each a specialist in his line of work. The College is organized on the basis of three departments, that of General Ceramic Technology and Engineering, Glass Technology and Ceramic Art. The courses of study embrace all fields of the ceramic industries in their three essential aspects of technology, engineering and art. The plant now consists of three buildings, including the new one to be dedicated today, and affords 40,000 square feet of floor space devoted to lecture rooms and laboratories. \$40,000 worth of new and up to date equipment was installed in this new building the past year and \$15,000 worth will be installed the coming year. This large expansion program of the past year has more than doubled the size of the plant and the equipment and has materially relieved the serious restrictions that have prevailed in the past. That such restrictions were severe is indicated by the large increase in enrollment the past year. However, it might be worth while to note that we are again confronted with the necessity of restricting enrollment.

My purpose in mentioning these facts is to bring out the contrast of the present status of the institution with the conditions that prevailed thirty-three years ago when the Alfred pioneers established this school of ceramics. \$20,000 was provided in that year to construct the building, equip it, provide for maintenance and pay

salaries. The student body was negligible. Altho Ohio State University had started the movement a short time before, ceramic education was as yet an unknown quantity, much less being established and even the ceramic industries doubted the need of it. It took vision to see the widespread and essential place that ceramic education was destined to hold in the educational system of the entire country, and particularly its possibilities at Alfred. It took courage to launch the venture and it took genius to build it up to the present status which I have just described. With Ohio State University, this institution has blazed the trail of ceramic education and at Alfred University it has culminated in the present status of the New York State College of Ceramics.

The most interesting side light of this background of today's ceremonies is that this entire third of a century of growth and development at this institution has been under the continuous executive direction of one president and under the administration of one director. This record is unique in the annals of ceramic education and it may be observed that in the recent establishment of the glass technology department, the first in America, we have evidence of that same courage and vision that gave birth to the institution thirty-three years ago. It is most fitting that the dedication of the new building should come at just the time that our distinguished president must lay down his duties as executive head of this institution, and so soon after the similar retirement of my honored predecessor, the Director Emeritus. The building may well serve as a monument to their great careers. As this building may serve as such a monument so may the busts of the President and Director which we have recently placed in the Assembly Room of the new ceramic building serve as symbols of the admiration and love for them by us who are to carry on and they shall be a constant source of inspiration to us in the years to come. The making of these busts was not a commercial proposition. We did not send out an order to a commercial sculptor. Instead they were modeled by one of us, Miss Elsie Binns, and they are not made of bronze, but of basic ceramic material, enduring clay. I should like to invite your particular attention to them this afternoon when you visit the ceramic building.

I was instructed to devote my talk to the aims and policies of the New York State College of Ceramics and now I have taken up all my time in presenting these side lights to the dedication ceremonies so I must let it suffice to state that the aims and policies of the College of Ceramics shall be those of the past modified only to the extent that new conditions demand and enlarged appropriations permit.

The policies include the development of effective contact with the industries, emphasis on the basic scientific work and the heavy applied engineering work and the direction of the art work to the industrial problems. The policies include also a desire to grow better rather than larger.

FELICITATIONS

State Education Department

MR. A. K. GETMAN

Chief Education Bureau

Your Excellency Governor Lehman, President Davis, Ladies and Gentlemen:

I am happy, this morning, to represent Commissioner Graves in bringing to this distinguished gathering the felicitations of the State Education Department. During the six years since the Legislature placed upon the Regents of the University certain administrative and supervisory responsibilities in connection with the State Colleges, the Education Department has exercised every effort to assist in carrying forward the notable achievements of the New York State College of Ceramics at Alfred University. We have taken great pride in the high record of service which this College has rendered to the youth who have received their training here and to the clay working industries.

We are met to dedicate a new building designed to enable the College to continue that service. The need for this structure has been well known. As you inspect the building and its equipment you will be impressed with its excellence of design and the adequacy of its facilities to increase the educational opportunities now available to students who have chosen ceramic engineering as their life work. Impressive as is such a structure, let us note that it constitutes but the material facilities of education. The constituent elements of brick and mortar merely create an opportunity for bringing eager students under the guidance of gifted teachers.

Nearly forty years ago such a teacher took the helm at Alfred University. Tomorrow, he plans to retire from active service at that helm. Indeed, my friends, the School of Ceramics at Alfred University and the present College of Ceramics owes its existence and its high place of service to the vision, the courage and the leadership of President Boothe Colwell Davis. He has been a bearer of culture, a creator of social values, a leader in technical training, and a builder of high personal character among the young men and women who are privileged to call Alfred University their Alma Mater. The students in the College of Ceramics have shared his gifts of council and leadership. Among the gifts of this executive was the quality to pick key men for important posts. Very early in the history of the School of Ceramics he secured a gifted artist, a trained technician and a strong teacher, in the person of Professor Binns to take the helm of the new school. It is quite impossible to estimate the vast influence of such a leader in training students in operative skill, sound judgment and high ideals.

Accordingly, I would remind you that we shall dedicate today not only a beautiful building of brick and stone, but, what is of even greater significance we shall commemorate the sacrificing efforts and the high ideals which President Davis, Professor Binns and their colleagues have built into the spirit of this University and this College. In bringing to you the felicitations of President Graves, Dr. Horner and others in the Education Department, I urge you to nurture this spirit of service and to fan this flame of idealism thus created on this campus. I trust that this dedication ceremony may imbue us with a new zeal to achieve this high purpose.

THE AMERICAN CERAMIC SOCIETY

J. C. HOSTETTER

President, American Ceramic Society

President Davis, Governor Lehman, Dean Holmes, Distinguished Guests and Friends of the New York State College of Ceramics:

It is indeed a rare privilege and a duty most pleasant to participate in an humble capacity in these impressive ceremonies that are of such great portent to the Ceramic industries of America.

