



11-1964

"Beacon O'er Our Western Land:" University of North Dakota

George W. Starcher
University of North Dakota

[How does access to this work benefit you? Let us know!](#)

Follow this and additional works at: <https://commons.und.edu/und-books>



Part of the [Higher Education Commons](#)

Recommended Citation

Starcher, George W., ""Beacon O'er Our Western Land:" University of North Dakota" (1964). *UND Publications*. 6.

<https://commons.und.edu/und-books/6>

This Book is brought to you for free and open access by the Elwyn B. Robinson Department of Special Collections at UND Scholarly Commons. It has been accepted for inclusion in UND Publications by an authorized administrator of UND Scholarly Commons. For more information, please contact und.commons@library.und.edu.

“Beacon O’er Our Western Land”

University of North Dakota

GEORGE W. STARCHER





"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE
(1886-1958)
Senior Vice-President for North America
The Newcomen Society
for the study of the history of
Engineering and Technology
(1923-1957)
Chairman for North America
(1958)



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"BEACON O'ER OUR WESTERN LAND"

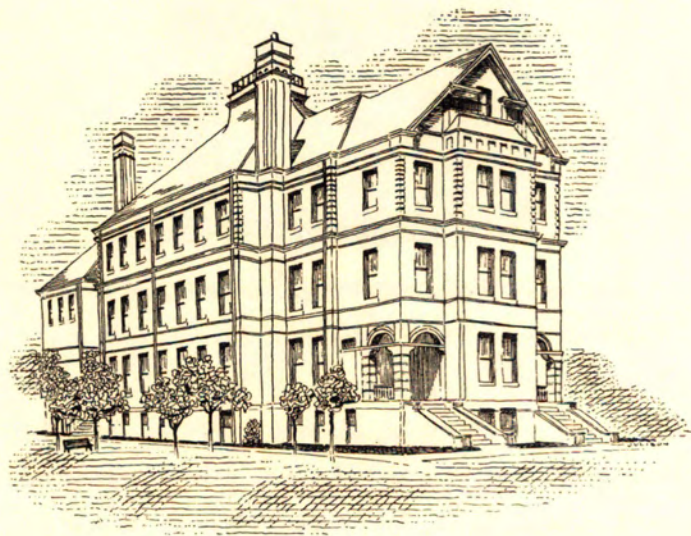
University of North Dakota

An Address at Grand Forks



AMERICAN NEWCOMEN, through the years, has honored numerous institutions of Higher Education, both in the United States of America and in Canada. It has been our privilege to record, through words by the chief executive heads of these, the life-stories of important seats of learning. In the present Newcomen manuscript is found a scholarly, restrained, and immensely human narrative of the beginnings, growth and manifold contributions, during 75 years, of the University of North Dakota.





"Old Main"
The University of North Dakota
1883-1963

"Beacon O'er Our Western Land"

University of North Dakota

GEORGE W. STARCHER, PH.D.

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

UNIVERSITY OF NORTH DAKOTA

GRAND FORKS



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK DOWNINGTOWN PRINCETON PORTLAND

1964

Copyright, 1964

GEORGE W. STARCHER

Library of Congress Catalog Card Number: 64-8423



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



First Printing: November 1964



This Newcomen Address, dealing with the history of the University of North Dakota and marking its 75th Anniversary (1883-1958), was delivered at the "1958 North Dakota Dinner" of The Newcomen Society in North America, held in the Grand Forks Country Club, at Grand Forks, North Dakota, U.S.A., when Dr. George W. Starcher was the guest of honor, on July 24, 1958



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN SOCIETY IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS



Fritz Library

INTRODUCTION OF DR. GEORGE W. STARCHER, AT GRAND FORKS, NORTH DAKOTA, ON JULY 24, 1958, BY M. M. OPPEGARD, EDITOR AND PUBLISHER OF THE GRAND FORKS HERALD, MEMBER OF THE NORTH DAKOTA COMMITTEE IN THE NEWCOMEN SOCIETY IN NORTH AMERICA

My fellow members of Newcomen:

WE who live in this community, feeling from day to day the full impress of our University on the cultural, business and social life of our city, our state and this entire North-Central region, are proud that our Society is acclaiming this Institution, so worthily taking its place with other leading universities of North America.

We find even greater satisfaction in this recognition of the contributions of our speaker in maintaining, and further refining, the high standards, the challenging ideals, that have made the University of North Dakota truly a shining "Beacon O'er Our Western Land."

This is the 75th anniversary year of our University. It is not my part to recount its history, for that will be done far better by our speaker, a comparatively new man among us, but a man whose zeal for our University has fired all its friends with a new and deep desire to help champion its march forward into an even more brilliant and useful future.

It was the opportunity for greater service he envisioned here that impelled our speaker to leave the faculty of Ohio University in 1954 to accept the Presidency of the University of North Dakota.

