

PROMINENT MEN I HAVE MET

By
L. H. PAMMEL, B. Agr., M.S. Ph. D., D. Sc.
Head Botany Department
Iowa State College

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AMES, IOWA
1927

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PREFACE

This is the second of a series of articles on "Prominent Men I Have Met" which were written for The Ames Daily Tribune. I am under great obligations to The Tribune for the publication of these articles. I am also indebted to Miss C. M. King for much assistance.

The first installment contains biographical sketches of Alfred Russell Wallace, Prof. J. L. Budd, Dr. Seaman Ashel Knapp, Dr. Asa Gray, Dr. Millikan Stalker, and Dr. James Wilson. In this number I present a sketch of the lives of Dr. William Beardshear, Prof. F. E. L. Beal, Dr. H. J. Detmers, Dr. C. C. Nutting, Dr. Leroy Titus Weeks, men with whom I was connected and associated for a great many years in the teaching profession, conservation and research work. The men whose names are mentioned have had a wonderful influence on the science and educational work of this state.

Letters of appreciation have come from men who have read the articles in The Ames Tribune and many who have since seen the articles published in the first part of "Prominent Men I Have Met."

I am glad that I can be of some service to present in outline the lives of men who have influenced this generation. The story of "Prominent Men I Have Met" will be continued to include those who have been connected with the Iowa State College and those who have been eminent in our educational, science, conservation and civic work. Along with these, biographical sketches will be given of other men including Major John F. Lacey, Dr. C. C. Parry, Dr. William Trelease, Dr. E. W. Stanton, Dr. W. G. Farlow, Dr. Frederick B. Powers, and Dr. C. R. Van Hise.

L. H. PAMMEL.

Ames, Iowa, July 8, 1927.

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WILLIAM MILLER BEARDSHEAR

It is a pleasure to include Dr. William Miller Beardshear in my series of sketches of "Prominent Men I Have Met," not only because he was a great college president, one of the greatest to head the higher educational institutions of Iowa, but because he was so genuine and sympathetic in this educational work. He was sympathetic towards science and the great out-of-doors. He was a man with a big heart. He commanded respect everywhere because of his honesty and integrity, and high idealism. Opportunity came to him to become the head of a great educational institution. He used his opportunity wisely, not for selfish purposes but as a service to this commonwealth. The college gave him a larger outlook on educational problems of the day. It helped him to come in contact with a clientele that needed the guidance of a great and magnetic personality. Dr. Beardshear was a great man in the estimation of the thousands who met him in the public school, the church, and at public gatherings, because he was so genuine. When Dr. Beardshear made these public addresses in a community, and if he knew there was an Iowa State college student there, he would call on the parents and the student. These visits were long remembered by them. It was this friendship that commanded respect. Those who wish to look into the career of Dr. Beardshear will find it splendidly portrayed in that charming book "A Boy Again, and Other Prose Poems," which some of his friends issued after his death. I have published two biographical sketches, one in the Proceedings of the Iowa Academy of Science (10:2), and one in Bailey's Encyclopaedia of American Agriculture (4:555). I shall take the liberty of republishing the whole of the Iowa Academy sketch with some additions and changes. I wrote a brief sketch of his personality for the college history committee a few years ago. I am using most of this, also. My sketch in the Iowa Academy, slightly changed, follows:

Dr. Beardshear became a member of the academy of science soon after he was elected president of the Iowa State College. He took an active interest in its progress, tho never presenting any papers. He was, however, deeply interested in building up the scientific side of every department represented in the academy. He saw the importance of science in all of its phases to human industry and education. In his death the academy loses an active friend and supporter.

The writer's acquaintance with Dr. Beardshear began when he delivered one of the Sunday morning addresses at the college chapel in 1890. This address, like others of his it was my privilege to hear, was full of noble thoughts and expressions. Early in 1891 he was elected to the presidency of the Iowa State college, and one of his first official acts was to preside at the experiment station council, at which the members of the station council had gathered for the purpose of outlining a policy of the work to be carried on by its staff. On this occasion, as in all others where he dealt in an official capacity, he was tactful and cautious. His success as an executive rests largely in his tactful way and the kind consideration he gave to all matters coming before him. This won for him the respect and confidence of his colleagues. I had the privilege also of being associated with him on the geological board, where every question was treated in a broad-minded manner. As a member of the faculty I found him very considerate for the wants and needs of the student body. He outlined policies that were not narrow nor one sided. He always worked for the full and complete development of the student. Mental training was not sufficient, but the social side of the student as well as athletics must needs receive attention. He wished the college to turn out men and women in the broadest sense.

Dr. Beardshear had two requisites for a successful college president. One was a commanding presence, which at once caused him to receive respectful consideration. He never had to resort to unusual methods as the student obediently followed his suggestions. Secondly, he had splendid executive ability. He was careful never to commit himself to a student, and by an instinctive process brought out what the student had to say. He then dealt with the student body as his conscience dictated.

Dr. Beardshear was a great lover of the beautiful in nature; the trees and flowers were an inspiration to him. He knew them from boyhood. When as a boy he had to cut trees on an Ohio farm, or afterwards roaming thru the woods on a hunt, the trees and flowers became an open book to him. I remember a long talk I had with him when he returned from Montauk, N. Y., where he had been attending a meeting of the United States Indian commission. The beautiful chestnut oaks on those grounds appealed to him. He had a strong affection for his old home in Ohio where his aged mother continued to reside until her death, and where he made a yearly visit. His home ties were equally strong and he had the strongest affection for his family.

The chief events of his life are as follows: He was born at Dayton, O., November 7, 1850, and his boyhood was spent on the farm. He entered the army of the Cumberland at 14 years

of age, his early education having been attained in the public schools of Ohio. He received the degree of bachelor of arts from Otterbein university in 1876, and later the degree of master of arts from the same school; he also received the degree LL. D. from his alma mater. He took two years post graduate work at Yale university beginning in the fall of 1878. He was a minister of the United Brethren church and held pastorates at Arcanum and Dayton, O. He was president of Western college, Toledo, Ia., from 1881 to 1889, and at that time was one of the youngest college presidents in the United States. He brought Western college from an obscure institution to one of standing among the colleges of the state. He was superintendent of the city schools of Des Moines from 1889 to 1891, where he displayed unusual executive abilities. To be a successful city superintendent requires tact and ability of an unusual kind, and he had both to a marked degree. He was president of the Iowa State Teachers' association in 1894; served a term on the executive committee of the Iowa State Teachers' association; was director of the National Educational association from Iowa for a number of years, and was president one year of the department of manual industry and training of that association; he was president of the Iowa State Improved Stock Breeders' association in 1899, and delivered the annual address that will long be remembered as a powerful one. In his delivery he displayed all of his powers of oratory, combined with wit and wisdom. He was a member of the United States Indian commission since 1897; was juror on educational awards at the Pan-American exposition, Buffalo, in 1901, and president of the National Educational association, 1901-1902. He died August 5, 1902, at Ames, Iowa.

One of his strongest addresses was delivered at the commencement exercises at Ames in June, 1902. The same month he delivered an address at Manhattan, Kan., and had prepared an address for the National Educational association, which met at Minneapolis, Minn., but which, however, was not delivered. Dr. Beardshear was the first president of the National Educational association to come from the state colleges. He had worked earnestly to extend the scope of this body, as well as the Association of Agricultural Colleges and Experiment Stations. In this body at the San Francisco meeting he had a resolution introduced, which was carried, looking for greater co-operation between the National Educational association and the state colleges.

A large concourse of mourning friends attended the funeral services, held in the college chapel at Ames on August 7, where addresses were made by President Bookwalter, Dr. O. Cessna, Professors Stanton and Loos, Superintendent Barrett and Will Boyd.

One of the best estimates of President Beardshear may be found in what President Bookwalter said in speaking of him as a man. "His strength lay as always, chiefly in his greatness of heart. His whole career was marked and made illustrious by his lofty, self-sacrificing devotion to the good of others. He literally gave himself without stint—alas, as it would seem, with too little thought of an overtaxed body—to the great interests committed to his care. But we would not have had him less the great hearted servant he was, the follower of Him who 'came not to be ministered but to minister.' What a noble soul he was. How life was emphatically an outpour. And what an outpour, what an overflow, watering the waste places and making everywhere the lilies to grow."

At the funeral exercises of Dr. Beardshear, Dr. Orange Cessna paid a beautiful tribute to the life of this great man in this fine finished oration. Dr. Cessna especially emphasized the sympathetic nature of Dr. Beardshear; "Our president was great in his sympathies. His heart responded fully and genuinely to every emotion of gladness or sorrow of his friends. I think perhaps no one trait of his great nature was more prominent than this and none, I am sure, will be more deeply cherished by the faculty and those who came in closest touch with him. He had the rare gift of interpreting the deeper feelings of the heart and to this he added facility of expression. Dr. Beardshear's was a rich, poetic nature. He loved the beautiful everywhere. He went beyond the mere outward form and show of things and sought the deeper mystery and reality of the poet's vision. His poetic instinct touched everything into new life. He enabled one to see new beauties in the dull dead commonplace things of life. He was deeply and thoroly Christian. Not in a narrow dogmatic sense, but in the wider, truer Christ-like sense which accepts everything as the gift from God, and hence sacred. The Monday as well as the Sunday, the little commonplaces as well as the great things of life—"God is as truly in nature as in the soul of the prophet and truth of science is therefore as divine and authoritative as truth of the Holy Scriptures." Dr. Cessna especially emphasized the high Christian character of the man and the fine poetic nature of his soul.

Equally noble sentiments were expressed by Prof. E. W. Stanton, in his address at the memorial services for the college students on September 7. "Two days in college history—February 17, 1891, and August 5, 1902—stand out before me in a similar impressive way. On the one, a great and lofty soul came into touch with a great and lofty mission. On the other, undaunted, triumphant, glorified, with the spirit of a true soldier, our beloved president answered the summons which called

him into higher fields of duty. Between these dates lies the greatest work of Dr. Beardshear's life, a work sanctified by such full measure of devotion, courage, and self-sacrifice as lights up the grief and mystery of today with a far-reaching, prophetic hope, and confirms our faith in the God-like possibilities of human living."

