A PROFESSION

That Has a Most Splendid School for the Instruction of Those Who Would Follow in Its Noble Path—Law, Medicine and the Sciences Are but a Part of This Great Study of the Whole—A University of Learning Unexcelled—A Great House of Learning.

The North Dakota agricultural college, like others of its kind, was created and endowed by the federal government to fill a long felt want in the educational system of the country.

From the primary grades in the district school up to the university courses by way of graded and high school curriculum the course of study is made continuous and natural with every facility and encouragement for thorough scholarship, but with no special facilities for the farming or industrial classes beyond general education.

To remedy this, agricultural colleges were provided. Normal schools are encouraged by the state to equip the student teacher with the requisite general knowledge for the duties of the school room, and the necessary technical instruction and drill in pedagogy to be able to instruct the youth naturally and effectively. All other professions support schools for technical instruction in the principles they embody, thus professionalizing each avocation and giving the student, in the very morning of his career, the advantage of the best thoughts and ripest experience of the veterans of his chosen profession.

Thus equipped the amateur has a liberal foundation upon which to build his experience, and his possibilities for success are immensurably increased. It is time that farming should be considered and treated as a profession, with equal educational adjuncts as have been long enjoyed by other branches of human labor—mental or physical. The agricultural interests of North Dakota being paramount, especial pains are taken in this college to acquaint the student, in the agricultural departments with a knowledge of the chemistry of soils and plants, the principles of plant and vegetable growth, as well as the climatic conditions affecting them favorably or adversely; to make the tillable portional of the state a land of homes, beautiful and home-like, and to encourage the most profitable diversity of products; to farm systematically, economically and scientifically, that the maximum of profit may result from the minimum expenditure of money and labor, as well as to give instruction in those practical branches of industrial art—necessary adjuncts to the farm—is one of the leading missions of this college.

What the university is to the scholar, what the law school is to the student lawyer, or the theological seminary is to the student clergyman, the agricultural college is to the student farmer or mechanic. Provided with apparatus to determine the constituent elements and to learn their functions and economy in the animal, vegetable and mineral kingdoms; to classify the members of the vegetable families and by analysis and dissection to understand their anatomical structure and physiological conditions; to understand the relationship of light, heat, moisture and soil in the production of a plant is not only pertinent, but interesting, and is calculated to lend an interest to agricultural pursuits hitherto unfelt. The farmer, above all other industrialists, should work in harmony with nature, and to do this he must understand nature's laws. This is also true of the ranch-man and stock-grower. The same money, labor and food will return twenty-five per cent greater profit if bestowed upon the proper breeds and they are given intelligent care. The agricultural department of this institution possesses the collated experience of all the pioneers and veterans of the agricultural and stock-raising industries, and the student has but to familiarize himself with what others spent wealth and labor to discover and demonstrate, to know as much as they. True, to some extent, the student's knowledge is theoretical, but is must be remembered that the graduate from a normal school is not a teacher, neither is the graduate of a medical college a physician. The foundation in either case is only laid upon which the fabric of experience may be built.

For an individual in either medicine, law or agriculture, to build himself up solely by experience is impossible during a short lifetime, and generally those who have their triumph thus over the unattainable are only experts in their own imaginations and quacks in the minds of knowing men. "Experience is the best teacher." True, but why each man devote his life to discovering the discovered? Why not accept the known discovered—demonstrated and proven by experience of others—upon the threshold of a business career, and devote the energies to somthing new? Why not utilize the experience and observation of eminent predecessors as our capital, our stock in trade, instead of attempting the same feat as they, in the same manner and often with less ability; then when attained we have simply spent years for what could have been had for the trouble of investigation?

Every other profession has for decades collected the wisdom of its devotees and proffered each student applicant to its ranks their ripest thoughts and accepted discoveries. But the farmer has scouted the idea of an educational basis or professional standard for agriculture, and has made himself alike the subject of common prey and ridiculous caricature in the funny papers; and though agriculture is the oldest occupation known to man, yet it remains the least systematic—a veritable child-among adult professions. If a man is not fit, or was too negligent to equip himself for any other business by common consent, he can farm. If a child is too dull for law or medicine or business he is only fit for the farm. But as a matter of fact to be a successful farmer requires not only skill, but a higher order of tact and talent than is required in that of almost any other business and a broader and more practical education than required by most other professions. Other professions co-operate and cultivate professional skill and professional pride; farmers seldom co-operate, except at times to elect a blatant demagogue to office as the "farmers' friend," and who, after election, generally demonstrates his friendship only for himself.