Born in Ripley, West Virginia, January 14, 1906, he grew up on a farm, attended a typical one-room country school—sometimes during a snowstorm he was the only pupil in attendance. When he was 11 years old, his family moved to a farm near Cheshire, Ohio, where he received his high school education. He received his A.B. degree from Ohio University in 1926, and was a fellow and teaching assistant in mathematics at the University of Illinois where he was awarded the M.A. in 1927 and the Ph.D. degree in 1930.

Returning that year to Ohio University as an instructor in mathematics, he continued on the faculty there until he came to Grand Forks, except for the year 1945-46 when he was a Fellow in Human Relations at Harvard. At Ohio he was acting dean of the graduate college and of the College of Arts and Sciences, 1943 to 1945; Dean of the University College from 1946 to 1951, and Dean of the College of Arts and Sciences from 1951 to 1954.

He is a member of Phi Beta Kappa, Sigma Xi, Theta Chi, Kappa Delta Pi, and Pi Mu Epsilon. He holds memberships in the American Mathematical Society, the Mathematical Association of America, the International Society for Semantics, and the American Association of University Professors. He is the author of articles on mathematics and in the field of Higher Education.

His service as President of the University of North Dakota has won for him the fullest admiration and respect, importantly including that of members of the State Legislature, his own faculty, and the State Board of Higher Education.

He married his high school sweetheart 30 years ago, and they have a grown son. Through her own educational attainments, her charm and graciousness, his wife has contributed greatly to the success of his administration.

I am happy to present our fellow member, and my friend, the President of the University of North Dakota: DR. GEORGE W. STARCHER.



Merrifield Building

My fellow members of Newcomen:

THE year 1883 will always be a significant date in the history of North Dakota. Founded in the days of the great Dakota boom, six years before North Dakota became a state, the University celebrates its seventy-fifth anniversary this year, proud of its role of leadership, sensitive to the ideals that gave it birth, and responsive to the challenge of the future. It has directly influenced the life and development of North Dakota, not only fulfilling the hopes and objectives of those who support it, but helping to refine those objectives themselves. Like a beacon on the prairie, the University has shed its light even beyond state boundaries. Free of the intellectual snobbery of those who would limit learning to an "educated elite," it has nevertheless stood for an education of high quality that does not sacrifice standards of excellence in order to serve large numbers. Of the seventy-nine students who eventually enrolled that first year none was classified as ready for college, yet many, like Walter Marclay, who was first in line on the opening day, completed the undergraduate curriculum and achieved distinction in their professional careers.

The earliest pioneers brought with them to this region the American dream of an open society dedicated to the free growth

and development of each individual, as far as his ability and ambition would permit, regardless of his race, color, creed, or previous status. The University was established at a time when Americans were beginning to feel a new sense of power and destiny, a product of the burgeoning urban and industrial development in the East and the opening of the "farmers' last frontier" on these western plains. But depression, drought, wars, and financial distress have more than once all but wiped out the sense of mission and obligation that was felt by those who dreamed of a publicly supported state university as one of the instruments of a new state. This is a stern land, a land of extremes where great expectations and high optimism have alternated with disappointment and pessimism, where a bonanza of wheat has on occasion been followed by crop failure and bankruptcy, where the glorious summer of the northern prairies is succeeded in due season by biting cold and the killing blizzard, and where the complacency and conservatism of Alex McKenzie's "Stalwarts" has been matched by the rebellion of the populists and A. C. Townley's Nonpartisan League. The story of our trials and triumphs is well told in Professor Louis G. Geiger's recently completed *University of the Northern Plains*, which was made available to me in manuscript form. I am further indebted to Professor Geiger for his helpful suggestions on this paper.

The great Dakota boom was at its peak in 1883, the year the University was founded. Andrew and R. B. Mellon of Pittsburgh opened a bank at Bismarck, the newly established capital of Dakota Territory. Theodore Roosevelt, whose centennial we celebrate this year, came to seek outdoor life and adventure and purchased his first ranch in the Badlands near where the wealthy French adventurers, the Marquis de Mores and his wife, had already built their chateau. Many others, less famous or picturesque, came seeking freedom, profit, and a new life unencumbered by old habits and traditions.