It is gratifying that the following individuals—Johnson Brigham, Prof. Isaac A. Loos, Prof. E. W. Stanton, Herman Knapp, Luther A. Brewer and W. R. Boyd—brought out a memorial volume under the title "A Boy Again and Other Prose Poems." To quote from this volume and the Cedar Rapids Republican:

"And it is so now. We scarce can make him dead—any of us who knew Dr. Beardshear. But recently he seemed so strong, so full of power, so much to do that only he could do."

"Some lives there be which may end at any time and none take note of their departure outside the family circle; most lives perhaps end so. And there are other lives, commanding the attention of the world, which seem to close as grandly and as naturally as the splendid setting of an unclouded sun after a perfect day." The article by W. R. Boyd is particularly fine.

In this volume are collected some of the finest sayings and addresses of Dr. Beardshear and are well worth reading. Every student in college might appropriately spend a little time to read this wonderfully fine prose poetry. Take that splendid address "The Geography of Character" in which he delineates in a splendid way the character of the man.

"Recent orators are talking upon the theme, 'back to the land.' We must go farther—back to the earth. So much earth rightfully assimilated, so much more strength and power. There is a geography in character. A man's chances in life rest vitally upon the nature of this geography in his face, in his brains, in his life."

Dr. E. W. Stanton, who came in close contact with him, in a fine appreciative way says: "As I stood one day on a bit of sacred ground which American valor had lifted from obscurity into enduring fame, my eyes were attracted by two dates on the stately shaft of marble which marked the historic spot. One told when brave men came up to the place where a great work was to be done; the other, when they moved on to new fields of high achievement. It was a simple thing; and yet under the spell of those battle scarred surroundings the deep import of those dates grew upon me until the ground on which I stood seemed holy and the very air tremulous with the impressive story."

Major S. H. M. Byers of Des Moines, well known to early

Iowans and a poet of fine ability and a good friend of Dr. Beardshear said:

Good bye, dear friend, your voyage new begun,
We stand and watch you sail out on the deep,
Beyond the rim of yonder setting sun,
Where other worlds in vaster circles sweep.

Far, far, and yet your pilot knows the way,
Where all to us seems shadowland and dim,
To you, one sudden, glorious, burst of day,
Because on earth you lived and loved with Him.

One of his associates in the faculty, Mrs. R. W. Crawford, who is a most capable judge of men and women, in an interview said: "Dr. Beardshear was a good man and a great president, a man with vision. I recall one little incident, showing the bigness of the man. Constance Beardshear was a little tot. She met him on the college grounds. He picked her up, gave her a kiss and hug. He was sympathetic and full of feeling."

On one occasion, Hamlin Garland, the author of "Main Traveled Roads" and other pioneer stories, was invited by Dr. Beardshear to spend a few days on the college campus. He became so thoroly impressed with the greatness and lovable character of Dr. Beardshear, and said at the time of his death: "It is with profound grief that I read of the death of Professor Beardshear. He was a splendid type of American, and tho I did not know him well, I honored him. I met him first at a college banquet at Drake university, and as he rose to speak he seemed a powerful, brusque and serious man. It was only later when a guest at his home that I learned to know his essentially fine poetic nature."

One of his friends with whom he was associated in college at Toledo and earlier in life as a student, Dr. Isaac A. Loos of the State University of Iowa, and who was frequently invited to address the students at Ames, said: "The larger tasks of his life, if such a distinction can be made, began with his call to the presidency of Western college. This institution was transplanted from Western, Linn county, to Toledo, Tama county, in the summer of 1881. "This," in the words of Dr. Bookwalter, the present president of Western college, "was evidently a time both of crisis and hope for the college. A new era was to be entered upon by the school—an era, it was hoped, of new life and of enlargement. Where was to be found the man for leadership in the task proposed? Tho it seemed like an adventurous thing to call to such a post a young man of but 30, yet the unanimous choice of those in authority was the vigorous, growing, consecrated young pastor at Dayton, O., Rev. W. M. Beardshear."

"Dr. Beardshear had friends everywhere, wherever his

work had taken him. He was a member of the Grand Army of the Republic, a Mason of high rank, and affiliated with various literary, political and social clubs. Among these were the Prairie club and the Grant club of Des Moines, the Walt Whitman club and various university clubs."

Student opinion of the faculty and an executive is always interesting, and perhaps it gives a better reflection of a man's character and ability than general public opinion. This is true especially when the person has had time to reflect, so the interviews with students given me a few years ago are most valuable.

Dr. E. M. Stanton, a prominent physician of New York and one of our graduates, says of Dr. Beardshear: "He was a truly great president, good executive and a wonderful educator, a real inspirer of students and faculty. Always sympathetic, carrying a fine perspective of educational matters."

Arthur Secor, an alumnus of 1905 says: "One of the greatest men I have ever known; I mean great in originality, outstanding and remarkable ability as shown by the accomplishments of his life. And with the largeness of his work he did not neglect the details. To have known such a man personally is a rich memory to me."

Dr. C. R. Ball, a broad-minded man and with a fair attitude on men in an interview said to me: "My first impression of him was of a large man, towering above everyone, deep set dark eyes and a black beard. He was most inspiring to a freshman, and yet he had a very warm quizzical smile, and a real sense of humor. I remember how at one time there was a rule that students going down town had to have permission from the president. I was taught always to take rules literally, and as I saw such a rule posted either in my room or somewhere, I do not recall just now where I did see it, to that effect, I went in and asked him if I could go down town. I will never forget him. He looked up thru his glasses and said, 'Are you coming back?' and I answered, 'Sure, I'll be back in a couple of hours.' And he began to grin. He was a great inspiration, a man of wonderful vision and energy, a hater of hypocrisy and for mental or spiritual laziness who did not hesitate to say so. In his prayers at chapel, which were long and worth while, he had a way of inventing new words and coupling words to bring out a stronger meaning and of running them into groups, keeping his listeners on tip toe all the time. I do not mean to say that this detracted from his prayer, as it did not. He was putting over a message. In his church talks how he used to score the wrong doers, saying, 'I am talking to a few heads of the many.' He was contemptuous to the person of the little mind and little soul. When some student would do some contemptible little thing he was angry. I remember he had the habit of

strolling along in the late evening for a regular walk. I suppose this is how he built up his strength for the next day. I remember that upon one of these night walks (it was a habit of some of the boys to run over to Boone and get back early the next morning) he started out to walk along the Boone road and finally fell in with a couple of student boys walking in that direction. He simply walked on with them and did not suggest turning back nor did the students suggest turning back. I do not remember whether they walked clear to Boone or not, but believe he got a lunch for them and hired a cab to bring them back.

"I remember one time with Dr. Newell, I was on my way to attend an annual meeting of ornithologists at Manchester and we were waiting for a train at Cedar Rapids about 4 o'clock in the morning. We were contemplating a hard day's work and ordered a heavy breakfast at the lunch counter. While we were at the lunch counter Dr. Beardshear walked in, sat down at a table without seeing us and ordered a half watermelon. After we had our breakfast we went over to where he was and had a very pleasant talk.

"On the whole he was a wonderful inspiration and it is a pity he was not appreciated more by the students. Some of the students regarded him as a tyrant.

E. A. Sherman, one of our able graduates, said to me in an interview:

It is difficult for me to put in cold and formal expression my estimate of Dr. Beardshear as a man, as a director, as an instructor, and as an executor. Most men are insular in character; Dr. Beardshear was continental. There was in him a breadth and diversity, mountain ranges and plains, everything that is elemental in humanity except littleness and meanness. I was 25 when I graduated. I am writing this 27 years later. In 52 years of rather unusually active life, I have met two men beside whom all other men have seemed to me to be children, and Dr. Beardshear was one of the two. Surely this is sufficient distant to remove glamour with which the eyes of youth appaels its beholdings. If this is not sufficient perhaps the fact of personal clash may in itself indicate a willingness to do justice and no more. For I did clash with him seriously the very night before my graduation, a fact at the time known to but a few.

And yet I loved and admired Dr. Beardshear as I have loved and admired no other man not of my own blood. Altho I took one term psychology under him, I do not feel qualified to fairly appraise his value as an instructor. It was my feeling that his time was so much occupied with other things that he could not give his daily subject the careful thoughtful previous preparation necessary for its illuminating development before the class.

But as a director, an executive, and a man I admired him tremendously. His hold on the spirit of the student body was powerful. His personality radiated magnetism, and he came closer to being a mind-reader than any other human being I have ever met. His grasp of student psychology was almost uncanny. His personality had in it many features characteristic of Lincoln. His features at first

glance impressed you as extremely homely. I use the word "homely" with careful deliberation, for "homeliness" is "redolent of affectionate care and toil." It carries with it a comfortable sense of mutual understanding and appreciation. Like Lincoln's his face at first glance repels you and then attracts; but the attraction grows in intensity until you see beauty in every rugged line and feature. At the time of his death he was one of the most commanding figures in the educational world. Had he lived he would have gone far. His influences on scientific agricultural education would have marked the age.

Dr. Ira C. Brownlie, one of our prominent graduates and a dentist in Denver, Colo., had this to say concerning Dr. Beardshear's interest connected with athletic matters: "The Iowa intercollegiate baseball league consisted of the following colleges: Ames, Iowa, Grinnell and Drake. We defeated Grinnell and Drake; Grinnell 8 to 5 and Drake 20 to 1, and also the State University of Iowa 10 to 2; thus Ames won the silver bat, the first time the trophy was won. I played second base. (I recall Dr. Brownlie caught a ball over his head and put the man out on second. L. H. P.) Dr. Beardshear who was watching the game, threw his hat up into the air. Dr. Beardshear's commanding presence was noticeable. He would attend all of the games, look intently and comment when good plays were made. I knew him well, a great man, a man with a vision. He put the college on its feet and gave it a start because he had a broad outlook on educational work. He died too early in life. Dr. Beardshear was a friend of the student body. He grew eloquent when he addressed students."

Judge Thomas Cares Burke of New York city did not know Dr. Beardshear here, but later met him in New York and made this estimate of his character: "Dr. Beardshear was a very aggressive man for the college, fine scholarship with a wonderful amount of mental energy and thoroly devoted to the college and its interests and by reason of his activity did much to give character to the institution and broaden its influence."

One of the engineering students, A. A. Canady, said to me in regard to Dr. Beardshear: "I entered in 1900 but could not make arrangements to go on. I went to Dr. Beardshear personally. He arranged so I could enter. He struck me as the finest man I had met, so approachable, a big man and sympathetic. He was right with you. My father knew him and liked him. He always thought a lot of him and would get him to speak at G. A. R. reunions. Dr. Beardshear's heart seemed to be in education."