Primarily, we are assembled here today to dedicate, with appropriate form and ritual, a magnificent building, generously provided by the people of New York State, to the service of Ceramic education. But this occasion is much more than the mere ceremony of dedicating a mass of brick and mortar. This new building with its excellent modern laboratories and scientific equipment, symbolizes the transition from Ceramics as an empirical art to Ceramics as a science,—a transition that has been taking place with ever increasing rapidity since this college was founded. Craftsmanship is being supplemented by technical knowledge; the potter is aligned with the scientist in the advancement of Ceramic art. This occasion will also go down in Ceramic history as of paramount importance to the glass industry of the country for today we are dedicating a school of glass technology, the first educational unit of its kind in the country. And even more, for today signifies the culmination of many years of devoted service and inspired leadership of your retiring President who has seen, as a fond father watches his growing child, the growth and development, during a third of a century, of this fine College of Ceramics. It is indeed quite fitting that the members of the American Ceramic Society, devoted to the arts and sciences of the silicate industries, should recognize this momentous occasion and extend, thru me, as president, their sincere felicitations.

The growth of the New York State College of Ceramics has not been left to chance; it has been guided by a great leader. It was the wise leadership of President Davis that builded this College. Dr. Davis claims no intimate knowledge of Ceramic Technology,

but he does know men. His choice of Professor Binns, as the first Director, assured in itself the success of this school of Ceramics.

Dr. Davis, you have accomplished much for Ceramics. The ceramists of the country wish to formally recognize these accomplishments and so, Sir, it is my pleasure to present to you this illumined scroll, embellished with the seals of New York State, Alfred University and the American Ceramic Society, inscribed as follows:

The Board of Trustees of the American Ceramic Society, with greetings to the Trustees, Faculty, Alumni and Undergraduates of the New York State College of Ceramics, wish hereby to testify that Boothe Colwell Davis, as President, New York State School of Clayworking and Ceramics, 1900-1932, and President, New York State College of Ceramics, 1932-1933, by rare executive planning, foresight, and diligence did establish and develop at Alfred, New York, a ceramic educational and research institution which has done much and which will continue to enhance academic and industrial ceramic welfare.

Appreciation of services rendered is attested by seal and official signatures of the American Ceramic Society.

J. C. HOSTETTER,
President.

ROSS C. PURDY,
General Secretary.

Presented June, the twelfth
Nineteen hundred and
Thirty-three.

And now to you, Dean Holmes, and to your faculty, we extend our wishes for continued success in carrying on the work of the New York State College of Ceramics. We know that under your administration and guidance there will result even greater accomplishments, in advancing Ceramic education and research, and hence the Ceramic industries of America.

FELLOWS OF THE AMERICAN CERAMIC SOCIETY

DR. G. A. BOLE
Ex-Chairman, Fellows

I have been introduced as the Chairman of the Fellows of the American Ceramic Society. I am sorry that I have not that honor. I am just a past chairman. Mr. Barringer of the General Electric Company is now chairman. He has delegated me to speak for the Fellows, since he is to receive his professional engineering degree at Ohio State this afternoon.

It would seem that the American Ceramic Society should change its charter to that of a New York concern, since Doctor Hostetter, also of New York State, is our president. New Yorkers holding these two highest elective offices in the society must have been prearranged to fit into this greater Alfred program. My Presbyterian

theology would even allow me to view it as part of a predestined program. My training in science would lead me to look on it as the inevitable result of ceramic evolution in New York State.

I came to the New York State School of Ceramics in the fall of 1912 as an instructor in chemistry, with a head full of theories and nothing to apply them to. There was a faculty of four—Professor Binns, Miss Elsie, Heubach and myself. Everyone was quite proud of the school. It had made great progress under the able leadership of that distinguished ceramist-artist-scholar, Charles Fergus Binns. Professor Binns' name and character had even at that early date been so indelibly stamped on every Alfred graduate that they were known and are known to this day as "Binns men."

I had not been here long, however, until I found that, while Professor Binns was the general manager, there was a president of the organization, and what a president he was and is. I have heard a Christian gentleman defined as a man who puts more back into life than he takes from it. The definition to me is abundantly descriptive of Boothe Colwell Davis. He has put his very life into this enterprise. When things looked darkest he worked hardest. Today we see the crowning of his efforts.

Back of the president of any organization is the Board of Control and it is usual to find that the chairman of the board is the man who makes the wheels go 'round. The plant employees may not realize how important he is, because they have never been told. They may even call him "Jake" as they do in the present case.

To me, Alfred is not so much fine buildings and up to date equipment. That should be taken for granted; it is the duty of a State to the present and oncoming generations. To me, the New York State College of Ceramics is Professor Binns, President Davis and J. J. Merrill. At the beginning there were, of course, other names such as Harris and Clark and, last but not least, those sympathetic and farsighted legislators who were persuaded that the ceramic industries of the Empire State should be served through a new type of engineer, the ceramic engineer.

Many able instructors have been added to the staff since 1912, until now you have the largest ceramic department in the country, both in point of students and instructors. The other schools are watching with very considerable interest the development of your department of glass technology, which should fill a long felt need in this country. The physical equipment of the College has kept pace with the increase in enrollment and faculty. First, there was the addition to the old building while I was still here, then the small art building, and now the crowning glory of them all, this magnificent edifice which we today dedicate.

It is fitting that New York State be a leader in this enterprise of equipping men for service in the ceramic industries. You have your great glass plants, your potteries, and your enamel plants.

These plants must be run by men adequately trained for their tasks if this country is to keep pace with, not to mention lead, the world in these industries.

These men must not only be well grounded in the fundamental sciences, but they must be men of sound judgment and of keen understanding if they are to lead this great industry under the changing program now facing the industrial fabric of the nation.