One of the most active of the boom towns was Grand Forks, founded in 1871. In the decade of the 1870's its development was hastened because of its position as a thriving station of the Red River Steamboat Line, which was founded by Captain Alexander Griggs, an associate of James J. Hill and brother-in-law of George

Walsh, one of the key figures in the founding of the University. By 1883 two railroads, the Northern Pacific and Hill's St. Paul, Minneapolis, and Manitoba, had entered the town, which was booming as the gateway for immigrants into the northern part of Dakota Territory. The transient nature of our population appears in the requirement of only three years' residence for membership when the "Old Settlers' Association" was established. One need hardly observe that Grand Forks was in those days a rough and ready town, yet it had its share of men and women who had been gently reared and broadly educated. Our civic and cultural leaders included such people as the Walsh family, James Twamley, who was born in Ireland and educated at the City College of New York, Dr. Charles E. Teel, a native of Quebec and a graduate of the University of Vermont School of Medicine, and Dr. William T. Collins, formerly of Massachusetts and a graduate of the Georgetown University School of Medicine. These three men encouraged and assisted Walsh, a leading member of the Territorial Council, in his efforts to secure passage of our organic act, which was signed by Governor Nehemiah Ordway on February 27, 1883. It is of some interest to note that the first official use of the name North Dakota appears in the designation then given to this University—University of North Dakota. The first Board of Regents was composed of Twamley, Teel, Collins, the Reverend Ezra A. Healy of Grafton, a Methodist minister from Ontario with a bachelor's and a master's degree from Victoria University, and Dr. Robert M. Evans of Minto. It is plainly evident that superior education and not political affiliation or influence directed their selection. With only a few exceptions this precedent has not been violated since. Our founders understood that education which truly serves the purposes of a free society can prosper only in an atmosphere of freedom, that governing boards must be composed of outstanding laymen, men with the perception and the determination to leave the details of educational policy to the faculty and its administrative leaders.

On October 2, 1883, the Superintendent of Public Instruction of Minnesota, David L. Kiehle, told a little crowd of dignitaries and local citizens assembled for the laying of the cornerstone of Old Main, the first University building, that education can solve

most of men's problems, that educated intelligence is the basis of industry, an essential in civil government, and the source of all moral reform. After naming the requirements of an ideal university he said, "A University with so generous a culture will contribute a freedom and vigor to the social forces of industry, government, and Christianity . . . which will give you proud eminence in the nation." The title and theme of this address inspired the first motto of the University, one to which we have returned for our Diamond Anniversary year: "Intelligence, the Basis of Civilization."

We are primarily interested tonight in this contribution of our University to its parent commonwealth, a University that through all the political turmoil of securing statehood and developing a new state has held its standards inviolate and has stood firmly for those values which have contributed to its steady growth in size, services, and in academic prestige: a "beacon o'er our western land" as Professor John Macnie phrased it in our "Alma Mater" long ago.

Important to securing passage of the University bill was the provision for a normal department which Governor Ordway preferred to the establishment of many separate teacher training institutions. Graduates of this department were in demand from the beginning, and since preparation for teaching was the quickest route to a job offered by the infant University, the normal course was a popular one. In other words, the first significant public service of the University to the State was the preparation of teachers for the public schools.

The need for leadership in developing the public schools of the Territory was obvious and great. When the University was founded the elementary school system was barely established, and there were only three high schools, all ungraded, in what is now North Dakota. One was in Grand Forks. The opportunity for educational pioneering was further enhanced by the fact that the entire American educational system was in a state of rapid change and expansion. The primary system was graded and the principle of free public education was extended upward to the secondary schools and even to higher education; at the same time

the American university took its present form with the addition of the German graduate school to the college system which had served the Nation since colonial times. People began to believe that the best way to spend their money was on education, but they wanted an education that would prepare the young for useful employment, instill religious principles, provide an understanding of an increasingly complex economic system, and ensure that young people would be prepared to defend the very system that produced their educational opportunity. Even military training seemed to be of practical use for the Territorial citizens who could remember the Battle of the Little Bighorn and who would yet witness the Ghost Dancer Uprising of the Sioux and the Battle of Wounded Knee. It may be noted in passing that the factor of philanthropy, important in the revolution in higher education in the East, played little part in our beginnings and has been a relatively minor factor here until recent years. Besides Wesley College, which is affiliated with the University, North Dakota has but one independent college.

One of our early presidents, Homer Baxter Sprague, was a true educational pioneer who accepted the position at North Dakota when it was offered to him in 1887 because it seemed to offer a virgin land for the innovator. He believed that "the supreme object of public education is to enable and dispose the young to be valuable members of the body politic." In 1889, when Grover Cleveland signed the Omnibus bill admitting North Dakota, South Dakota, Montana, and Washington to the Union, the North Dakota Constitutional Convention called upon President Sprague to submit a recommendation for the constitutional provisions on education. As a result the constitution of North Dakota contains as clear a statement of public responsibility for free public education from the common schools through the University as one is likely to find anywhere. This was an ideal for which Sprague had fought years before, with only partial success, in the State of Connecticut.