My friend and student, Edgar Cory, told me in an interview: "Dr. Beardshear came in while I was a student at Ames and we hardly knew what to expect of him but it was not long before he won the confidence of the student body. He knew how to handle young people and knew how to handle the faculty. Every student while I was there respected Dr. Beard-

shear. He had the viewpoint of the student and more than that he had breadth of vision. He could take the case of any difficult problem and solve it to the satisfaction of everyone. Let me give an illustration:

"An itinerant Italian came on the college grounds with a bear. The Italian made the bear climb poles, etc. The students soon began to gather round the bear and the Italian. Then the Italian tried to make the bear climb the pole with a hundred or more students around. The students were of course anxious to see the performance but the bear refused to climb the pole and so the Italian would lash the bear. Dr. Beardshear came on the scene. He at once made the Italian move on. 'Get off the campus,' and then he said to the students, 'You do not think it is fun to watch this man lash the bear do you?' The students at once dispersed and at heart all felt ashamed of themselves. I know often that the business men of Des Moines who mention the fact that Dr. Beardshear was superintendent of schools in Des Moines and these men always speak of him in the highest terms. Only the other day I met Mr. Piper who publishes the 'People's Monthly' of Des Moines, and he said that when Beardshear was in Des Moines that he was on the Register and certainly found Dr. Beardshear a big, large-souled great man."

In regard to the fraternities and sororities, a good judge, Mrs. Carrie Cottrell, said in an interview with me: "While teaching in Ames, Miss Nell Johnson and I were elected honorary members of the Philomathean society. This was started as a protest against the ban on secret clubs and sororities. All the members of this society were connected with secret organizations. Dr. Beardshear was invited to a dinner by various secret societies. He was the man they wanted to roast. Dr. Beardshear told the assembled guests that these secret organizations were to be done away with but in spite of this difference of opinion on fraternity matters, I want to say that Dr. Beardshear was liked by the student body, almost worshipped.

Prof. Mark Thornburg, secretary of agriculture, whose contact with men makes him an unusually good judge, says: "I think Dr. Beardshear was one of the greatest college presidents of the country. His personal contact with the students was greatly appreciated by all. He was never too busy to listen to anyone. He had a wonderful memory. He was one of the most human men I have ever met."

Jennie Fedson Kirkman, who knew Dr. Beardshear as a student and who because of her prominence in her class told me in an interview: "It was my privilege to know Dr. Beardshear during my freshman year. He has always seemed to me an ideal college president. His ability to identify himself with

his faculty and students was marvelous. He knew us all, and we all knew him."

C. C. Quinn, Boone, Ia., gave me the following comment: "A great educator with a heart for the beautiful, not only in nature but for those things that builded for character in the lives of those who came under his wonderful influence."

Miss Virginia H. Corbett, who is a good judge of characters says: "The administration of President Beardshear seems to me an important era at Ames. It is, of course, the time I know best. He succeeded in removing elements of friction and producing harmony on the campus and confidence in the state which resulted in wonderful growth which has gone on since his work was finished."

The community in which the life on an individual is spent must measure a man or woman by personal contacts. This Beardshear contact was splendid.

Parley Sheldon, one of our leading Ames citizens, a veteran of the Civil war and a personal friend of Dr. Beardshear, has this to say: "Dr. Beardshear was a great man, not only as an educator, but as an executive. When the students would try to steal a ride on the Chicago & North Western railway to Boone, he would sometimes accompany these boys on the train and when they got off he got off. He would buy their supper for them, then buy tickets back to Ames. The students all respected Dr. Beardshear. He was always on hand when something was going on. Dr. Beardshear could make a fine address. He was great when it came to talking to soldiers at soldiers' reunions because he was a veteran of the Civil war himself. It was my pleasure to take Dr. Beardshear on several occasions to those county reunions. The old veterans always wanted Dr. Beardshear. Dr. Beardshear was a great mixer and a great man for the institution."

Uncle Henry McCarthy, who gave me an interview on March 2, 1922, and who grew up with this community, said to me:

"Dr. Beardshear had the reputation of being an all around popular man, liked by everyone. At the graduation exercises of a class he said, 'You are going out to mingle with your fellow men, to get more education. It does not matter what party you belong to or what church, if any, the main thing is, "Be a man".' It is to be regretted that his useful life could not have been spared many more years to the college."

One of the business men of town, L. M. Bosworth, says: "I considered Dr. Beardshear a strong man and a good organizer; a fine speaker; and I think helped the college a great deal thru his influence with outside people and by his influence over students. He looked after getting the college before the people of

Iowa and he did it in the right way. He was a fine man to meet and he always felt that interests of the college and the city of Ames were the same. What is good for one is good for the other."

Robert Cairns, a traveling salesman, once told me that Dr. Beardshear stood well with the traveling men of Iowa, because he made their acquaintance on the train and took pains to tell them about the college. These men were real friends of the college, and when the first college excursion was arranged, these men saw to it that this excursion would be a success. He was therefore delighted to see them on the campus. I recall meeting one of these salesmen on a train between Ames and Jewell Junction, who said to me, "Dr. Beardshear is a great college president. I am going to send my children to Ames, because I know they will be taken care of, and the education they get will be of the right kind."

Mrs. Blaize who was private secretary to Governor Kendall and a former resident of Toledo, Ia., where she was a student under Dr. Beardshear, made this statement to me: "Yes, I knew Dr. Beardshear well, a big man, intellectually a man with broad talent—I remember when he was called to Des Moines as superintendent of schools and later went to Ames. There were several persons in Iowa, among these Judge Kinney, Tama Jim Wilson and Henry Wallace, who wanted Dr. Beardshear to be president of Iowa State college. In order, however, to get this place, his friends thought it would be wise to be elected as superintendent of schools in this city. It was carried out and he was elected to the vacancy in the Des Moines schools and later went to Ames."

A few years ago I wrote the following for the college history committee:

Dr. Beardshear came to the college when the farmers of Iowa thru men like Henry Wallace, Tama Jim Wilson (secretary of agriculture), John Cownie and others wanted the curriculum changed so that more students would take agriculture. Dr. Beardshear had some experience as an executive in Leander Clark college (then under another name) in Toledo, Ia.; also as superintendent in the Des Moines public schools in both of which places he was eminently successful. He was a Civil war veteran and it is said the youngest man who enlisted from Ohio. He was, therefore, always interested in the old soldiers of the Civil war, and was always ready to do something for the soldier. He was magnanimous to the south and felt that the wounds of the Civil war should be bridged over. He was one of the most tolerant men I ever met. He was interested most in the goodness of man rather than in creed.

Dr. Beardshear had a profound influence on students. They

would give him all the information they had when anything went wrong. He would question the student and before he was thru he knew everything about the whole affair. He needed no proctors to inform him. He was always magnanimous to the offender and the sentence in most cases was light. The students came back and promised to obey the rules of the college. I ~~know of no~~ student who ever broke his pledge to Dr. Beardshear. There was always something wholesome about the man. He looked square at you, and would ask your advice in important matters. He was willing to concede many things if he thought it was for the good of the student, faculty, community and state. He was a familiar figure on the streets of Ames, would drop in and talk over matters with citizens and faculty, and I think his success was due to his wise diplomacy.

Dr. Beardshear kept in touch with the faculty. For instance he used to pay me a visit in my office and laboratory and ask questions, showing a genuine interest in college work of every kind and in every department; science, literature, history, psychology, engineering and agriculture. They all interested him alike. It was fundamental to have good training in all of these branches to make good men and women and fit them for their work in life. Trivial and minor matters were looked at as important in our every day life. Of course the college was small, but he knew by name many of the students. He would speak to them when he had an opportunity. It was nothing uncommon for him to visit for an hour or more with students because they were fellow human beings with hopes and aspirations. I remember the preaching of a funeral sermon of a young man who committed suicide in the college orchard. It was a fine sermon, full of pathos and feeling for the young man who in a moment of despair lost himself and passed into eternity.

On another occasion Dr. Beardshear called a special chapel in what is now the assembly room in Morrill hall. While Dr. Beardshear had been in Des Moines trying to secure an appropriation for the college some students went on a rampage, so in eloquent terms he appealed to the student body to desist this play work. There was no more of it during that session of the legislature. It was an appeal to the manhood of the young students to do the right thing.

Dr. Beardshear was eminently successful in bringing the college before the public in its right attitude. There also grew up a more friendly relation between the colleges of the state; the university and Iowa State college. The relations were often strained, but Dr. Beardshear made the point that the educational institutions should only have a friendly rivalry.

President McLain of the State University of Iowa told me

last winter that when he was elected to the presidency of the State University of Iowa, he made it a point to stop at Ames on his way from Lincoln, Neb., to confer with Dr. Beardshear, to talk over educational matters in Iowa. He was charmed with his personality and the broad-minded spirit manifested towards the university.

I remember the deep interest he took in bacteriology. He paid me a visit on one occasion and we discussed various phases of the subject. When I introduced the subject of ecology he asked me before the faculty meeting to explain what was meant by the subject. He wanted to know, as he was of an enquiring mind.

I remember another interesting interview I had with him about the Parry collection. It was suggested to me by Dr. C. E. Bessey that the college should purchase the collection since Dr. Parry was formerly a citizen of Iowa. He asked me, "Do you think it wise to buy this collection and where can we get the funds?" I told him I certainly thought we should buy it and gave my reasons. There were no funds and we had to use some accumulated interest funds. Dr. Stanton helped in this arrangement and the collection was purchased from Mrs. C. C. Parry. This was the largest single outlay of money the department had ever spent. Dr. Beardshear I think was always proud that this collection was purchased for the college. When the department needed praise Dr. Beardshear always gave it; the same was true of other departments. I can truthfully say that Dr. Beardshear was always friendly and one to whom a person could go for advice.

Dr. Beardshear was a great orator, ordinarily somewhat reticent but when he became interested he threw all of his strength into the subject. I have heard many fine speakers but none who have so impressed me with such feeling and genuineness. He was tall but not handsome, but his sincere utterances soon held the audience spellbound. I recall many of his fine baccalaureate sermons. I wish we might come back to the day when the college president will deliver a baccalaureate sermon giving admonition to students who are about to leave the college,—talk, if you please, to his children.