The Fellows of the American Ceramic Society, as a group of ceramic scientists, engineers and artists who are much interested in ceramic education, congratulate you upon this fine accomplishment.

UNIVERSITY OF ILLINOIS

PROFESSOR C. W. PARMELEE

Head, Ceramic Department, University of Illinois

Whenever a Ceramist thinks of Alfred University, he thinks of Charles F. Binns, who has labored here for so many years in the work which he loves. My first acquaintance with the University and Professor Binns was thirty years ago when I was given the task of organizing the New Jersey Department of Ceramics. Since then I have revisited Alfred on various occasions, each time being refreshed by the charm of this campus, the beauty of the surrounding hills and the peace and dignity of the town. My first visit was to meet Professor Binns and to see his laboratory. His reception was so kindly and our subsequent contacts have been so happy that I have looked forward with delight to each opportunity to renew our acquaintance. We of the Ceramic Guild honor Professor Binns for his admirable personal qualities, his professional attainments and his success as an educator.

This happy occasion which we are celebrating has been made possible because of the devoted services of him and his associates for the benefit of the State and its young people. Each year at this season there has gone forth a group of youth inspired by the enthusiasm of these teachers and imbued with the spirit of this community. I have met many Alfred students and have known intimately some who have worked in our laboratories. It is a pleasure to recall these acquaintances and to express our appreciation of their training.

Thirty years have seen great changes in Ceramic Education. In 1903 there were only two institutions offering such training, Ohio and New York. The New Jersey Department was being organized. Now there are many universities having departments or offering courses. Thirty years ago, notwithstanding the great antiquity of the clay craft, the amount of scientific literature devoted to this subject and published in our tongue was to be found between the covers of possibly a half dozen books. It was scanty in quantity and meager in quality. Empiricism and secrecy were character-

istics of the craft. Suspicion and jealousy were rife amongst the workers. The establishment of the pioneer instruction in Ceramics marked the dawning of a new day. The schools attracted to their support the bolder, the more generous craftsmen, those who had an understanding of what applied science was doing for other industries and a vision of what should be done in Ceramics. They were men who would and could cooperate. Great things had been accomplished by previous generations of craftsmen. One has only to consider the works of Adams, Spode, Palissy and others, or, better, to visit that shrine of potters', the Wedgwood Museum at Etruria, to realize what a high order of attainment had been reached before Chemistry was out of its swaddling clothes. But time marches on and the needs of the twentieth century were vastly more complex than those of any of its predecessors. The twentieth century had brought the skyscraper type of construction with the urgent demand for a suitable cover for its steel frame. Clay fireproofing and hollow block were produced for walls, floors and partitions, while the manufacture of architectural terra cotta because of its varied beauty of form and color and suitability for the ceramic integument, expanded greatly. The concentration of population in urban centers and the consequent need for better hygiene and sanitation gave a great impetus to the manufacture of sanitary ware. The rapid extension of the use of electricity created a new branch of the industry—electrical porcelain. The development of the internal combustion engine required a new product—spark plugs. New materials had to be found, new methods devised, new technique developed. The same was true of refractories, glass and enameled metals. The old empiricism was doomed. The promoters and supporters of the pioneer ceramic schools knew that science must rule.

Has Ceramic Education been a success? This new building, which is being dedicated, answers the question insofar as the people of New York State are concerned. It is recognition of the services rendered by Professor Binns, his able associates and also by the graduates. Yes! Ceramic Education is a success for we measure it by the contributions which the graduates have made and are making to the upbuilding of this most important industry. It is a success since it provides a way of living for many young people who are gainfully employed in work which offers unlimited possibilities for the development of the individual according to his ability. Can we desire more for our young people?

This splendid new building expresses the confidence of the people of New York that you will continue the vital task of education with even greater success. Just what the details of the courses shall be, I presume the State does not attempt to specify, nor do I know any organization other than your own which is better qualified to determine what in your opinion is practicable for Alfred. We feel confident that you will preserve the best traditions and interpret modern trends in some practical

expression. You may be assured that your friends in the other schools will profit by your experience.

These superior facilities bring greater responsibilities. Foremost amongst these is the requirement that the College be diligent in research. You have a fine leader in your new dean, Dr. Holmes, and we are sure that the College will be productive.

Speaking as a representative of sister institutions, it gives me great pleasure to express sincere admiration of past accomplishments and best wishes for a useful future. Your achievements will not only redound to your everlasting credit but will spur us all on in a generous rivalry to do even better than you if we can.

BOARD OF MANAGERS OF THE CERAMIC COLLEGE

HON. J. J. MERRILL

State Tax Commissioner

The Honorable J. J. Merrill was introduced by President Davis as the individual who grasped the need for a ceramic school at Alfred and then set about to obtain State support for it. Mr. Merrill told of the time thirty-three years before, when Governor Theodore Roosevelt had signed the bill creating at Alfred a ceramic school which would furnish expert advice, expert technicians and artists to the industry. The search which was made for a director and which led the President and Mr. Merrill to ask the advice of Professor Charles F. Binns, then directing a school in Trenton, N. J., was rewarded then and there for, although Dr. Binns asserted that no man could be found to fill such a position as they had in mind, the delegates engaged him for the position. In the hearts and minds of the board of managers of the ceramic school no one could have displaced him in all the term of his service. His work was shared by the President who, because of his skill of management and cooperation, received, in the past, and will continue to receive in the future, the loyal support and grateful affection of the Board of Managers of the Ceramic College.