It remained for Sprague's successor, Webster Merrifield, however, to give substance to the measure. Merrifield had surrendered his post as instructor of Greek at Yale to come to North Dakota, partly to find a cure for his hay fever and to look after family

investments, but chiefly because he too saw the challenge of educational pioneering in this western land. During his tenure as president, from 1891 to 1909, he shepherded the University through the economic crisis of the 90's and oversaw its emergence as a true state university. Merrifield owed his success not only to his own efforts and clear vision but also to the loyalty and hard work of a strong faculty and a dedicated Board of Trustees. Of the latter, William Budge of Grand Forks, who served during almost the entire period of Merrifield's presidency, was a key figure. High in the councils of the dominant political faction of the time, Alex McKenzie's Republican "Stalwarts," he served as an indispensable liaison between the University and the state legislature hundreds of miles away in Bismarck. Although quite different in background and personality, Budge and Merrifield were united in their devotion to the ideal of tax-supported higher education, and they worked closely as a team in behalf of the University.

Only a few months after he assumed the presidency Merrifield took the first steps toward the formation of a system for inspecting and grading the high schools of North Dakota. He proposed that the minimum high school course be three years and worked out the standard for the high schools—largely looking toward preparing the student for entrance into the University. He insisted that all high school teachers and superintendents have a University degree (no degrees or even any college-level work was given then by the normal schools), and because he was state high school inspector he could see that the policy was carried out. A master stroke was his appointment of Joseph Kennedy, a graduate of the University of Minnesota, to head the Normal Department. Although a Roman Catholic, Kennedy was a follower of John Dewey and a critic of parochial education, and he shared with the president the role of leading spokesman in North Dakota for public education. He, too, upheld the University's stand for broad liberal training and solid "subject matter." Kennedy influenced much of the school legislation enacted in North Dakota during his thirty-seven years tenure as head of the Normal Department and Dean of the School of Education.

The University's leadership in promoting and improving the State's high schools, and education in general, was continued in

the administration of Merrifield's successor, Frank LeRond McVey, the third Yale man in succession to head this Institution. In 1911 the legislature appointed McVey as chairman of a committee to study the state's system of higher education. The resulting report emphasized the University's role as the "highest institution of learning in the state" and pointed out that its position was not one of rivalry with any part of the system, but rather that it should help "co-ordinate, strengthen, and develop the work of all."

The University continues to promote the advancement of the quality and the quantity of education through co-operation with all the colleges. It conducts school surveys, state-wide testing of pupils, institutes and workshops for educators at all levels, and extension classes for teachers or for those who have never had the opportunity to attend college. Its graduates are found on every level of the public school system, from rural school teacher to State Superintendent of Public Instruction.

From the very beginning the University has sought to make its departments of science and technology into instruments of direct service to the State. The first appropriations for scientific study were to equip a University museum. Henry Montgomery, appointed as professor of natural science and vice-president in 1883—he was the first faculty appointee—spent \$2,000 collecting some 1,800 specimens for display, studied Indian mounds and their builders, and attracted the attention of the scientific world by writing and publishing articles on the subject. The museum became the University's one showplace.

Montgomery's pioneer efforts were expanded in the late 1880's by Ludovic Estes, Ph.D. in physics from the University of Michigan, Earle J. Babcock, a graduate in chemistry of the University of Minnesota, and William Patten, a Harvard graduate with a Ph.D. from the University of Leipzig. As a result of Estes' establishment of a weather reporting station, the United States Department of the Interior designated the University as a weather signal station, which then began supplying newspapers with daily weather reports. Largely owing to the urging and preliminary efforts of Babcock, the state School of Mines was

established at the University by the state constitutional convention in 1889. Although there was no appropriation for the school, Babcock made his ill-equipped laboratory into the testing room for the state. The results of his pioneering investigations of North Dakota soils and of the sugar content of beets grown in them were published by the State Department of Agriculture and Labor; the state legislature responded with a resolution directing the Department to pursue these investigations further. Patten collected prairie grasses for the United States Department of Agriculture and for the newly established Experiment Station. To be sure, the subsequent development of this work was by our sister college at Fargo, but through these initial efforts the University can claim some credit for the transformation in agriculture which has occurred in this broad valley in the last seventy-five years.

Babcock's greatest contributions were his extensive and prolonged studies of lignite, North Dakota's most plentiful mineral resource. When no other apparatus was available in the difficult 1890's, the ingenious Babcock would fall back on the University heating plant for rough practical experiments to test the fuel properties of lignite. The reputation established by the School of Mines through these investigations and its explorations of the properties of clays, cement rock, and other minerals brought much prestige in science and technology. In 1895 the office of state geologist was permanently established at the University with Babcock as the first incumbent. In 1897 he was officially designated, what he was already in fact, the director of the School of Mines. In 1901 this school was the nucleus of a new College of Engineering. Its reputation as a department "from which the people of the state may secure practical tests or any other aids" won for the school the first public support for research at the University. The 1907 legislature specifically directed the trustees and the University to "provide suitable means" for experimenting and testing mineral resources, especially the briquetting of lignite, its use for gas or electric power, the uses of clay deposits and the building properties of North Dakota stone. A briquetting and gasification laboratory was opened west of Bismarck, at Hebron, in 1909, and in 1915 the United States Department of the Interior

published Babcock's monograph, *Economic Methods of Utilizing Western Lignite*, which presented what seemed at the time to be a workable method for using lignite for industrial purposes. This work was further expanded in the 1920's by George Wharen's experiments with pulverization of lignite, Alfred Gauger's studies of its basic properties and composition, and Leonard Dove's work which resulted in the discovery that a water soluble wood dye, "Dakalite," could be produced from lignite. More recently, during World War II, the United States Department of the Interior recognized the significance of the work on this campus by allocating \$300,000 for a pilot gasification plant, which in turn led to the construction of the \$750,000 Charles E. Robertson lignite laboratory of the United States Bureau of Mines in 1951 on a part of the campus donated by the University. There is perhaps no more graphic example of the University's direct influence upon the development of the state.