I consider it a great privilege to have worked with Dr. Beardshear. Let me relate a little incident. I had Dr. Trelease of the Missouri botanical garden come here to make a Sunday chapel address. Of course, I took Dr. Trelease down to meet Dr. Beardshear. We had a pleasant little chat and then left. Dr. Trelease remarked to me, "You have a great president," and "one instinctively must respect him. He being a large man in itself commands respect, but he is more than that, he is genuine." I may conclude by saying during the regime of Dr.

Beardshear the number of students began to increase very rapidly. It came to occupy a more important place in educational affairs of the state. He urged that faculty members identify themselves with outside interests like the Academy of Science, and State Teachers' association. He was president of the National Educational association when it met in Minneapolis. He delivered his address, came home a sick man and died in August. I should add he was not well when he went to the meeting. I saw him a month before he died in the sick chamber, had a long visit with him. He was as cheerful as he could be. I talked about various college matters and in particular about botany. I went out west and could not return for the funeral.

Dr. Beardshear was a great man, one of the outstanding educators of Iowa. His memory will ever be blessed to those who knew him. To me he was a friend.

There are two other points to be mentioned in connection with Dr. Beardshear's regime. In the old days of the college there were very rigid rules about going down town, and students in his administration were given the privilege of going to the city and coming home when they liked. He relaxed rules on dancing, which he permitted. Students were allowed to attend church of their own choice and chapel ceased to be obligatory. Tolerance in religious matter was shown—he was broad-minded.

Dr. Beardshear was opposed to fraternities and sororities in the college, until such time as seemed propitious. He therefore got the only fraternity, Delta Tau Delta and the sorority, Pi Beta Phi, to voluntarily give up their charters. He instituted a friendly suit to test the power of the board to see whether this could be done. The court decided the board of trustees had full power to do this. During his presidency the college annual was started, and I think the first volume was dedicated to him. He examined every part of the proof before it went to press. He did this for two or three years. I remember telling Dr. Beardshear once that he should abolish the judiciary committee, that he could handle these matters better than the committee. He did abolish the committee.

In order to refresh my memory on some of the things Dr. Beardshear stood for, I have looked up some of his reports. I found also some other historical matter. Some years ago the editor of the Iowa State College Student (June 1, 1908) asked me to prepare an article "Looking Backward," in which I made this comment: "A new era was inaugurated at the time Dr. Beardshear became president of the institution. The broad-minded spirit of the man at once saw the necessity of making the agricultural work as prominent as the engineering and scientific work of the college." Then I referred to the splendid teamwork of Dr. Beardshear, Professors Wilson and Curtiss.

The scientific attitude of some members of the faculty was splendid; witness the many fine scientific contributions made by C. E. Bessey, H. Osborn and Byron D. Halsted, and the fine work in engineering and veterinary medicine, but agriculture lagged. To bring new life into this work was the task these men, Henry Wallace, James Wilson and John Cownie set before them. Dr. Beardshear was the man selected to carry out this program. He was virile and broad-minded.

The biennial reports are interesting. Dr. Beardshear was generous in his praise for the men and women who helped in this great task. In the biennial report for 1892 and 1893 he says, "The state of the college is on the whole encouraging. The work of the faculty is characterized by a spirit of unity of growth." He submitted reports from each department and asked the legislature to give each careful consideration. "I count it a high privilege to express my highest gratitude and appreciation as to the intelligent co-operation and help of all professors, teaching assistants, office assistants, to the students, citizens of Ames and vicinity, to the alumni patrons and friends of Iowa State college thruout the state and country." Notice that no one was forgotten. We are all on an equal footing. If one is worth mentioning, then all are. In 1894-1895 he was glad to report great progress and he speaks of the harmonious organization of the college. In 1896-1897 he again notes marked progress and hopes better things are to come. He stresses the importance of scientific research work for the benefit of the farmer.

Personally, I was much indebted to him for his kindly interest in our botanical work. He was always sympathetic. I wanted the Parry herbarium for the college. He was enthusiastic and his report said how valuable it was for his college and in 1898 and 1899 said, "A working collection of botanical specimens is indispensable for carrying on botanical work. The Iowa State College is fortunate in containing an extremely valuable collection of plants made by the late Dr. C. C. Parry." Noted when the plants were collected and said, "This collection was purchased at a cost of \$5,000; five times \$5,000 could not replace it." Then he commented on the other plant collections. He urged a fire-proof building. He was always interested. He came to see me and talked about it, or he would bring some friend to see the Parry collection. It was interest like this that gave zest to our work. What he did for me was repeated elsewhere. We needed encouragement and sympathy, and Dr. Beardshear gave it.

In 1894 and 1895 he wanted to have a chair of pedagogy established and wanted a veterinary hospital to treat contagious diseases. In 1895-1896 he recommended a residence for the col-

lege president. He reported substantial progress in material and educational facilities and there were larger and better things to come. Plans of changing college year were outlined. In 1898-1899 he urged the importance of a department of mining engineering. Our mining interests are large and the school will fill an important place. He advocated a brief name for the college, "Iowa State college." It is not merely agricultural but engineering, science and agriculture. Each is helpful to the other.

Narrowness in any educational system is bad. Calls attention to liberal educational outline in the Morrill act. Was pleased with the nature study leaflets. He was essentially an outdoor man and saw the need of inspiring the youth along this line. The campus as planned with its inspiring setting in groups, a little shaded ravine with the overhanging branches was a charm to him. He would often stand in the old ravine and look up at the fine maples and spruces and express lofty sentiments. His reports again finished by an acknowledgement of help received from his associates. A generous mind governed by an impulse to be kind to all.

Dr. Beardshear was one of the great orators of the state. Few men could equal him in flights of genuine oratory. In one of these fine addresses, "A Boy Again Just for a Night," he describes to us the return home to his mother in Ohio. I heard this great address which has in it the sympathy, a son's love for his mother and his longing for home.

"Man is a sheaf and the straws are moods. These are chaotic, epochal and formative. Once in a great while a man longs to be a boy again. The boyish instincts of all the years rebirth themselves in his soul. A cradle song comes back to him with the discovery that mother sang it for her own heart as well as his:

Backward, turn backward, oh time, in thy flight,
Make me a child again, just for tonight!

"In such an epochal mood a child in his forties and a mother in her seventies lived life over again just for a night. It came about in this way: Duty and work had separated them hundreds of miles for years. The child in his forties had been summoned from afar to share the indescribable and ineffaceable last hours of the mother. Her absence from boyhood's entrance gate had been intuitional of bad dreams coming true."

The sentiment connected with everything about the old home place is shown in the following sentences: "He turned over with his face to the sky." In grief as in love, "A man without sentiment is a mental cripple." "However appreciative he may be, it takes 40 years to know his own mother."

"The spirit of genuine motherhood is fundamental to all

Christian progress, civilization, and eternal life. Tho one cannot be a child again, yet the spirit of such motherhood is a perpetual benediction dispensing its beneficences upon one's head ceaselessly."

How true to life is the picture he paints for us in a wonderfully fine oration "Some Birds I Have Known." "Some birds, like a few men, leave an immortal impression upon us. We do not need to clothe a bird with human faculties to make it interesting." He was an observer, always meditative. The song of that bird touched his very soul. This comes out again beautifully in another fine address "The Charge of a Brother Walt." "Who aspires to be a Brother Walt must know the earth as his mother, the light as his father, the wind as his friend, the water as his kinsman, the sky as his kindred spirits." And again how everything that builds up character and a soul of man is yours. "All things are yours, the new and the antique, the Greek and the Germanic systems, Kant, Fichte, Schelling, and Hegel, the stated lore of Plato, greater than Socrates sought and stated, the Christ divine—philosophies all, churches all, tenets all, yet underneath all, the dear love of man for his comrade."

His broad human sympathy is shown in his address on "Scotland," when he said of this sturdy people, "It was a wholesome breath of the Almighty that gave birth to Scotland, and a fortunate lot that awaited its native people." Scotland, storm beaten by a hostile ocean, ennobled by its famous highlands, enriched by its fertile lowlands, happified by its voiceful lakes and meaningful landscapes, and brooded over by a sombre and sea-girdled sky, combined influences for the royal birthplace of a self-made people."

Everywhere in his addresses there is a note on nature and the great out of doors. In his address "Influence of Poetry on Education," he said: "In its widest range poetry treats of nature, man and God." There are no distinct boundary lines separating these, and then this wonderful thought: "Poetry brings to education a universal language. Some months ago, standing by trees on the banks of a South American river, environed by flowers of most exquisite loveliness and fragrance, were several Spaniards and an American. We didn't know each other's language, but there was a language in the beauty of the coloring and the inspiration of the perfume that kindled our emotions with a mutual spirit of a universal language. Those flowers were both English and Spanish, and beside us we might have selected representatives of all the tongues of the earth, and they in turn would have understood this mother tongue in the flowers of God."

In every one of these great masterpieces which are brought together in the "A Boy Again and Other Prose Poems" he

shows great knowledge of history and literature and its bearing on our daily problems of life.

Beardshear was a believer in the brotherhood of man. He would stop to converse with the workman in the mine, the pilot on the engine, the man digging the ditch. He believed in goodness of man everywhere and in that peerless oration, "The Universal Brotherhood," he said: "The ideal outcome of a citizen is not to be an American or a Britisher, but a brother man. The truest patriot is the wisest internationalist and cosmopolitan. Man's inhumanity to man is decreasing. The bastille, the inquisition, the dungeon, the rack and the scourge have largely disappeared from the punitive laws of the race."

Those who have given thought to the importance of "the great out of doors" for the future welfare of our race will find in his address "The Rural Home" much that we should take to heart because we will become great as a nation if we encourage the making of rural homes. We must plant our feet firmly on Mother Earth. Dr. Beardshear says: "God made the country, man made the town, and thence springs the question whether we could not find the ideal home in the country rather than in the town. In the town we have a limited horizon, begirt by chimney tops and bedimmed with smoke and soot. In the country we have a horizon touching the friendliness of the treetops encircled by magnanimous distances and pure as a lake of mountain-fed springs. In the town we have air at second-hand, freighted with innumerable unseen elements which are the foes of health and home and the beckoners of doctors." In this paper there is much good sound advice about location of buildings, planting of trees and flowers. He gave fine thought to the subject. "With these environments should go holidays in which the horses are free from harness, the children of care, and the home filled with sprightliness and delight. The observance of birthdays, the proper use of national and ecclesiastical days wisely chosen would bring larger cheer and enjoyment of life, and more dollars, in the end, to the purse. In the homes of the city and town we are all too liable today to cultivate everything else except ourselves."