DEDICATORY ADDRESS

“The Basic Structure of the Ceramic Industry”

MR. A. V. BLEININGER

Chief Ceramist, Homer Laughlin China Co.
Newell, West Virginia

It is indeed an agreeable privilege to return again to this beautiful college and to take part in the dedication of the fine new structure which the State of New York has built and set apart for service to the Commonwealth in the field of ceramics. It is

eminently proper that such a building be erected here since this college was the second in the United States to offer instruction in ceramics and has behind it a fine record of achievement.

Those of us whose activity lies in this field have become quite accustomed to hear requests for the definition of the word 'ceramic', and it is an unusual word. Without going into the etymology of the word, suffice it to say that it is from the Greek, and perhaps, as our English friends claim, should be pronounced 'keramics.' In the modern sense it has acquired a meaning different from that to be found in the dictionaries even of recent dates. In general, it is understood to refer to the various products fabricated from earthy and other rocks through the agency of fire or heat. In this broad sense, the term ceramic might be applied to a large part of the non-metallic industries which concern themselves chiefly with the inorganic oxides, in distinction from the metal industries to whom the elementary metals and their alloys are of principal interest.

Based on this conception and knowing that the composition of the earth's lithosphere has an average composition, according to Dr. Clarke, of 59.79 percent of silica, 14.93 of alumina, 5.96 of the iron oxides, 4.82 of calcium oxide, 3.98 of magnesium oxide, 3.28 of sodium oxide, 2.96 of potassium oxide, and smaller percentages of many other oxides, we are not surprised to find that such rocks and minerals as the clays, quartzes and sandstones, feldspars, limestones, steatites, and many more, occurring in vast quantities, supply the raw materials of the ceramic industries. These minerals and their aggregates thus form the basis of the industrial field with which we are dealing.

The ceramic industries, in a very rough way, may be collected under the very general headings of the clay, glass, enameled metals and the cement industries.

The clay industries may be subdivided into three large divisions, the structural, the pottery and the refractories industries, each of which has numerous ramifications.

In the structural group we find a large number of products, from the many kinds of bricks and sanitary products to artistic tiles and architectural terra cotta. In the field of pottery, in which your Dr. Binns occupies so prominent a place, we again have numerous sub-divisions, ranging from stoneware to electrical insulators and the most exquisite china and porcelain.

In the refractories division we find products of enormous importance to the metallurgical industries, to gas and coke production, power plants, the fusion of glass, and innumerable other applications. It is not often realized that without the highly heat resisting and insulating refractory materials these basic industrial activities would be paralyzed. It would be quite difficult to imagine a blast furnace or any other high temperature operation to function without the ceramic lining which is so essential.

To the three large divisions just mentioned must be added some highly specialized industries of which the manufacture of grinding wheels is a fine example. Without this important product the modern precision grinding of the automotive industry would hardly be feasible, to say nothing of hundreds of other grinding and cutting operations.

Coming now to the glass industry we also find it to be a complex group. We hardly need emphasize its enormous importance. How could we vision modern life without the electric lamp, without window or plate glass, without the technical and scientific apparatus made from glass, and the thousands of useful articles made from this interesting substance?

You are very fortunate in having close to you a remarkable industrial institution which has brought the application of science, art and technology to the highest point of development, the Corning Glass Works. All of us are exceedingly proud of this great American enterprise.

In the industries which concern themselves with the application of enamels to metals we really have a relation of the glass industry. In such familiar examples as the bath tub, the electrical refrigerator and the modern stove we find steel or cast iron coated with vitreous enamels. This application of glass to metal is being done with much skill and results in a type of protective finish which is remarkably attractive.

Finally, in the field of cements the chief product is Portland cement which dominates so large a part of all construction and which is indispensable to the civilization of to-day. This industry is based on reactions which take place between clay and limestone and result in the formation of basic silicates of lime which are in contrast to the acid silicates of the clay industries.

Let us now examine these industries with reference to their position among the industries of the nation. We shall consider them from the standpoint of the usual measuring stick, their production values in dollars and also from a more unusual point of view, their true economic relation to the structure of our country.

As has been said, the ceramic industries belong to the large group of the nonmetallic mineral industries. These have shown a steady growth over the metallic industries and in 1930, during the beginning of the depression, they yielded a production estimated to have been \$1,013,325,000 as compared with \$986,975,000 for the metals and \$2,764,500,000 for the fuels. This growth is very significant since it has been rapid, and from 1880 to 1929 the production value of the nonmetallic industries has increased 20 times.

Referring more specifically to the ceramic industries we find that in 1929 the total value for the structural clay products was \$297,240,000, of the various pottery products \$112,019,000, of the glass products, \$299,717,000, of enameled products, \$77,730,000 and of Portland cement approximately \$255,000,000. The total

value of the ceramic products in the year 1929 exceeded the respectable valuation of one billion dollars. While it is hardly necessary to add that these values are much lower for the years since 1929 it is found that they have held their own better than the metal products. From these figures it appears that the ceramic industries have assumed no mean proportions and that they occupy a prominent place in the industrial scheme of the country.

We shall now consider these industries from a more unusual angle, that of their true position in the economic structure of the nation. It must be recognized that for every ton of metal ore mined the resources of the country have been reduced to this extent since the ore carrying deposits are definitely limited in size. On the other hand, the ceramic raw materials are practically inexhaustible. Owing to this very abundance the intrinsic value of a ton of ceramic material is low, involving chiefly the labor cost of mining it, and transportation. If now, through the expenditure of more labor and the use of fuel we convert the raw materials into useful products it is evident that the people of the nation are the chief gainers. We have given needed employment to our citizens, have afforded a market to the fuel industries, have contributed to the business of transportation and have manufactured articles of permanent value, and all this without diminishing the natural resources of the country to any appreciable extent. At the same time we are given the opportunity to enhance still further the value of some of the products through the application of some form of applied art. If, from a lump of clay worth only a few cents, the craftsman fashions a beautiful piece of pottery, glazes and fires it, he certainly has increased the value of the crude material enormously.