A farmer requires, for his happiness and social influence, as much education outside his profession as the lawyer does outside of law—as every professional man does outside of the narrow groove of his professional labor. General education relates less to facts memorized, than to a mind trained to think and to reason.

Recognizing that

Agriculture

is working with nature, those branches of learning which unfold and make plain the mysterious forces of nature and awaken an interest in the organic structure of plants and animals as well as explains the functions of each component, are given paramount attention. A farmer raising grain and vegetables should know nature's processes in their formation, and the conditions required for their most successful propagation, and also to understand the natural enemies of each and the cure.

By text book and lecture the student in the agricultural department gets the benefit of all that has been discovered, demonstrated much of it for himself in the chemical or botanical laboratories, and is prepared to go out and enjoy his labor because he understands it, and to work at a profit because he works with and not against nature.

Horticulture

is also of the utmost importance where trees and shrubbery should and can be grown on our vast treeless prairies, and is given a special department in this institution, and equipped with everything necessary to master the intricacies of this interesting science.

The farmer should also understand the use of machinery and steam, and should acquire at least a fair degree of workmanship in wood and iron. Recognizing this the department of

Mechanical Engineering

is maintained and equipped with tools, machinery and other material and apparatus, where the student, under the direction of skilled operators, is taught the use and care of tools, and is given instruction in wood and iron work, the application of steam and electricity and the principles involved in each.

While it is not designed to teach a trade, yet the useful recreation the mechanical laboratory affords, will give the student a technical knowledge and manual training that makes the road to any industrial pursuit easy and familiar.

A knowledge of the breeds of domestic animals best adapted to this climate, how to diagnose and treat diseases to which they are subject, and how to feed and care for them to the best advantage is of such vital importance that the department of

Veterinary Science

is sustained and supplied with such apparatus, models, drawings, etc., as to afford the student thorough and practical instruction in this science. Lectures, text books, models and practical operations and experiments combine to elucidate this subject.

Dairying

is also taught by "precept and example." The student learns, and from weighing the milk to the finished product, every process necessary to learn what enters into making butter and cheese is fully imparted.

The new creamery donated to the state by the enterprising citizens of Fargo and Cass county is the most complete in its equipment of any in the Northwest.

Chemistry

is acknowledged to be one of the most valuable sciences when practically applied, and is inseparably connected with agriculture. It furnishes the key to nature's mysteries, unfolding not alone her beauties but her laws, what she works with, why, and for what purpose. It divorces from success the sovereignty of chance, and guides labor to sure results by directing it into harmonious relations with nature. This department is under the direction of a practical chemist of acknowledged repute. Next to this, and not less important, is the department of

Botany and Zoology,

also under the direction of a specialist of distinction. This department is fitted up with microscopes and other necessary apparatus to thoroughly elucidate the subjects that belong to it. Plant anatomy and physiology; what causes plants and vegetables to grow; favorable and unfavorable climatic and soil conditions; their diseases and enemies and how to destroy them, and a hundred other essential inquiries are explained in the class room by the aid of scientific investigation.

To accommodate the young ladies of the state who desire a more thorough domestic education than academy or high school affords, the department of

Domestic Economy

is made a part of the regular college course. In addition to painting, music, and a good English education, the young lady students are instructed (who desire it) in all the mysteries of baking, cooking, cutting and fitting garments, in short all the essentials of good housekeeping with a view to health, economy, and home comforts. This department needs no argument for its existence. It is founded upon the logic of necessity.

Hitherto the patronage of the agricultural college has not equalled the facilities of the institution, nor has its mission been popularized. Too many looked upon it as an institution, for its name to some seems to indicate, where plowing, sowing, planting and digging alone is taught. Such is not the case. The course of study is comprehensive, and the instructors able and efficient. As its benefits becomes more apparent, the patronage increases.