The mapping of North Dakota's lignite resources, estimated at 350 billion tons, or 75 percent of the total deposit in the United States, was carried out by Arthur G. Leonard, a Johns Hopkins Ph.D., in co-operation with the School of Mines and the United States Geological Survey. Leonard, who joined the University faculty in 1903, gave himself completely to working in the public interest; he outlined the geological map of North Dakota, studied its clay and cement rock deposits, and during the 1920's he predicted oil in western North Dakota, approximately where it was actually discovered in 1951. In 1923 he was commissioned by law to locate and study gravel deposits for the "Good Roads Program" of the state highway department. He, rather than Babcock, who was our pioneer geologist although he had little training for such work, developed the department of geology and organized its teaching program.

The kind of public service begun by men like Merrifield, Kennedy, and Babcock was expanded under President McVey to involve almost every branch of the University. Professing his "profound faith in education as the chief creator of a moral society," McVey announced at his inauguration, in September, 1910, that "It is time to recognize that the University is a great latent force that can be utilized in many directions. It ought to be closely

related to every department of the state. It should be the medium through which statistics are gathered, information collected, advice given, problems solved, in fact a real part of the state government." He set out, almost literally before he assumed office, to develop a program of adult education and University extension, one so ambitious that it took eleven pages to describe in the first catalog in which it appeared. In 1911 the legislature allowed \$3,500 to organize a Bureau of Educational Co-operation, but the governor vetoed the appropriation. The Extension Division was modeled after the plan at the University of Wisconsin; indeed, the first director, John J. Pettijohn, was drawn from the Wisconsin Extension Division. The ambitious plan he and McVey developed proposed to push out the University to all the state through extension classes, lectures, touring symphony orchestras and other music groups, two and three day institutes, and similar agencies, all emphasizing public service rather than public relations. McVey met constant frustrations because of inadequate appropriations to support the work he had in mind; in 1911, for example, when the work had barely begun, the governor vetoed the modest appropriation of \$3,500 allowed for extension by the legislature. Nevertheless, McVey made some progress, and the idea has never been allowed to die, even through the disastrous 1930's. Recently there has been a substantial revival of state-wide interest in University extension courses and workshops. With the support of the Board of Higher Education and of the legislature this dream of extending the campus of the University to other parts of the state may yet become a reality; in fact, at no time in our history has the possibility of this development seemed so near realization.

When McVey resigned in 1917 to accept the presidency of the University of Kentucky, the Grand Forks *Herald* noted that his major contribution had been the ennobling concept of the duty of the University and the University man to make the solution of society's problems their main business. His parting words were: "... (the University) must be a beacon light to hold up the highest things for the city and the state . . . *The things that will save this nation . . . are the universities.*"

Although the concept of service to the state at North Dakota is almost as old as the University, especially in the technological departments, our primary function of training the young men and women of this region for future usefulness has not been neglected. There was little in the way of equipment in the early days, but teaching of a high order, by competent and dedicated men, overcame the handicap, and many of our early graduates went on to highly successful careers. Their contributions to the state and to society afford concrete evidence of the role of the University in educating future leaders in our dynamic world where the prosperity of any one state depends upon the welfare of all. For example, there is Maxwell Upson, who graduated in 1896 before the School of Mines was much more than a name in the state constitution, the president of the Raymond Concrete Pile Company of New York, a firm with clients all over the world; Thomas Campbell, the first engineering graduate of the University (1904), won fame in Montana as the "world's biggest wheat farmer"; Charles Boise, another early engineering graduate, became a director of Selection Trust Limited, one of the world's biggest mining companies; a third engineer, Herbert Treichler, became a world leader in sulphur mining while director of operations for the Texas Company; John Hancock became a leading New York financier and director of many large corporations; and Chester Fritz, recognized in several parts of the world as an expert on foreign trade and in international finance, who became the University's largest single benefactor to date.