This unique economic status of the ceramic industries is not generally realized and appreciated, especially when we consider that the labor cost is the heaviest item of the total cost. But, as is to be expected, this sort of thing operates equally well in other countries. For this reason they are all eager to convert their low cost ceramic materials, through the use of their own labor, into products which they hope to sell to us. When they succeed in doing so they hurt us chiefly through the displacement of our labor.

Coincident with the large use of labor we must mention at this time the opportunity offered in this field for the worker in applied art. Through the agency of art the product values are not only enhanced to a marked extent and a field of endeavor opened to artists and artisans but the country and the people are the richer for such products. When Dr. Binns planned the ceramic courses at Alfred University he showed his wisdom by bringing into close proximity the training in art with that in technology. But the full fruition of this plan is still in the future when our people shall

be more completely educated to desire and demand beautiful things in their daily surroundings.

The ceramic products have still another bearing on the economic household of the nation. They have the virtue (already being oxides) of being immune to atmospheric oxidation, corrosion, or decay as compared with metals which must be protected through the use of surface coatings, or organic materials. The amount of metal lost to us through corrosion amounts to astounding figures. We can look to ceramics to supply us with structural materials which defy the decay of time. Again, the ceramic products, having been through fire, can be expected to give that protection which is essential in reducing the large economic waste caused by fires. Coupled with these considerations the immense variety of shape, color and texture possible in ceramic products offers unique opportunities, not yet fully realized, for the construction of permanent homes and other structures which give full scope to the expression of individual taste. The objection to the recent proposals to standardize the construction of homes lies in the destruction of individual effort and of esthetic values, to say nothing of the question of permanency.

It would seem that all of these economic factors should be evaluated in estimating the place and importance of these industries in the economy of the nation.

Viewing the ceramic industries from the standpoint of their general status and their philosophy, or as we should say now, their psychology, we find many of them connected closely with the deposits of the raw materials they use, such as the clays. They are circumscribed by local environment, the demands of their locality and the limited distance through which they can ship their goods. Their point of view is hence strongly localized and sometimes they find it difficult to look at questions from a wider angle. The great number of clay deposits has given rise to many plants which during the last 20 years have gradually been reduced in number and replaced by fewer but larger works. Mergers have also taken place but have not been as successful as was hoped. From the very nature of these industries, the low cost of the raw materials and their wide distribution they will always remain highly competitive. At the same time, it is being realized that mere size does not determine the success of an establishment but that efficient smaller plants with low overhead costs often stand a better chance of survival than their larger competitors. If we read the signs of the times correctly we might predict that huge manufacturing plants and great mergers which have proven themselves to be vulnerable in periods of distress, will tend to be replaced by smaller but highly efficient factories located in strategic positions with reference to the markets and transportation.

Other ceramic industries such as the glass and pottery branches are not so strictly confined to their sources of raw materials.

Especially in the glass industry large manufacturing establishments which are highly efficient and equipped with automatic or semi-automatic machines yield the bulk of the production. But, with the exception of the glass and cement branches, the ceramic industries have not carried mechanization to such a degree of completeness as has American industry in general. Those who are compelled to face foreign competition may be forced to the use of labor saving machines which are far from being an unmixed blessing.

While the manufacturers of the heavier products are comparatively free from foreign competition the makers of pottery and glass products are subject to it in a marked degree. This struggle, of late, has become very fierce. In addition, there is more or less competition between the related industries, as for instance between the manufacturers of glass and pottery. And to make the situation more complicated the products of organic chemistry, such as the synthetic resins, have entered the competition with both pottery and glass. It is not too much to say, then, that competitive conditions exist in this field to a very marked degree, and monopolies are virtually impossible.

The systems of distribution of our industries, as a whole, have not been distinguished by their aggressiveness as compared with other fields. Much has been taken for granted and the country at large is not as familiar with ceramic products as it should be. High pressure salesmanship and extensive advertising have been conspicuous by their absence. While it would hardly be possible to carry on distribution under such pressure as is common in many fields it cannot be denied that the ceramic industries have been over modest. During the past five years great advances have been made in the quality and appearance of our product but the American public is hardly aware of this. There is still a prejudice in favor of foreign wares which should be met by statements of fact.

At the present time all of the ceramic industries are extremely active in perfecting their processes and creating new products at a rapid rate. The technically trained men are doing their full share of this work but it would be desirable if more of them were engaged in the operation of plants, in research and in the field of distribution. It is believed that with the release from the present economic distress, or even partially so, the industry will absorb much new technical assistance since it has learned the lesson of industrial preparedness. New vision, tempered by scientific thought, is the need of these as well as of all other industries as they must meet the conditions of the future. I hope I may be pardoned for touching upon the commercial phases of the subject. But the technical man of to-day can no longer isolate himself in his laboratory speciality. He must realize that all aspects of industry are of vital moment, involving as they do the livelihood of thousands of workers.

The structure of every industry rests upon some scientific foundation. The ceramic industries have been classified as belonging to the chemical industries. This is not the case in the usual acceptance of the term. In ceramics many factors are introduced which depend upon physical manipulations, manual skill and practice. What chemical reactions take place differ vastly from those of aqueous chemistry since they deal with the action between solid particles at elevated temperatures. We have hardly ever any completed reaction but practically always an arrested one. In producing, for instance, porcelain, from kaolin, feldspar and quartz, we cannot and must not allow an equilibrium to be reached, since otherwise we should obtain no porcelain. The ceramist, hence, must often grapple alone with his problems because the chemistry of solid particles reacting at high temperature is still largely undeveloped. This makes experience a large factor in dealing with such systems. And how well the master craftsmen have done is amply illustrated by their work which we admire in museums.