In a recent address that Mr. Geo. T. Baker of Davenport made at Ames, he paid a high compliment to Dr. Beardshear as an executive and an administrator. He said that Dr. Beardshear did a great piece of constructive work as president of Iowa State College and its road to success began when Beardshear was made president.

W. C. Stuckslager of Lisbon, Ia., said: "Dr. Beardshear was a good friend of mine. He was the 'salt of the earth' in my opinion."

His funeral orations are unlike the ordinary cut and dried sermons. They are full of real sympathy and love. In the

funeral address of Mrs. Margaret Stanton, he said: "It is an interesting study of our lives to observe the characterful impression of serious events, both private and public. They often take the rarest hue of earth and sky. On last Thursday evening at the time of our beloved friend's departure for the good home in the skies there was a remarkable spectacle of nature. To the northward there was the fiercest thunder cloud and storm vivified with the intensest and frequentest lightnings that I have observed for many a day. Northward with the storm was destruction and death, but to the westward was a clear sky, sealed with heaven's own blue. The new moon and evening star vied with each other in a silent beauty and a prophetic cheer which, with the peculiar background and environment, clothed nature with an unusual awe. These strikingly companion scenes under the consciousness of our great loss made upon me a profound and helpful impression."

And again one finds a fine lesson in the funeral oration in memory of Marvin E. Witter: "My friends, as we grow older I find this life mellowing with an indescribable sadness. Many friends who at one time in the buoyancy of our faith and hope lived in the apparent everlastingness of life have the silver cord loosed and the golden bowl broken before our living eyes, and we ourselves are left something like pitchers partly broken at the fountain. But somehow, say what we may and feel what we will, the lives of these departed ones enter into our work and life with a double emphasis ever afterward. The experiences of their apparently untimely dying prove awakening energies to inspirit our souls with inspiration and fortitude."

Some years ago, on the college campus, I arranged an Arbor day celebration and asked Dr. Beardshear to give an address on "Arbor Day." He responded by making an address in which he gave full sway to his great oratory and great interest in trees and what it means to have a knowledge of trees, and how the children may be stimulated in their study. "One of the most interesting lessons I ever heard in composition was with a high school class on the elm tree. It was a quiz lesson preparatory to each one's writing. Questions like the following were asked: In what form does the elm send forth its branches? What shape of trunk has it? What kind of bark? What form of roots? Does an elm tree have blossoms? Does it have seed? and so on. The class numbered about 60 and ranged from 14 to 17 years of age, but not one of them could tell whether the elm tree has seed or not. I would ask no better delight than to take a country school into a field or woods to teach language lessons and even grammar."

These expressions called forth by various occasions testified to a breadth of understanding and depth of soul in the man. One of the great men of Iowa.

F. E. L. BEAL

Soon after coming to Iowa State college in 1889, Prof. Herbert Osborn and Charles Aldrich spoke to me about Professor Beal who at one time was connected with Iowa State college. Dr. Osborn spoke about his contributions to our knowledge of bird life, and Charles Aldrich mentioned going on a trip north of Ames to study a peat bog where buffalo skulls had been found in large numbers. Some years later while attending a meeting of the American association for the advancement of science in Washington, D. C., I met him for a short time. My delightful visit was cut short, owing to want of time. During my recent visit in Washington and Boston I took occasion to look up material concerning his life and may I say at the outset that the foundation for his great economic work on birds was laid at Ames. It was here that he met kindred minded spirits. Dr. Charles E. Bessey, the botanist; Herbert Osborn, the entomologist; Dr. A. S. Welch, president; the chemist, Prof. T. E. Pope; Prof. J. H. Macomber in physics, and the fine student of literature, Prof. W. H. Wynn. Charles Aldrich who frequently visited Ames was the editor of a newspaper in Webster City. These men and Professor Beal, Professor McAtee tells us in his fine biography (*The Auk*, 34:243) formed a dining club which was known as Lamellibrancheophagists. It was my pleasure to interview a number of persons who were intimately associated with Professor Beal. Of these Professor McAtee worked in his laboratory and knew the subject of this sketch intimately. Dr. H. Oberholser, another associate, knew him well, altho not as closely connected in this special work. I also interviewed some of his professors at Massachusetts School of Technology.

The subject of this sketch, Foster Ellenborough Lascelles Beal, was born at South Groton (now Ayer) in Middlesex county, Massachusetts on the 9th day of January, 1840, and died at his home, Branchville, Md., on October 1, 1916, and buried at Bretsville, Md. A sketch of his life appearing in the *Technology Review* (1916, p. 897.) The father of Professor Beal was J. Foster who died from tuberculosis when the subject of our sketch was eight years old; the mother soon followed (December, 1850.) Before the death of the mother young Beal was taken to a second cousin who was a bachelor, Nathaniel C. Day, and who later married Harriet C. Gray, his housekeeper. To this bashful youth Mrs. Day was a real mother, interested in

all of his affairs. She encouraged him in his outdoor farming operations, school work and the study of plant and animal life. He wrote in his diary afterwards "All honor to Harriet Day." It was while under the tutelage of Mrs. Day that Gilbert White's *Natural History of Selbourne* fell into his hands. What an inspiration this charming book was to him. After his public school instruction he attended the academy in Luenberg and the Lawrence academy at Groton. The slavery issue was at its height. Lincoln was elected president, and later when war was declared he wanted to enlist in the federal army. Mrs. Day did not want him to do so at that time but he insisted and the opposition was withdrawn. He enlisted in Company A of the 36th Massachusetts regiment which was recruited at Fitchburg, Mass. He took the transport Merrimac and arrived in Alexandria, Va., September 6, 1861. He was transferred to Washington, D. C. Marched to Frederick, Md., on September 18, heard the cannon of the battle of Antietam. His brigade was reviewed by President Lincoln. He notes this in his diary. The brigade was stationed at Point of Rocks, Md., October 20. He took sick and was ordered to the convalescent's camp at Harper's Ferry, then to Camp Alexandria, Va. On December 8 the doctor sent him to the hospital. It was discovered that he had tuberculosis and he was discharged from the service on February 5, 1863. He went back to the farm in Massachusetts. He received a small legacy from his mother's estate, built a greenhouse and established a market gardening business. Studied birds, insects and flowers and in his diary mentions the finding of a saxifrage. In January, 1866, began work for a florist in Fitchburg. Entered Massachusetts Institute of Technology October 7, 1867... During the summer vacation of 1868 he had charge of the outside work of the prisoners of Leominster jail and cared for his foster parents a part of the time. They died in December, 1868. In the summer of 1869 he took a trip west to Chicago, Burlington, Ia., and to St. Paul, Minn., and back home via Niagara Falls. He also made trips up to New Hampshire. He was president of his class of 1868-1872. Received the degree B. S. in C. E. March 8, 1872. He took the course in civil engineering because he thought the engineering profession might offer an opening for him. I found his finely prepared thesis "Design for a Howe Trust Bridge" in the library of Boston Institute of Technology. It was not published. It no doubt helped him to receive a position as surveyor with the Burlington and Missouri River railroad, now the Burlington railroad, stationed at Crete, Neb. It gave him an opportunity to study bird life. Many sketches were made in his diary. He was a good artist.

Dr. Robert H. Richards, on whom I called last winter, said he knew Professor Beal, "A man of pleasant personality."

Foster E. L. Beal was studying chemistry at the Massachusetts Institute of Technology at the time when I was an assistant in chemistry to Professor Storer, so I think I can say that I was in a way one of his teachers.

While his name is very firmly fixed in my mind the name does not carry distinct memories of the man.

I have heard of him all along as a man who was doing a man's work and a pupil of Technology of whom Technology could be justly proud.

Along with him in his class were men of considerable prominence: Elmer Faunce, a well-known lead metallurgist; E. W. Rollins, a banker, well known all over the country, also known for his kindly philanthropic interests; Henry M. Howe, one of the leading steel metallurgists of the world; Frank Rockwood Hall, well-known Boston lawyer; Thomas E. Pope, a successful professor of chemistry for many years at Mass. Tech.; I. S. P. Weeks, a prominent railroad man out west.

(Signed) ROBERT H. RICHARDS.

In addition to the strictly technical courses he took work in geology, physics, astronomy, chemistry and natural history. One is always interested to know the nature of the instruction given to a young man. The professor of geology was William B. Rogers. Samuel Kneeland was professor of zoology and physiology. He was an excellent student, deeply interested in all of the subjects he took. Had he not have been a good student he would not have been appointed an instructor in mathematics to the lower classes at the institution. In 1869-1870, 1871-1872, and again in 1873-1874. The diary states he delivered his first lecture March 17, 1870. After his experience as an engineer for the B. & Mo. River R. R., he opened up an engineering office at Fitchburg, Mass. In October (1873, he again began teaching at the Massachusetts Institute of Technology. In 1874 he started teaching service at U. S. Naval academy, Annapolis. He did not like the irksome duties. He received a call from Iowa Agricultural college. Professor McAtee has well said:

"March 20, 1876, was an important date in Professor Beal's life, as it was then he started for Ames, Ia., to take a position in the agricultural college there, where he met the girl he was to marry and where he remained for the next seven years. After the first semester at Ames, he took an eastern trip of about a month's duration, attending the Centennial Exposition at Philadelphia and visiting in Boston and Fitchburg. On his next visit to the east which began in November, 1876, he was married on his thirty-seventh birthday, January 9, 1877, to Mary Louise Barnes¹ at Cortland, N. Y. The newly married pair

¹Mrs. Beal was born at Bath, N. Y., July 22, 1844, and was educated in the Elmira Female college, and the Lyons Musical academy. She has published two books for boys under the titles: "A Misunderstood Hero" and "Boys of Cloverdale." Professor Beal is survived also by a son, Kenneth Foster Beal, who was born March 20, 1880.

spent their honeymoon in Professor Beal's old haunts in Massachusetts and proceeded to Ames, Ia., in March, 1877.