The present term makes a gain of fully one hundred per cent over any former opening, and the future of the college is assured. With five full courses of study of four years each, viz.: Agriculture, mechanics, science, and literature, domestic science, science and industrial arts, besides several short special courses of one or two years each, as well as military drill, the graduates of this college are thoroughly equipped for life's emergencies, and the more able to enjoy their work because it will harmonize with their individual tastes.

—J. H. Worst.

North Dakota Agricultural College, Fargo.

Cardinal Paul Melchers is dead in Rome. He was a German, born in 1813, and was created a cardinal in 1885.

This institution is erected upon what is known as the segregate or detached ward building plan, and embraces in its general plan numerous buildings of different kinds, such as administration, receiving and close wards, assembly hall, kitchen, laundry, store-house, boiler-house, barns and other outbuildings. The general plan was drawn in view of additional ward buildings to be erected from time to time as the necessities of the hospital require.

At present the institution consists of the administration or office building, two male and two female ward buildings, having the capacity for about three hundred patients. In addition to this we have kitchen, laundry, store-house and boiler-house, with a capacity suitable for present needs, from which all our apartments are lighted with electricity and heated with steam, lignite coal being used entirely for said purposes.

The buildings have underground communication seven feet in depth and eight feet wide, above which the corridors connect all our buildings from basements, which are comfortably utilized for passage during disagreeable weather, and on pleasant days the top is used for said purpose. This system of corridor connections extends only about four and one-half feet above the ground, and in no way detracts from the beauty and home-like appearance of what was originally intended, the family cottage.

The law provided at the time of the opening of the Jamestown hospital for insane that it provide for all insane persons living north of the 46th parallel, which number at the time amounted to eighty patients, who were then at the hospital for insane at Yankton.

North Dakota Penetentiary, Bismarck.

THE INSANE HOSPITAL AT JAMES TOWN.

On the 9th of March, 1883, by an act of the territorial legislature bonds to the amount of $50,000 were issued to establish a hospital for the insane, within a five-mile limit of the court house in the city of Jamestown, Stutsman county.

The first trustees received their commissions in May, 1883, organized and held their first meeting in June of the same year.

The act provided that the trustees elect a superintendent, who should be consulted in locating grounds, and who should formulate plans for said hospital. In compliance with this, by unanimous consent at their first meeting I was elected superintendent of the North Dakota hospital for the insane, at which time I was serving as post surgeon in the United States army, and stationed at Fort Abraham Lincoln.

The act also provided that no less than 640 acres should be purchased. Numerous proposals were received in response to advertisements for locations. The lands described varying in distance from said court house from one to four miles, and in price from fifteen to thirty dollars per acre. After due and careful consideration of said proposals, the present location was selected, which lies south of the city of Jamestown one and one-half miles, for which the board of trustees paid $20,000. Sufficient building stone was obtained upon the institution premises for the construction of the basement and first stories of our present buildings. Aside from the fact that the price paid for this section of land now seems exorbitant, the location has proved everything that was anticipated or hoped for.

On April 1, 1885, we admitted our first two patients from Mandan, now North Dakota. At this time the only structure was one ward building without any of the necessary conveniences whatever for the admission of patients of this kind. In June of the same year thirty-five patients were removed from Yankton, and not until the following year were the remaining patients placed in this hospital.

For the first two or three years the institution suffered greatly for such necessary conveniences as water supply, sewerage, etc. At present, however, we are supplied with all the latest improvements, giving comfort to our household and the best water supply, in my opinion, that any institution in any state enjoys. We have a deep well which furnishes good, pure water, for cooking and drinking purposes, also an artesian well, supplying about 6,000 barrels of water per day, respectively. The latter is mostly used for sewerage cleansing, etc. This duplicate water supply leaves us a reserve in case of accident occurring to one or the other at any time, which, in the management of an institution of this kind is a most important matter.