Although the chemistry of ceramics is incomplete a great deal has been done in the application of science to this field. What we need, of course, is a great deal more of chemistry and physics. Without the precision measurement of high temperatures, chemical analysis, petrographic and X ray studies, and the use of many physical tests we should be unable to control the industrial processes at all adequately. But we are urgently in need of much more knowledge concerning the intimate structure of the many kinds of rocks and minerals, as well as of the finished products we make. Through the use of refined methods of attack, especially the X ray, spectrum, optical and other methods we must penetrate more deeply into the atomic structure of the substance with which we deal. The new world which modern physics and chemistry has opened to us must be explored within our field. We must learn to know, for instance the atomic structure of glass and the many silicates that concern us.

That even the most common substances are subject to far reaching changes in structure is well illustrated by such a universally distributed compound as silica, familiar to all of us as quartz, in the form of sand, pebbles or sand rock. We should hardly expect the atomic structure of quartz to be complicated, and yet it is exceedingly so. When we heat it from atmospheric to high temperatures we subject it to stresses which cause the re-arrangement of the electrons with the result that we find silica to exist in no less than eight forms or modifications, each having its own physical properties. These are known as alpha and beta quartz, alpha and beta cristobalite, alpha, beta and gamma tridymite, and fused quartz glass. These forms of silica have important industrial applications. Thus, if we were to construct a large modern by-product coke oven, costing a million or more dollars, we must be

very careful to select a silica refractory which consists essentially of cristobalite. If, by chance, we should use a material deficient in this kind of silica and rather high in quartz we should run a good chance of losing the investment through the gradual breaking down of the complicated oven structure.

If such changes and transformations are met with in the use of such a supposedly simple compound like silica what have we to learn about the complicated systems represented by the many kinds of glass, the porcelains, the various types of refractories, to say nothing of the infinite variety of the minerals and rocks which abound in nature?

It must be the task of a teaching and research institution specializing in the field of ceramics to contribute its share to the building up of the chemistry and physics of the reactions of solids at high temperatures. This field of research is a most fascinating one since it offers great possibilities for original investigation. The accumulation of basic scientific facts will make it possible for this institution to speak to industry with authority and to help guide it.

Technical education has become part of the basic structure of most industries. Inherently, it must deal with the application of mathematics, physics and chemistry to some field of engineering or technology. Specialization has become necessary because of the vast expansion of science and, alas, the short span of human life. But there is proper and improper specialization. If it means the concept of a narrow training without a sound foundation in the basic sciences, I say that it is not worth while, and deserves no place in academic education. I pin my faith in the old fashioned education, the discipline of the sciences or some other strict regime of mental training as are the classics in the liberal courses. With us it must be science, and it is well to realize that it has emerged from the world confusion of the present day most untouched and free.

Education in ceramics should combine the teaching of the fundamental sciences with the record of accomplishment of previous generations, whether it be the story of Chinese porcelain, the achievement of Luca della Robbia, or the inspiring triumphs of Josiah Wedgwood, together with the presentation of the modern status of our technology. It is a most difficult task to crowd into a four year curriculum all the subjects clamoring for attention and it requires the best efforts of the faculty to maintain a proper balance. But this is the business of the college with which we do not presume to meddle. Yet, I like to think of science and its applications as weaving a thread through all the technical courses, whether they deal with the raw materials or the finished products. It would be most desirable also if the curriculum could find time to foster an appreciation of the fine arts as has been the practice of Dr. Binns, and it is to be hoped that gifted young people would continue to devote themselves entirely to the field of applied art.

Speaking for the industry may I be permitted to point out, as has been urged for many years by the Secretary of the American Ceramic Society, Mr. R. C. Purdy, that the critical study of the finished commercial products would be highly desirable. It is not too much to say that future merchandising must receive more and more the attention of trained men so that steady progress and constant improvement in quality is assured. This is especially true to-day when new, competitive products constantly encroach upon ours some of which may seem so long established that their makers dream on blissfully until engulfed by the deluge. To-day there are no sacred traditions in industry and no one may consider himself safely entrenched. The germ of a new idea developed in some obscure laboratory may threaten the existence of any industry at any time. It is this condition which will make necessary a much needed increase in the number of technical men employed by industry and an increased volume of research.

There remains another aspect of technical education which should receive mention and this is the realization that every graduate must face certain social obligations especially in dealing with industrial working conditions, community health, and welfare. The problems of the workers can no longer be ignored and the new world we face to-day demands an attitude entirely dissimilar to that of the indifference of the 'good old times'. Human values can no longer be neglected as they have been in the past.

The best gift of the college, then, as it would seem, is that it fill its graduates with the true spirit of science which is humble and willing to serve but at the same time meets the issues of this world fearlessly and without compromise on fundamentals. More will be expected of the young men of this generation than was the case in our day but the distribution of scientific service will be more general. According to their special talents and inclinations your graduates must be distributed along the entire front of the ceramic industries, many of them in production, some in the field of applied art, some in research and others in marketing. In the last named field especially, there is need of new blood and fresh ideas.

But the splendid equipment provided here by the State will serve not only for the technical training of youth but will yield a valuable by-product in research. It is to be expected that much investigational work will be done here not only in the domain of science proper, but in many directions in which service will be rendered to the State. The development of the non-metallic resources of New York demands attention and along paths which we realize but dimly to-day. There will be established in the State entirely new industries which will contribute their share to the wealth of the State. This institution will also concern itself with the search for new products and in rendering assistance to existing industries. It is to be expected likewise that service will be rendered in the more efficient utilization of the present as well

as of newly developed ceramic products as applied to engineering, architecture, sanitation, power transmission, and especially in the homes. The imperial city of New York alone which makes use of more non-metallic products than any other municipality in the world, on a much vaster scale, and in greater variety, offers a large field for the application of ceramic art and engineering. It is to be expected that much research coming from this college will find fruitful application in the great city. Investigations co-operative between state departments or municipalities and the New York State College of Ceramics are possible avenues of useful service.