The University has brought many truly distinguished teachers and scholars to North Dakota to serve on the faculty: John Morris Gillette who earned a national reputation as the founder of rural sociology; James Boyle who became a national figure in the field of economics, especially in marketing and farm credits; Albert Hoyt Taylor, a brilliant physicist who made a local and a national reputation in wireless telegraphy and radio, and established here one of the first three college radio stations in the Country; Frederick Koch, whose classes included one of America's foremost men of letters, Maxwell Anderson, and whose students wrote plays and pageants that stimulated interest in serious drama and won wide recognition; Gottfried Hult, a poet and writer of distinction as

well as an outstanding teacher; Orin G. Libby, who helped North Dakota rediscover its history and through whose efforts the state park system was established; and John Macnie, called by Libby "our outstanding universal scholar."

The faculty were concerned about public service too, as evidenced by a University Council resolution of 1907 to "endeavor to make the University a larger factor in the life of the state"; the first number in the faculty lecture series started that same year was entitled "The University and the State." Members of the faculty were also active in many state organizations like the state bar association, the academy of science, the various public school associations, and others; some were academic in nature, some not.

The behavior of the faculty and the president during the financial crisis of 1895 is symbolic of the self-sacrifice and devotion that have characterized those who have remained here and maintained our standards of scholarship and performance in the face of the severest hardships and difficulties. On that occasion the state's revenues had dried up and credit was unobtainable. Successive reductions in the University's original request for \$152,320 resulted in a final figure of \$15,980 for the biennium (about half as much as was authorized at the same time for the eradication of the Russian thistle). But, led by William Budge, people from all over the state responded to an appeal based upon the service of the University to the state—a concept new to the general public—and they subscribed more than \$25,000 which, with the 25 percent reduction in salaries contributed by the faculty, made it possible to keep the University going. When the University of Montana offered to employ the president and all of the faculty, the offer was declined.

By the turn of the century there began a long period of good crops and favorable prices, which within a few years raised North Dakota from the depressed state of the 1890's to the happy position of having the highest per capita income in the Nation. Moreover, personal income was so evenly distributed that there were no millionaires and no paupers. Even so, there was need for the University to extend its services by assisting with community planning, and establishing social service clubs and a settlement house run by students.

Like all research efforts, some attempts to serve the state failed or were not fully appreciated. Taylor's work on the storage and utilization of windpower, an abundant resource in North Dakota, was cut short by an economy-minded governor's veto of appropriations for further work on the project. The biological station at Devils Lake, established in 1909 and directed by Melvin A. Brannon as a teaching and experimental laboratory, failed in its efforts to acclimatize steelhead trout to the alkaline waters of Devils Lake or to develop a mussel industry on the Red River. Efforts to develop commercial uses for flax fiber also had little success. The lack of public appreciation appeared in the sharp criticisms aroused by some faculty members' investigations of the state prison and poor-relief systems. Even Merrifield's work to improve the high schools aroused resentment in some quarters, because, it was charged, the University was using its position to damage the other colleges and even the high schools by attracting their best students to its own Model School.

With the development of the concept of public service of the state university, sooner or later the issue of academic freedom arises. When a faculty member testified before a United States Senate committee in favor of a reciprocal trade treaty with Canada, the newspapers and the Board of Regents criticized him for dragging the University into partisan politics. The president made it clear that the faculty member must be free to teach, or to speak upon social and economic questions, so long as he does not ally himself with a group which seeks political control of the state; for the University that would serve the state must always keep above that kind of politics.

Back in 1887 the Territorial Legislature appropriated \$1,000 for a chair in medicine. Dr. Henry Wheeler refused his appointment as dean because of a technical difficulty. In 1905 Brannon furnished the leadership in securing the co-operation of the faculty and the medical profession in establishing a two-year medical school to replace the three year old school of pharmacy. The University was one of the first institutions in the Nation to establish a two-year pre-medical requirement for admission to medical school. Approval by the Association of American Medical Schools made it the first branch of the University to win accreditation.

(However, the University was on the first list of approved colleges and secondary schools issued by the North Central Association in 1913.) It is a high tribute to Dean Harley E. French that he was able to carry on with a faculty of four, and almost no equipment, to give such sound medical education that there was never a problem of admission to other institutions for the final two years of training. Our medical students have established a remarkable record for successful completion of their medical course; only three out of nearly a thousand who have transferred elsewhere have failed to complete work for the M.D. degree. In the beginning there was little opportunity for research in the School of Medicine; and its primary contribution to the state, other than the doctors trained, has until recently been through the practical services of the Public Health Laboratory which Dean Brannon established in 1907. It has always been noted for the high quality of its work. In 1917 substations were opened at Bismarck, Minot, and Fargo. The number of analyses made each year in the laboratory rose from under 2,000 in 1907 to more than 20,000 in 1917, and to a quarter of a million in 1957. Since its founding, the laboratory has issued numerous bulletins for the information of the citizens of North Dakota.