"Professor Beal went to Ames as professor of civil engineering. On July 23, 1879, he notes "heard my first class in natural history" and on July 24 he was elected professor of zoology and comparative anatomy. In his thirty-eighth year, therefore, he finally was enabled to take up as a vocation what all his life had been his favorite avocation. The occasion must have been a happy one tho possibly tinged with regret for lost time. There is no doubt that Professor Beal took the course in civil engineering at the Institute of Technology chiefly because he did not know that a living could be made in natural history. However, he was destined to work almost continuously in that field for the next 38 years, longer than most people are able to follow out any one line of endeavor."

The college records show he was elected professor of civil engineering February, 1876, and his services began March, 1876. In the biennial report for 1878-1879 he is listed as Professor Beal (dean) under the course of civil engineering. He was professor of geology in 1882 as well as professor of zoology. In the civil engineering work he had as an assistant, Prof. C. F. Mount, and in zoology Dr. Herbert Osborn. He held these positions until 1883. His work at Ames called for a multiplicity of duties. In the biennial report of the board of trustees of the Iowa State college for 1877 he gives an outline for the engineering students. Many difficulties will be met "hillside and valley." In this same report is this interesting comment on education research: "Wherever narrowness and bigotry are found, they have arisen from other causes," and indeed, if the choice were between narrowness with depth or breadth without it we should most certainly choose the former. We know of no system of education, and the last century has failed to show any, that can give broader and more enlightened culture than the thoro working out of some particular line of research." In the biennial college report for 1880-1881 he made a report of the department of zoology as acting professor. Prof. H. Osborn was the assistant in zoology and entomology. He states that there were 10 compound microscopes and a set of Ward models in the zoological museum. He also submitted a report as professor of civil engineering. States that the civil engineering students were provided with passes to Burlington and St. Louis to study bridges.

The diary kept by him states that on January 1, 1880, he worked with the microscope, dinner with Thompsons and Binghams. On the 3rd he had dinner with Fairchilds. On January 6, 1880, skinned and mounted a partridge. The 9th was the third anniversary of his marriage. Had a visit with Dr. C. E. Bessey in the evening. On Sunday, January 25, took a long

walk, found a buffalo skull, and on February 8, took another long walk, found some buffalo bones. Some more were found on the 12th and he made observations on birds. Undoubtedly it was on some of these walks that Mr. Aldrich accompanied Professor Beal. They became friends which lasted until Mr. Aldrich passed away. The following letter kindly forwarded to me by E. R. Harlan of the historical department will therefore be of interest:

Prof. L. H. Pammel, Ames, Iowa. Dear Dr. Pammel: We have searched the old letter files from 1889 and previous to 1899 and the enclosed copy is the only letter we find from or to Mr. Beal. I am sorry. Sincerely,

(Signed) E. R. HARLAN.

1516 Kingman Place,
Washington, D. C.
July 30, 1897.

My dear Aldrich: I sent you another Blue Jay paper and enclose herein a letter that I received a few days ago from Iowa. I call your attention to the wholesale slaughter of birds that is there related and ask if there is not some law by which it can be stopped. Is there no Audubon society in Iowa?

You have perhaps wondered why when I send you my papers I do not put my name and compliments upon them. The reason is that there is a law that forbids putting anything of that kind upon a government publication. The law, it seems to me is a foolish one, but we do not dare to break it.

I have been sorry not to see you here this summer. It has been a remarkably cool pleasant summer, here, unlike what we usually have. I have not been very well for the past month and on next Monday I leave here for a four-weeks vacation in the valley of the Shenandoah.

Hoping you and yours are well, I remain,
Very cordially yours,

(Signed) F. E. L. BEAL.

This shows his early interest in protection of birds. Professor Beal was a splendid teacher altho a Mr. Underhill who was a student of his at Ames says he lacked enthusiasm. Many other students have told me then he was an inspiring teacher.

His diary further tells us the principal event on Saturday, January 1, 1881, was to go to the farm house, take dinner with other professors and their wives. Notes on January 9, 1881, the fourth anniversary of his marriage and forty-first birthday. Boarded with the Bingham family on May 13, 1881. Gathered some mussels on August 13, 1881.

I quote from an interview with Mrs. D. M. Hayden:

Professor Beal was a wonderfully nice, whole-souled good man. I should say a strong man. He left on his own accord because he wanted to change his work and went to the department of agriculture.

Professor Beal was an active man at Ames and it was here

that he laid the broad foundation for the great work he accomplished in economic ornithology. His was a pioneer in this. In 1878 he published an account of a tame crane (College Quarterly 2:45) which was found at Little Wall lake (Walled lake) Hamilton county, and was kept at his home. Incidentally in the same publication he wrote about the construction of green houses and in the Iowa State Horticultural Society he published a paper on "Our Most Useful Birds" (14:297) especially notes the value of the rose breasted grosbeak, the orchard oriole and introduces the term "the balance of nature" in a plea to restore bird life to keep insects in check.

In 1878 in the report of the Iowa State Horticultural society (13:350) refers to the value of birds as weed seed eaters and insect eaters, refers to snow bird, titmouse or chickadee. He noted that the canary bird (*Spizella monticola*) in Iowa consumes 65,529 bushels of weed seeds annually.² He was a frequent contributor to the Iowa Homestead and the Iowa State Register. This paper ran a series of articles by him and in the issue of January 23, 1883, says the little folks who read the Register will find something of great interest to them in today's Register in the article in which Professor Beal tells of the many birds that are staying in Iowa all thru this hard winter.

It was at Ames that his real interest began in a study of birds. His articles were numerous and kept in his scrap book. These articles are practically buried because he did not give the date of publication. He kept his papers and these are brought together in the biographical sketch by Professor McAttee. They touch on such subjects as the house wren, the sparrows, woodpeckers, blue jay, swifts, nuthatch, marsh wren, English sparrow, Baltimore oriole, Iowa birds, habits and economic value. In an article published in the Iowa State Register June 21, 1883, he states that 40 species of birds winter in Iowa in spite of fierce blizzards and drifting snows; "in a walk you may be greeted by the chickadee-dee-dee; the nuthatch and downy woodpeckers are common and show wonderful adaptation to environment."

His interests were many sided. The last year at Ames, 1883, he gave a course in geology.

The earliest paper, 1874, published in a scientific journal was in the American Naturalist for April, 1874 (8:234). In this article he notes that the abundance of males of the Prometheus moth which fluttered about the office window. He found the object of these moths to have been a female moth. Undoubtedly the most important of the early articles were those published in the Iowa State Register and the Iowa Homestead. In the Iowa State Register which treat of such subjects as the

²And the tree sparrow of Iowa consumes 196,000 bushels of weed seed in Iowa.

house wren, the swallows, the woodpeckers, the sparrows, game shooting in Iowa, the nuthatch and his friends the blue jay and the Baltimore oriole.

There are some 13 articles on the "Birds of Iowa," treating the crow, brown thrush, horned lark, the little screech owl, the swifts, the meadow lark, the bobolink, the fly catcher, the blue bird, the robin, the butcher bird, the catbird, and the purple grackle. Usefulness of seed eating birds, the English sparrow (probably in the Des Moines Register.) In the Iowa Homestead articles on the marsh wren, a chapter on snakes, about bats, also articles in the Chicago Herald on "How Farmers Should Treat the Birds," and in the Washington Evening Star. Articles were also published in Forest and Stream, American Naturalist, Bull. Nuttall Ornithological club, yearbook U. S. department of agriculture, Auk, Science, Bird Lore, Educational Leaflet Audobon Society, National Association Audubon Societies, Report New York Fish and Game commission; the Bird's Impulse to Song was written in Country Life, London (39:520, 1916.)

The foundation for much of the future work on the analysis of the stomachs of birds was laid in 1881 when Professor Beal had Miss M. J. Crossman study the contents of the stomachs of birds at Iowa State college. In a paper published in 1882 (Trans. Iowa State Hort. Soc. 1881:264-276) Professor Beal wrote an introduction to this fine paper by Miss Crossman on the Food of Birds. To properly study the contents of the stomachs of birds a wide range of information on plants and animals is required, and Professor Beal got this information by close and long study. The Farm Journal (Iowa, March 3, 1876) surely was not disappointed in Beal when it said, "The other gentlemen (several other men elected at this same time) are unknown in the west, but due care has doubtless been exercised in the selection."

In the fall (September) of 1883 he went to Massachusetts where he bought a farm near his old home. The family settled on a farm, remaining here for eight years. During six months of this time, January to July 1, 1880, he taught mathematics in the Chicago Manual Training school. During this time he had a temporary appointment in the U. S. department of agriculture in the division of economic ornithology and mammalogy, December 16, 1886, to June 30, 1887. He made a study of the bobolink and English sparrow. Professor Beal was one of the pioneers in economic ornithology. Stephen Forbes was the other pioneer. While on the farm he did not lose his interests along agricultural lines. He was frequently called upon to make addresses to farmers at the grange clubs on bird topics. He also wrote papers on birds for the press. His permanent

appointment in the U. S. department of agriculture began February 17, 1892. He served in this bureau until his death. The task set for Professor Beal was to study the stomachs of birds, an enormous one. I saw his fine collection last winter in the biological survey. Professor McAtee speaking of the task of studying birds' stomachs, says: "The grand total of bird stomachs examined by Professor Beal for the biological survey is 37,825, an average of more than 1500 per year. This enormous number includes birds of almost all families, but Professor Beal paid particular attention to the woodpeckers, the Icteridae, cuckoos, flycatchers, thrushes and swallows, upon all of which he wrote reports. He made a study also of the mockers, wrens, thrashers, titmice, creepers, nuthatches and kinglets, but did not report upon them." His field work was done in Iowa, Massachusetts, Maryland, Oregon and California.

In a study of the woodpecker (Bull. U. S. Dept. of Agr. Biological Survey 37, Colored III) he notes that insects destroy \$100,000,000 worth of lumber a year, that the woodpecker is the most important bird to destroy the larvae of these insects. In his paper "Some Common Birds Useful to the Farmer" (Farmers' Bull. U. S. Dept. of Agr., 630, 1915) he reports his findings after examining 1,256 stomachs of the robin. The contents of 42 per cent consisted of insects, the remainder seeds and small berries; of the chickadee 68 per cent of the contents consisted of insects and 32 per cent vegetable matter. The brown thrasher, 36 per cent vegetable and 64 per cent insects. Henry W. Henshaw in an article gives the loss to crop from insects at \$700,000,000 and credits Professor Beal for bringing these facts out with reference to importance of economic ornithology (Farmers' Bull. 54.)