Education and research go well together, one helping and inspiring the other, and creating that atmosphere of intellectual activity which makes the college the vital institution it must be to meet the demands of the present time. It is well for students to mature in a college where research is taken for granted.

The investment made by the State of New York in this technical school can be expected to yield ample returns in four directions. First, through the education of the youth of the State in the technology of ceramics; second, through its contributions to basic science and the arts; third, through its economic researches dealing with the raw materials of the State and the development of new industries, and fourth, through cooperation with official bodies and the industries, in many and various directions. Surely, such possibilities should be productive enough to justify the investment made by the State, in providing these facilities.

It is to be hoped that the academic work relating to the education in ceramics in the State of New York will remain centralized at this institution. There has been a tendency during the past 15 years to over-expand in technical education throughout the country and to follow expensive educational fashions. While it is agreed that technical education in ceramics is a good thing there is no need of unreasonable and foolish expansion. After all, even the largest sections of industry have their limits of absorption which must be recognized. While the New York State College of Ceramics, the second oldest institution of its kind in the country, is firmly established, the fact remains that over-production even in education is not desirable.

May I be permitted to congratulate His Excellency, the Governor of New York, the Legislature, the Head of the Department of Education and the other officers of the State responsible for the erection of this fine building, upon the wisdom of their action. May I also be allowed to felicitate Dr. Davis, President of Alfred University, Dr. Binns and Dr. Holmes upon the realization of their long cherished dream.

May this structure, dedicated to the education of youth and the advancement of science, endure and continue to serve the State of New York, and with it, the Nation, for many generations.

President Davis introduced the Governor by saying:

Ladies and Gentlemen:

We are particularly fortunate to have present at this dedication of the new building of the New York State College of Ceramics, His Excellency the Governor of the State.

As Lieutenant Governor he distinguished himself by his interest in the institutions of the State and his understanding of their needs.

As Governor he has been able to conserve the resources of the State and at the same time to protect the institutions of the State so that none are impaired; and their usefulness continues at a maximum under his wise administration. Ladies and Gentlemen, the Governor.

PRESENTATION ADDRESS

GOVERNOR HERBERT H. LEHMAN

The educational program of the State is built on two general principles. The first involves the maintenance of a system of common schools, including high schools, throughout the State. In the support of this system, the state government contributed in the present fiscal year more than one hundred million dollars. The purpose of this program of subventions, which was initiated in 1851, is to provide equality of opportunity in every portion of the State and to give the country boy or girl the same chance which is given to the resident of the large city. It has too the further purpose of relieving the citizens of all communities of the State of part of their great burden of real property taxation.

The second part of the State program which has developed over a period of years is the maintenance of state colleges, providing technical training. The State College of Agriculture at Cornell, the State College of Forestry at Syracuse, and the State College of Ceramics at Alfred are the three technical colleges. In addition to these, the normal schools and teachers' colleges supply trained teachers, and the agricultural schools, one of which is located on your campus, serve the farming community of the State. By following these two principles, the State of New York has built up an educational system which is second to none in the country. We are grateful for that system, and I am proud to have had a part in the development of a sound fiscal program which, although we are forced greatly to retrench at Albany, has not allowed education to suffer, and yet has not imposed additional direct tax burdens on the people of the State. I hope to maintain our system of education so far as economic conditions will permit.

The three technical colleges of the State serve three basic industries—agriculture, forestry, and the ceramic industries. You may be interested to know that in 1930, the allied ceramic industries of the State had a total production of \$50,000,000. These figures indicate why a college such as this is essential.

The School of Ceramics was founded in 1900 by an act of the Legislature. The bill was signed by Governor Theodore Roosevelt in the spring before he was nominated for Vice-President. In 1912 an appropriation for \$25,000 was secured and a wing added to the original building. It is interesting to note that thirty years after the founding of the school by Governor Theodore Roosevelt, a second Roosevelt, now President of the United States, signed the bill which made possible the erection of this important addition to the Ceramic College which we are now dedicating. The State of New York has today an investment of a quarter of a million in this College of Ceramics. We are justly proud of this college and the work that it has been doing in the training of ceramic technologists and ceramic artists. It is regarded throughout the country as the leading Ceramic College. Almost every plant in the State of New York devoted to this industry has had the benefit of these specialists or the aid of these laboratories or of members of the faculty. The presence today of the leaders of the ceramic industry of the State and of a distinguished representative of the American Ceramic Association is indicative of the high regard with which this College is held in the State and elsewhere.

At no time in the history of the country is there a greater need for trained leadership in our industrial life. As the nation turns to a planned economy through the National Recovery Act, leadership will fall to those who by training and education are qualified to lead. A technical college has a greater responsibility than the production of technicians; it must supply effective leaders who are willing to move forward. The State of New York is interested in the training of men and women as well as technicians. This job has been well done and the State will lend its hearty cooperation in the future.

Your Governor and the State Education Department have had great confidence in the administration of President Davis, and it is with sincere regret that we learn of his retirement. He has earned his rest by the work of many years at Alfred. He takes with him the grateful appreciation and best wishes of the people of the State. I know that his successor will enjoy the same confidence in the future. Dean Holmes of the Ceramic College and his faculty are doing a fine job, and I am particularly interested in the work of the new department of glass technology which is the first of its kind in this country.

As Governor, I am glad to have this opportunity to know better, Alfred University and the State College of Ceramics. In the past two years, I have visited most of the state schools and colleges, but this is my first visit to Alfred. As I turn over the keys of this building to the President and Dean, I am confident of the continued success of this state undertaking; I look forward to its greater usefulness to the people of the State, and I assure you of the continued support of the State of New York.