Since the opening of the hospital 1,060 patients have been received, of which number 569 have been discharged and 186 have died, leaving in the institution Oct. 31, 1895, 307 inmates. I herewith add a tabular statement showing number of patients admitted, discharged and died, together with the number now remaining, during the institution's history:

Number of Patients Admitted From Opening of Hospital to Oct. 31, 1895:

Male	624
Female	500
Total	1,024
Readmitted	36
Total	1,060

Number of Patients Discharged From Opening of Hospital to Oct. 31, 1895:

Male	361
Female	208
Total	569

Number of Patients Died From Opening of Hospital up to Oct. 31, 1895:

Male	110
Female	76
Total	186

Noting the number of discharges, deaths and number remaining, we can show a very remarkable number of recoveries compared with other institutions of this character, 25 per cent being admitted as a large number. Our institution shows something over 50 per cent.

Of the number of patients treated since the hospital was opened in May, 1885, until Oct. 31, 1895, 53.7 per cent recovered, 17.5 per cent died, and 28 per cent remain in the hospital.

The amount of money expended since the organization of the institution for permanent improvements, purchase of land, etc., amounts to $303,618.26.

The organization of the institution at present comprises a board of trustees, as follows: S. K. McGinnis, president; H. Cornwall, secretary; Alexander Montague, J. W. Mitchell, Halver Johnson, E. P. Wells, treasurer, together with the officers of the internal management, viz., Dr. O. W. Archibald, superintendent; Dr. E. A. Anderson, assistant superintendent; Ogden Lovell, steward; S. A. Archibald, matron. In addition to these we have a corps of subordinate officers, nurses, employes, etc., which aggregate in number about fifty-five.

In the early establishment and organization of the institution much credit is due to N. G. Ordway, who was then governor of the Territory of Dakota, and the Hon. Johnson Nickens, formerly of this city, but now a resident of Tacoma, Wash. Too much praise cannot be given to Maj. L. Lyon, F. E. Jones, Capt. S. K. McGinnis and Col. W. E. Dodge, all of whom devoted much time and gave their energy to the upbuilding and fostering of every interest of the work while in its infancy, and when the institution most needed their care and assistance.

The internal organization and management is perfect. None but competent and trustworthy employes are tolerated, and all officials and subordinates work together with absolute harmony. The foresight necessary to select competent help is far more important in the management of an institution of this character than is generally supposed.

One of the peculiarities of this institution is its cottage and home-like apartments. Almost free from restraint, the patients are given every home comfort, and all their surroundings are conducive to cheerfulness. Pictures adorn the walls and flowering plants bloom in every ward, and musical instruments are at the convenience of such convalescents as can find pastime and amusement in their use.

The government of the institution is mild and gentle. Harsh treatment is strictly prohibited in every department. Under no circumstances is anything that savors of cruelty or chastisement tolerated.

Patients are regarded as sick people and handled and cared for as such. Everything in appearance, and in fact, of the nature of imprisonment is banished, and the cheerfulness of the home is thoughtfully cultivated.

Wholesome food and plenty of it, healthful exercise, absence of restraint, amusements adapted to their understanding, and light labor where they prefer it is afforded to these peculiar unfortunates.

The farm, the garden and the stables afford suitable employment for a number of men physically able to do light work, while the laundry, the kitchen and other departments afford light labor for a number of women.

Amidst all the gloom of mental darkness and beclouded minds incident to a hospital for the insane the one element of cheerfulness is constantly cultivated.

The several boards of trustees since the establishment of the institution have labored with signal ability in promoting the welfare of the inmates, and here, without an exception, been loyal to the original plan of internal government and of fostering home-like and pleasant environments.

Every governor since the hospital was established has given it the sanction of his approval and in no instance sought to change the management or the methods that have prevailed from the beginning.

Each successive legislative assembly deserves unstinted credit for their unswerving loyalty to these wards of the state by appropriating what they could for their comfort and care. And, though overcrowded and with reduced appropriation on account of necessity, the disposition of each official and employe is to do full justice to the unblest patient, and, as far as possible, dispel the mental darkness by restoring reason and make glad some saddened home.

—Dr. O. W. Wellington Archibald.

NORTH DAKOTA PENITENTIARY.