Speaking of the food habits of the hermit thrush in the United States, he found there were 65 species of vegetable fruits and 116 insect species. The northern thrush insect species 46 and plant species 48 (Bull. U. S. Dept. of Agr., professional paper 380.)

He was also interested in aquatic and rapacious birds, and with W. L. McAtee pointed out that many of the aquatic birds and the ruffed grouse, prairie chicken and California quail are most useful to man (Farmers' Bull. 497, 1912.) He makes slight criticism that the ring necked pheasant is somewhat injurious.

Professor Beal was an unusually active man. At the time of his permanent appointment in the U. S. Biological Survey, his work became so thoroly known that he was sent out to California to study the bird life with reference to the agriculture and horticulture. From May 20 to September 22, 1901, and from February 16 to October 1, 1903, and April 6 to December 11, 1906. July 7 to December 11, 1906, in California and again

from July 7 to November 25, 1909, he investigated the birds in Washington, Oregon and California. He so thoroly investigated the subject that he knew more about these birds than anyone in this country. The results of these investigations were combined into 100-page bulletin in which he discussed the relation of birds to the fruit industry. He noted that the California quail consumed 73 species of plants, many weed seeds. (Bull. U. S. Bio. Survey 34: Pt. I, Pt. II.) This work is beautifully illustrated.

One of his important papers "Some Common Birds in Their Relation to Agriculture (Farmers' Bull. U. S. Dept. of Agr. 54:1897, revised in 1904 and rewritten, Farmers' Bull. 630:1915), Professor McAtee states was issued 50 times with a distribution of over a million copies and reached a large number of persons, and this work must have had an enormous influence on the protection of birds in the United States. One of his valuable publications is "Birds as Conservators of the Forest," published by the New York forest, fish and game commission (1902-1903, 1906.) This handsome volume with colored illustrations gives ample discussion of sapsuckers, blue jay, robins and cuckoos. He tells us that in the stomachs of 155 cuckoos he found 27 species of insects.

Professor Beal frequently associated himself with others in the publication of papers; among these his coworker W. L. McAtee who has done some very notable work in economic ornithology. We may mention the paper on Grosbeaks (Bull. U. S. Biological Survey 32:1908) as a most valuable one.

He published some of the educational leaflets in the national association of Audubon societies (No. 1) and got a large hearing before the public in this way.

He was a member of the Biological society and a fellow in the American Ornithological union, Cooper Ornithological club, Potomac Valley Ornithological club. He was a member of the Iowa Academy of Sciences and the Massachusetts state grange.

His style of writing and his keen powers of observation are shown in the following extracts from several papers. With reference to the cuckoos he says (Bull. U. S. Dept. of Agr., Biol. Survey 9): "Cuckoos are quiet and rather shy birds, while they do avoid the haunts of man they nevertheless have a way of concealing themselves in foliage, seldom alighting on naked branches or in exposed places, and hence are not often seen. Their favorite resorts are open groves or woods, the edges of forests, orchards and clumps of trees or shrubs."

In the paper "Birds of California in Relation to the Fruit Industry" (Bull. U. S. Dept. of Agr., Biol. Survey Pt. II, 30, 1910), he says: "A reasonable way of viewing the relation of

birds to the farmer is to consider birds as servants, employed to destroy weeds and insects. In the long run, no part of the capital invested in a farm or orchard is more certain to pay big interest than the small sum required for the care and protection of birds."

In speaking of the linnet in California he says (Bull. U. S. Dept. of Agr. Biol. Survey 30, Pt. I, 1907), "Admitting, as we must, that the orchardist has just grounds of complaint against the linnet on account of depredations upon fruit, the bird's claim to favorable consideration must rest upon its valuable service as a consumer of weed seed and upon its aesthetic value."

In his paper "The Food of Woodpeckers of the United States" (Bull. U. S. Dept. of Agr. Biol. Survey 37:1911) he notes the enormous damage from insects to wood and then says "From these considerations it is at once apparent how important must be the agency that restrains or limits the great army of tree destroyers. Of all birds that further the welfare of trees, whether of forest or orchard, woodpeckers are the most important."

Professor Beal had the respect and confidence of his associates in the biological survey and the communities in which he lived. He had the courage of his convictions and expressed himself when occasion demanded. Progress in this world is never made by those who are complacent to let things slide. They respected him for his outspoken views. They honored him for the many fine contributions he made. Let me insert here a letter written to me by Dr. Harry Oberholser, an able biologist of the U. S. biological survey, and a friend and co-worker. His letter is as follows:

My association with him in the biological survey for many years was so uniformly pleasant and we all loved him so much, that it was difficult for us to estimate his influence. He was an inspiration and a great help to all younger men who needed assistance. While ordinarily of mild disposition he could on occasion be very righteously indignant. He had a good sense of humor and thoroly enjoyed a good, clean story whether told by himself or by another. At the time of his death no one in the biological survey was so much beloved as he.

During later years of his life the biological survey united in tendering him congratulations usually at a lunch or dinner and on his seventieth birthday, with a loving cup.

He gave full service to the biological survey up to the day before his death. He was fatally stricken with cerebral hemorrhage while he was working in his flower garden. At 70 years of age Professor McAtee tells us, he was equal to another man in his prime. Tho his memory may have failed somewhat and his bodily strength was impaired somewhat, he accomplished

much in his old age. Professor McAtee says, "He was indeed a grand old man and was so recognized by everyone."

Let me close by giving the expression of one who was close to him. Professor McAtee, who refers to his long and useful life, says:

Is it not much better, then, that it came before there was marked impairment either physical or mental? Certainly that is the way it appears to me, and the conviction that all was for the best for him, checks the feeling of sadness, which, after all is selfish in origin. Our nobler impulses prompt us only to high appreciation of his long career so honorable and useful, of a most admirable growing old, and of a passing that was really enviable. Professor Beal lived the life of a man, unafraid, and was fortunate enough to die in the harness. Our memories of him, therefore, can only be of one well and vigorous, alert of mind, a hard worker and a good companion. If all lives were as productive and all natures so open and honest, it would indeed be a better world.

DR. H. J. DETMERS

Soon after the organization of the college history committee, the writer of this sketch began to look up matters pertaining to the lives of the faculty of Iowa State college in the seventies. I found that Dr. H. J. Detmers was a member of the faculty. Dr. M. Stalker, Dr. E. W. Stanton, and others of the old faculty mentioned him to me. It so happened that I knew his daughter, Freda, the talented botanist of the Ohio agricultural experiment station, for some years. Furthermore, in 1888 and 1889 while I was engaged in a study of root rot of cotton in Texas, I was thrown in contact with Dr. Mark Francis, an outstanding student of Dr. Detmers, who has made some noteworthy contributions to veterinary science in connection with Texas cattle fever. Dr. Francis often spoke to me about Dr. Detmers' work along the lines of bacteriology and veterinary science. I therefore became quite impressed with the work he had done in veterinary science. Later I met Dr. Detmers. I remember but little about this meeting, except that he was stockily built and had a pleasing personality. I was impressed with his knowledge of things pathological and bacteriological, and that he was well informed on general topics of the day. He impressed me as a scholar and student.

In 1922 I began to look up the career of this man. Letters passed between a score of persons who were connected with the institutions where Dr. Detmers had been located, among these Dr. M. Francis of Texas. I also had interviews with Dr. Campbell, and Dr. L. A. Merillat of veterinary medicine, Chicago. Recently Dr. O. H. Cessna, the college chaplain, and Charles N. Dietz, former students of his at Iowa State college, gave me some interesting data about Dr. Detmers. I also received an interesting letter from Prof. J. T. Willard of the Kansas Agricultural college; Prof. E. N. Wentworth of Chicago, and Dr. C. N. MacBryde of Ames. Dr. Freda Detmers gave me a sketch of his life. I have looked thru the library of the U. S. department of agriculture, U. S. Surgeon's General library, and Library of Congress, and Iowa State college library. The information about his life is very meager. In 1901, Dr. D. E. Salmon published a souvenir volume of the United States bureau of animal industry with biographical sketches, and while of course Dr. Detmers' work in the U. S. department of agriculture antedates the organization of the work of the bureau, an account of Dr. Detmers might have been included.

Dr. Detmers' life work may be divided into three parts: (1) His work as an investigator and teacher in Germany; (2) His teaching in veterinary schools and colleges; and (3) His research work in connection with bacteriology and diseases of livestock. It is strange, indeed, that the veterinary journals at the time of his demise did not give an account of his life.

Dr. H. J. Detmers was born in Jever, a village in the northern part of the grand duchy of Oldenburg, Germany, a maritime province, on April 15, 1833. He was baptized Heinrich Jansen, which he changed when coming to America to Henry Johnson, being the anglicized names. I take it that the name Jansen came originally from the Danish language.

He attended the village school until the age of 13 years, entering the gymnasium, from which he graduated in four years. He worked on the farm of his father who, however, always wanted him to become a farmer. Dr. Detmers was interested in studying medicine. This inclination was not given up, and after five years of experience on the home farm, his interest in livestock determined the young man to take up the study of veterinary medicine. He decided to enter the Royal Veterinary college at Hanover (1853) becoming a student under the Guenthers, father and son. These men had a reputation thruout Europe. These celebrated veterinarians made a profound impression on him. Men, after all, make an institution. It is quite customary in Germany for students to go from one university to another, and so young Detmers left Hanover to attend the Royal Veterinary college in Berlin, from which he was graduated in 1859. He then practiced his profession for a few years in his native state, then accepted the chair of stock breeding and veterinary science in the newly established agricultural college in Neuenberg, grand duchy of Oldenburg. The salary was small, and after a short service he asked to be relieved so that he could again enter private practice, but this request was not granted. In Germany he not only received the best of training but laid the foundation for research work. There was added to this the theoretical, knowledge on the farm and his experience as a teacher and the practical experience in his profession. He married Marie Hearn of his native village in 1854.

After the close of our Civil war in 1865, he emigrated with his three children to the United States, establishing himself at Dixon, Ill., where he practiced his profession. While practicing he found time to write for the Chicago Tribune, and edited the veterinary department of Farm and Fireside, an agricultural weekly.