President Davis responded with these words:

Governor Lehman, as President of the New York State College of Ceramics at Alfred University and President of the Board of Managers and in behalf of the Board and of the Faculty, I accept these keys from your hand, symbolical of the presentation by the State of New York of this splendid new building to the State College of Ceramics at Alfred University.

I pledge you our best endeavor to carry out faithfully the trust imposed by the gift of this building, and to make it serve the State in the highest possible degree in the promotion of ceramic education and in promotion of the ceramic industries of the State.

In the furtherance of this pledge, I now transmit these keys to the Dean of the College and direct that he and the faculty under his direction spare no pains or effort to fulfill the high commission which you, sir, have this day committed to our hands.

CONFERRING OF HONORARY DEGREES

Governor Lehman was presented as a candidate for an honorary doctor's degree by Dean M. E. Holmes.

Dean Holmes said:

Mr. President, I have the honor of presenting for the honorary degree one who has rendered most distinguished service to his state and country, and who occupies an exalted place in the hearts and minds of his fellow citizens. Lifted by his business acumen to the highest offices in the fields of business, banking and finance, he chose to forego the private emolument to be derived from those sources in order to devote his life to the public service and the welfare of his fellow man.

In his home town of New York City he has been an outstanding leader in the child welfare movement and in the movement for the advancement of colored people. The World War offered an opportunity for a national service which he embraced, rising by steps from Captain to Colonel in the General Staff and receiving in 1919 the distinguished service medal.

Since the war he has been devoting his life to the service of his home State of New York. As Lieutenant Governor and Governor he has done everything possible to mitigate the effects of this terrible depression and the interests and economic welfare of all classes have been preserved to the utmost. No state has met the financial and social issues of the day more successfully than has New York under the forceful leadership of Governor Lehman, and thereby a great service has been rendered to this state, and because of the outstanding position which the state occupies in the business and financial structure of the nation he has also rendered a great service to the entire nation.

A lover of art, a gentleman of culture, a college graduate with an honorary degree from his Alma Mater, Williams College, he is recognized as a scholar of high rank. We are particularly interested in his appreciation of the practical value of higher education in the economic and social welfare of the state. Along with the other state institutions we recognize in him a great friend of higher education.

Mr. President, it is an honor to recommend that the honorary degree of Doctor of Laws be conferred upon the first citizen of the State of New York, his Excellency the Governor, Herbert H. Lehman.

President Davis said:

Son of Williams College, scholar, economist, financier, philanthropist, friend of education, patriot, executive, beloved Governor of the Empire State, Alfred University is honored by your presence today, and by your participation in the dedication of the splendid new building which is the gift of the State to the New York State College of Ceramics at Alfred University. We prize your presence, your cordial message of good-will on this occasion, and your assurance of the State's deep interest in its College of Ceramics. You do us double honor by your participation in this dedication program, and by your gracious acceptance of a place on the rolls of Alfred University as an honorary alumnus. Alfred welcomes you to this fellowship and bestows her highest honor upon you. This it does in recognition of your distinguished achievements, and your wise and efficient devotion to the people of the State, as Governor.

By the authority of the Trustees of Alfred University, I gladly admit you, Herbert Henry Lehman, to the degree of Doctor of Laws, honoris causa, in this University, with all the rights and privileges thereunto appertaining, and in token thereof I cause you to be invested with the hood of this degree and present you with this diploma.

Mr. Bleininger was presented as a candidate for an honorary doctor's degree by Dr. S. R. Scholes.

Dr. Scholes said:

Mr. President, I take pleasure in presenting for an honorary degree a man who is beloved for the sweetness and generosity of his character, as well as admired for the extent of his scientific achievements.

He has had a typically American career: an immigrant boy, becoming a clayworker, then in turn a graduate of Ohio State University, a teacher there associated with Professor Edward Orton, a Government scientist, a University Professor, and now chief ceramist of one of the great china factories.

For more than thirty years a leader in the American Ceramic Society, he has served it in many capacities: on committees, as editor, and as president. He was among the first to be chosen a Fellow. He is one of that small number of men whose loyalty and devotion have built and maintained the Ceramic Society.

When the World War found us in dire need of optical glass, it was he who devised a means for casting clay melting-pots, and thus accelerating the production of that vital necessity.

When I first met him, more than twenty years ago, it was to ask his advice on a ceramic problem. His help was freely given, as it has been to many others. He remains the friend and counsellor of all who work with silicates. He edited a translation of the writings of Herman Seger, so that a great text-book became available. He is the author of a work on cements, and the writer of many published papers on silicate technology. His scholarly address of today displays his skill in exposition.

Since 'Doctor' means 'teacher', it is most fitting that he should be so called.

Mr. President, I am sure that Alfred University will honor itself by conferring a degree upon this gentleman and scholar. I therefore present for the honorary degree of Doctor of Science, Albert Victor Bleininger.

President Davis said:

Son of Ohio State University, scholar, scientist, executive, pillar of the American Ceramic Society, and highly distinguished authority in the ceramic profession; in recognition of your outstanding leadership in ceramic science, education and engineering; and in appreciation of the scholarly address delivered today at the dedication of the new building of the New York State College of Ceramics, Alfred University is pleased to welcome you to a place among her honorary alumni.

By the authority of the Trustees of Alfred, I gladly admit you, Albert Victor Bleininger, to the degree of Doctor of Science, honoris causa, in this University with all rights and privileges thereunto appertaining, and in token thereof I cause you to be invested with the hood of this degree and present you with this diploma.

The ceremonies were concluded with the singing of the Alma Mater and the pronouncement of the benediction.