The medical school's capacity for public service was greatly expanded when a State Medical Center, an administrative arm of the University, with its own advisory board of nine members drawn from all over the state, was established by legislative act in 1945. The idea had originated the year before at the spring meeting of the Alumni Association. The same legislative session which established the center also appropriated \$250,000 for a medical science building, the first in the history of the University to be devoted entirely to the study and teaching of medicine. One measure of the influence of the new center, and the expanded medical school, is the nearly 30 percent increase in the number of physicians practicing in the state that has occurred between 1946 and 1956—from 335 to 430 to be exact. Research has been expanded enormously, not only with funds assigned for this purpose by the advisory board, but by grants from foundations, health agencies, the federal government, and from local philanthropists. During the years 1950-57 the total sum assigned for research came to

more than \$650,000. During the past ten years the medical school faculty has published nearly 200 articles and papers in professional journals. Within the past year a new Medical Rehabilitation Unit opened its doors for service. Our plans for the nursing school look forward to a fully accredited four-year school that will enable the University to provide the leadership it should in nursing education in the state. A new cancer research laboratory is under construction. The policy, more or less generally accepted now, to encourage the location of any new state medical facilities at the University is wise long-range planning for the future.

In the area of public affairs and politics the School of Law, opened in 1899, has done much to underline the importance of the University's public service role. Graduates of the University law school include the present Governor, the Lieutenant Governor, the Attorney General, five Supreme Court justices, seven district court judges, six state senators, six representatives, 40 of the 53 states attorneys and a number of other important state officials, as well as the Federal District Judge and a United States Senator. Of the 611 practicing attorneys in North Dakota 406 are graduates of the law school. Moreover, eight governors have been graduates of the University. The extent of the influence of the University through its many graduates engaged in public service cannot be fully known. Their own initiative and ability to develop themselves are of first importance, but few who ever attended the University fail to pay high tribute to the opportunities afforded them while they were students. Time does not permit more than brief reference to some of the ways in which this University has both directly and indirectly contributed to the advancement of knowledge and learning to make intelligence a basic civilizing influence in a developing pioneer state. The University has never been a luxury and now, more than ever, it is recognized as a part of the developmental arm of the state. It permeates the whole educational system and bears the burden of a certain responsibility commensurate with the authority and prestige it has earned.

Thousands of alumni have gone forth to take their places throughout the state and to contribute to its development. Perhaps the University's greatest gift to the Agricultural College has

been one of its ablest presidents, John Lee Coulter, of the class of 1908, who during the 1920's led our sister institution to new heights of service and achievement. An agricultural economist, he later became chairman of the United States Tariff Commission.

The University has always responded to help the Country at large in times of national emergency. During World War II, as in 1917, the total effort of the University was concentrated upon activities having a direct bearing upon the training of officers and technicians, and each time most services to the state, in fact, all normal routines, had to be interrupted. Professors retooled for teaching science and mathematics courses. In all, more than 6,500 service personnel were given their training in one of the eight programs set up on the campus.

The University of North Dakota Branch of the Summer Institute of Linguistics, now in its seventh summer, trains personnel for the analysis and description of unwritten languages. The 22 linguists on the 1958 staff have had field experience in Mexico, Peru, Ecuador, Japan, Afghanistan, and the Philippines. They and the 87 students enrolled this year will continue their technical linguistic studies, preparation of alphabets and literacy materials, and Bible translation, in a dozen different countries of the Western Hemisphere and Asia. The results of their work are published in a number of United States and foreign journals.

The loyalty and resourcefulness of the president and faculty received their severest trial since the 1890's in the depression of the 1930's. A decade of crop failure and low prices reduced per capita income in North Dakota to about 30 percent below the average for the Country; about one-third of our farmers lost their land, and in 1937 alone more than a third of the state's population found it necessary to accept some relief assistance. Funds for higher education literally dried up. Appropriations made in 1931 could not be collected, and the University had to accept a nearly one-quarter reduction in its budget for 1932. The 1933 appropriation was cut to 45 percent of the 1931 figure, which itself had been barely adequate to maintain normal operation. Better employment opportunities in more favored areas cost the University dearly in depletion of its faculty and staff, losses which it would take nearly

two decades to recoup. Research and the broad services of the University were severely curtailed; any funds available for such purposes had to come from the federal government.

Now as the University projects into the future, momentous decisions still have to be faced—decisions that bear directly upon the preservation of the basic philosophy of the free, public University as an investment for the good of the state. The state cannot afford to spread its educational effort at the expense of the vertical development of excellence, graduate work, and the quality resources at the University.

Good teachers are not the only ones that contribute to the making of a good University. The quality of our instruction can be no better than the background preparation and the ambition of our students will permit. Hence, the University will continue its role in the state's educational effort at all levels. It must be a part of the public conscience of the University and of the state to teach increasing numbers how to live and manage a dynamic and accelerating world of resources, conflicts, and ideas. The University must help the whole world to see that free and responsible enterprise in higher education can maintain the flow of leadership that has given this Nation a pre-eminence in the world of ideas and of technology.