The legislature of 1882 authorized the construction of the North Dakota penitentiary at Bismarck, and appropriated $50,000 in bonds for the purpose of construction. Hon. A. W. Edwards of Fargo; Col. C. A. Lounsberry, John J. Dunn, John A. McLean and Alexander McKenzie, Bismarck, and Judson Lonoure, Pembina, were appointed as the board of trustees. They secured forty acres of land, a donation from the cit yof Bismarck, and proceeded to the construction of the building. It was built by contractor Melton of Fargo and was built wholly within the appropriation. The prisoners were used to make further improvements, and with very slight additional appropriations it became one of the model institutions of the state, not only as to the prison itself, but in all of its surroundings, including barn, stables, pig pens, stalls for cows and a vegetable garden and a farm. They rent 320 acres adjoining the prison forty. They raise all of the vegetables required for the prison, furnish feed for all of the prison stock and to fatten hogs for the pork required for prison use. They make a portion of the butter required, and have all of the milk required.

All of the work is done by the prisoners, and in addition they have worked on the roads between the prison and town, and between the capitol and the city. They have planted and care for a large number of trees on the prison grounds and about the capitol, and last year built the addition to the cap'tol.

At this writing the number of inmates is 102, with a dozen more quite certain to be added before the fall terms of court close. Fully 90 per cent of the prisoners are transients, who come to the state in connection with the harvest. There has been a increase of 25 per cent since the last harvest commenced. Twenty are employed in the harness shop under contract. The average number working on the farm and garden during the past summer has been thirty. Ten have been employed about the capitol, ten in the care of horses and other stock. There are others employed in the prison, making shoes and clothing for the prisoners, and as carpenters, engineers, laundrymen cooks, etc. There are no idle men and only twenty employed in competition with free labor. They had this year 175 acres of corn, and furnished one firm 1,000 bushels of seed corn for next year, at 50 cents a bushel. They had 50 acres of potatoes, 60 in oats and the balance in roots and garden. They had 3,000 bushels of corn, 3,000 bushels of potatoes, 2,200 bushels of oats and a proportionate amount of onions and other roots and vegetables. There are 110 hogs 20 head of cattle and 10 horses on the farm. Thirteen guards care for the prisoners, and these, with the warden and deputy, complete the pay roll of the institution, which is now run at an average expense of less than $2,000 per month. During the first six months of the present year the expense was $1,000 less than the year before, but is increased now by increased numbers. The present board of directors is Roderick Johnson, chairman; Col. C. A. Lounsberry of Fargo, F. H. Register and W. H. Bratton, Burleigh county and Ole C. Wing of McLean county. E. H. Wilson is warden and Murdock McKenzie deputy warden. The clothing is made in the prison of North Dakota grown wool, manufactured into cloth in North Dakota. —C. A. Lounsberry.

GRAIN RAISERS.

There Should be Various Sorts of Them—The Things That Will Grow in North Dakota Should be Grown There in a Scientific and Farmer-Like Manner—The Subject Treated by One of the Most Thorough and Successful Farmers in the Northwest.

All farmers should diversify their crops, but no one should undertake to raise all the farm crops on one farm. The grain raiser should raise wheat, oats, barley, flax, and potatoes, if near a large town or railroad station, in connection with dairying, and hens are sometimes profitable. A few cows can also be kept to furnish milk, cream and butter for the use of the farm. If any part of the farm is rough or unfit for cultivation such land should be made to furnish beef for the use of the farm and some to sell in case there is a surplus. Wheat will, however, for a long time to come be the principal crop in North Dakota and Northwestern Minnesota.

Dairying, cattle raising and hogs is entirely a separate business from grain raising, although bar ey and corn s ould be raised in a limited amount in connection with dairying. Stock raising goes well with dairying, as quite a number of calves can be raised on the farm from the dairy cows; hogs can be fed partly on the skimmed milk and buttermilk left after making butter, and in case a separator is used the milk can be fed sweet, mixed with barley meal, corn meal, or wheat bran, and in my opinion it is better to feed the milk sweet, although some prefer it sour. If it is sour it should be fed before feeding. At this time the products of the dairy are the best paying of all the farm products. A farmer should diversify which ever of the two lines of diversified farming his farm is best adapted to, then govern himself accordingly; if the farm contains much rough land, more stock should be raised; if hay is plenty and pasture good, dairying can be carried on profitably; but on the other hand, if the land is smooth and high with wild hay and pasture scarce, then grain should be the principal crop.

—James Holes.