Given the necessary financial support, the quality of academic excellence—without which buildings, books, and betatrons are as useless as diamonds in the attic—becomes the responsibility of all of us in the University. The sphere of the University's influence upon the life and development of the state is ever expanding. The story of the past makes it clear that the real strength of the University is not in its physical plant, necessary as it is, but in its faculty, students, and in the spirit of working together with all those who would make this a better world.

Alumni and friends of this University throughout this state, and all over the world, through their interest, work, and financial support contribute to the building of a greater University. They do this not to benefit themselves. Many give scholarships and build where they may never see the results. Others have in wills and bequests, or through foundations, made a place for themselves

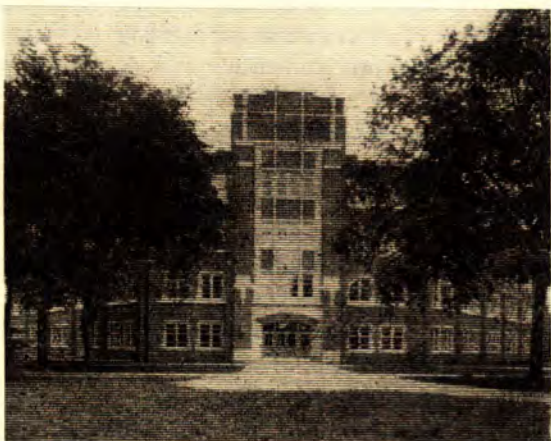
in the total structure of the University, not just for their own ease and comfort, but for the benefit of mankind. Such is the spirit that will build a greater future for all of us.

This is our Diamond Anniversary. Building for tomorrow will require diamonds that can be spent, diamonds that inspire ideas and individual effort, diamonds that symbolize courage and faith in the University as a growing institution now mature enough to bear the diamond as a symbol of age and strength and hope for the future.

THE END



"Actorum Memores simul affectamus Agenda!"



Twamley Hall



THE NEWCOMEN SOCIETY
in North America

IN APRIL, 1923, the late L. F. Loree (1858-1940) of New York, then dean of American railroad presidents, established a group now known as "American Newcomen" and interested in Material History, as distinguished from political history. Its objectives center in the beginnings, growth, development, contributions, and influence of Industry, Transportation, Communication, the Utilities, Mining, Agriculture, Banking, Finance, Economics, Insurance, Education, Invention, and the Law—these and correlated historical fields. In short, the background of those factors which have contributed or are contributing to the progress of Mankind.

The Newcomen Society in North America is a non-profit membership corporation chartered in 1961 under the Charitable Law of the State of Maine, with headquarters on North Ship Road, Uwchlan Township, Chester County, Pennsylvania, some five miles east of Downingtown, Pennsylvania, and 32 miles west of the City of Philadelphia. Here also is located The Thomas Newcomen Memorial Library in Business History, a reference collection, including microfilm, open to the public for research and dealing with the subjects to which the Society devotes attention.

Meetings are held throughout the United States of America and across Canada at which Newcomen Addresses are presented by leaders in their respective fields. These manuscripts represent a broadest coverage of phases of Material History involved, both American and Canadian.

The approach in most cases has been a life-story of corporate organizations, interpreted through the ambitions, the successes and failures, and the ultimate achievements of those pioneers whose efforts laid the foundations of the particular enterprise.

The Society's name perpetuates the life and work of Thomas Newcomen (1663-1729), the British pioneer, whose valuable contributions in improvements to the newly invented Steam Engine brought him lasting fame in the field of the Mechanic Arts. The Newcomen Engines, whose period of use was from 1712 to 1775, paved a way for the Industrial Revolution. Newcomen's inventive genius preceded by more than 50 years the brilliant work in Steam by the world-famous James Watt.

The Newcomen Society in North America is affiliated with The Newcomen Society for the Study of the History of Engineering and Technology, with offices at The Science Museum, South Kensington, London, S.W. 7, England. The Society is also associated in union with the Royal Society for the Encouragement of Arts, Manufactures and Commerce, whose offices are at 6 John Adam Street, London, W.C. 2, England.



Members of American Newcomen, when in Europe, are invited by the Dartmouth Newcomen Association to visit the home of Thomas Newcomen at Dartmouth in South Devonshire, England, where the festival of "Newcomen Day" is celebrated each year on the fourth Friday in July.

CHESTER FRITZ LIBRARY
UNIVERSITY of NORTH DAKOTA
GRAND FORKS, N. DAK.

H.D. ROOM



*"The roads you travel so briskly
lead out of dim antiquity,
and you study the past chiefly because
of its bearing on the living present
and its promise for the future."*

—LIEUTENANT GENERAL JAMES G. HARBORD,
K.C.M.G., D.S.M., LL.D., U.S. ARMY (RET.)
(1866-1947)

*Late American Member of Council at London
The Newcomen Society
for the study of the history of
Engineering and Technology*