He became connected with the University of Illinois in 1869 where he remained until 1871. He taught the subject of veterinary science and related subjects in stock breeding. In 1872

he was called to a similar position in Kansas State college of agriculture and mechanic arts. Professor Willard gives me the following facts:

Dr. Detmers began his service at Manhattan in the fall of 1871. The following courses were offered:

Freshman year—Anatomy, and physiology.

Sophomore year—Physiology, exterior and breeds of horses, exterior and breeds of cattle, hogs and sheep.

Junior year—General pathology and clinic, special pathology and clinic, special surgery and clinic.

Senior year—Veterinary jurisprudence, pharmacology and clinic.

Dr. Detmers' relations with the regents became strained because of an incident. Dr. Willard writes me: "The college was under fire at that period and in the spring of 1873 a board of regents was appointed by the governor which removed President and elected John A. Anderson as president. President Anderson had revolutionary ideas in respect to education with which Dr. Detmers and several others were out of sympathy. This board of regents had not been confirmed by the state senate but came up for confirmation in January, 1874. Dr. Detmers and two other members of the faculty went to Topeka and opposed the confirmation of the regents. In spite of this, however, the board was confirmed and shortly afterwards the professors were removed from their positions, not even being permitted to complete the work of the college year."

Dr. A. S. Welch, in his report to the college trustees for 1871, noted the need of a professor of veterinary science. On this recommendation the board investigated and Dr. Detmers was elected. His connection with Iowa State college began in 1872. At the May meeting of the board, Mr. C. Chase made a report asking that the president of college and farm be authorized to employ Dr. Detmers to teach comparative anatomy, physiology and veterinary science. The office was declared vacant on November, 1873. This was the case with all faculty members at that time. There were no classes listed for the first term, but for the second term the senior class was given a course in pathology, comparative anatomy and physiology.

Dr. Detmers' instruction was of the highest type. The lectures were prepared in a scholarly way. Dr. O. H. Cessna has an interesting notebook giving in detail the lectures. They are precise, and Dr. Cessna's notes show that Dr. Detmers thoroly knew his subject. Two of his students, Dr. O. H. Cessna and C. N. Dietz, have given me their opinion of Dr. Detmers. The sincerity and earnestness of those fine students is worthy of record in this connection, and the personal worth of these friends cannot be questioned, so it gives me great pleasure to quote from them, because one of my correspondents makes the

statement that he seemed to be a typical German with all of the personal qualities such a man is supposed to have—officially gruff, positive, intolerant of opinions different from his, even somewhat quarrelsome, socially pleasant, accommodating, a good fellow generally. He may have had peculiar traits and no doubt sometimes been harsh with those who did not carry out the program as he saw it. It is, however, erroneous to imply that was his general makeup. Following is letter from Dr. Cessna:

"Dear Dr. Pammel: You have asked me for a statement of my recollections of Dr. Detmers who gave our course in veterinary science in 1872. There were two courses—one in anatomy and one in pathology, that were given in the late summer and early fall of that year. There were two divisions at the college at that time—agriculture and mechanic arts, or what later developed into the engineering division. Dr. Detmers lectured to the agricultural students. As I remember it, we had quite a recitation room full. We were seated in alphabetical order. I was on the front row with Arthur, Churchill, and Dietz.

"As I remember Dr. Detmers he was a man a little past middle life, rather short in stature, a rather large, broad, strong German face, bushy brown hair with some gray, somewhat shaggy in appearance. He was near sighted and wore glasses. It was necessary for him to hold his manuscript rather near to his face.

"I have quite full notes of the lectures, and I would judge from my notes that the lectures must have been dictated quite freely. He must have kept us quiet by keeping us busy taking the technical discussions. I see the evidences on my notebook of lulls in the dictation, as there are little aimless markings on the notebook. It was evidently when he stopped to amplify.

"Boys will be boys as is evidenced by the following incident which I remember: I used to lead the singing in the college and had the tuning fork. I was playing with it on one occasion when Dietz snatched it out of my hand and struck it on his knees and put the end down on the chair beside him. Of course the sound rang out thru the room. Dr. Detmers stopped and spoke quite sternly, 'Vas iss dot?' Dietz threw the fork down on the floor; and as Dr. Detmers was quite near sighted and could not see who had done it, he asked whose fork it was; and of course I had to acknowledge the ownership. I do not remember the rebuke, if any was given. It would have been sufficient to have Dr. Detmers look at one. I was very much embarrassed and I felt that that look would be sufficient. We respected him for his learning and did not feel that we could fool around much in his classes.

"He was genial and friendly in his class associations with the students and his hearty laugh and cordial manner made us feel at home with him. We all liked him and respected him for his scholarship and learning.

"He must have learned his English late in life, as his speech was quite broken. One or two expressions have remained in my memory. I remember on one occasion he was discussing the ravages of certain diseases among animals. 'Und dey die shust like de vlies.' On another occasion he was discussing certain diseases that affect the bones and make them brittle. 'Und dey vould prake shust like izzigles.'

"In looking over my notebook I find on November 4, 1872, we were

assigned a review in pathology and also in anatomy. There were 30 questions asked. The general questions on pathology included general health and disease; primary and secondary disease with their primary and secondary causes, including diseases usually found in horses. The questions in anatomy included all parts of the framework of the horse.

"In general as I remember Dr. Detmers, we regarded him as one of the outstanding men of the faculty. He always inspired me to faithful honest work and thoro preparation. He always was fully prepared for his lectures and had his matter thoroly in hand. He knew just what he was going to do and say. You must remember that these are the recollections of what took place in the life of a boy between 19 and 20 years of age, and recalled over half a century later."

Following is letter from Mr. Charles N. Dietz:

"Dear Mr. Pammel: Dr. Cessna and I were co-laborers and always hard workers in Detmers' class. He was the best off as a lecturer, and as examinations were made frequently on the basis of your written record of his lectures, I managed to get thru on the lectures all right and passed top of the list in Detmers' class on my simple records. So much so, that with the record of that examination and my vivid memory about all the bones of the horse, on our first winter vacation at home, at the mature age of 16 years, I was airing my knowledge of the horse with the usual town crowd in the country drug store where I had formerly worked as clerk. Imagine my amazement the following week, in the country newspaper, a statement that I was home from college and a celebrated veterinary doctor, with a local reputation, said that I knew more about a horse than any man in ——— county. I was pretty careful after that about airing my attainments. Just a little more personal stuff about Cessna and Detmers. I must blow off to some one, and all this is confidential to you and personal. Cessna conducted the college choir and looked after the singing and the chapei services. One day at recitation in the old museum Cessna was playing with his tuning fork, which he always had with him. He kindly loaned it to me and I touched a horse's skull with it for a sounding board. Dr. Detmers was very deaf but that hum attracted his attention, but when he looked up we were all busy with our records. There seemed no other chance so I dropped it on the floor, which made quite a loud noise. Immediately Dr. Detmers said 'Voss iss dot?' I was innocent. Cessna had to claim it.

"Another time, Dr. Detmers always illustrated our work upon the animals themselves. We were down at the college barn one day, listening attentively to the breathing of a cow that was threatened with pneumonia. The accidental dropping of a clod of dirt amongst a big flock of gobblers close by did make a sensation, and Cessna had a nice scolding from Professor Detmers—so much so, that I had to own up for once.

"But with all this we were all the best of friends, and there was no one better than Dr. Detmers that ever trod the boards at Ames."

Judge John L. Stevens, who was a student at Ames at the same time, tells me he had no work under him, but he was considered an able and an outstanding scholarly man.

A biographer would not be doing justice to himself if he did not give the other side of the picture of the man. A friend

and a student of the Doctor's at Manhattan did not consider him a good teacher because of his broken English. The students could not quite get the German words brought in every now and then. Dr. Detmer was quick and could not tolerate poor work, and was called peculiar. He was always independent in his action, a high spirited man of the greatest integrity. Nothing could swerve him from his viewpoint. He was unfortunate at Ohio State university in saying certain things when he was "wrought up," and for this reason his chair was declared vacant and he was given a very much reduced salary. He therefore would not accept this and resigned. He received enough money out of his patent on the hypodermic syringe and from the sale of hog cholera serum to be able to live. Tolerance might have been exercised. I do not know, of course, the circumstances that led to the remarks made by Dr. Detmers, but it was unfortunate and no one regretted these hasty actions more than Dr. Detmers himself.

Dr. Detmers established the school of veterinary medicine at Ohio State university in the fall of 1884. Two of these early students that I know, have attained eminence in the profession of veterinary science, namely Dr. David S. White, the dean of the veterinary college of the University of Ohio, and Dr. Mark Francis of the Texas A. & M. college.

The turning out of a single man like Dr. Francis by Dr. Detmers was worth while. Says Emerson Robinson, writing in the Dearborn Independent, concerning well known men who were born at Shandon, Butler county, Ohio: "One of the products of Shandon is Dr. Mark Francis of College Station, Texas, whose research in medicine for the treatment of 'cattle fever' has been the means of saving fortunes for Texans and caused Dr. W. O. Thompson, president of Ohio State university to remark that if Ohio State had done nothing else except give Dr. Francis to the world, her mission has been worth while." (Ohio State Veterinary Quarterly, June, 1925.) Prof. C. C. Palmer of the University of Delaware writes me:

"Concerning Dr. Detmers' early career at Ohio State university, this as you know was before my time. However, I have heard Dean White tell of Dr. Detmers' experiments on hog cholera. Dean White it seems was a student of Ohio State university and Dr. Detmers was his teacher. Much of the material collected in the field was obtained by White under Dr. Detmers' direction and brought into the laboratory where it was studied by Dr. Detmers and his students. At that time the hog cholera bacillus was believed to be the cause of hog cholera. Dr. White, then student White, would go out into the field where there was an outbreak of cholera, and by means of sterile Pasteur pipettes, collect a sample of blood from the heart of a pig that had died of cholera. When this material was examined at the laboratory, it would sometimes be sterile; other times it would reveal the so-called hog cholera bacillus in pure culture. Dr. Detmers could not understand why the material which White collected from

a herd having a positive history of hog cholera and showing typical post-mortem lesions, would not reveal the organisms. He thought at first that it was due to poor technique on the part of White."

Dr. Detmers retired in 1894 and continued his private practice and the sale of swine plague preventive virus to the time of his death, which occurred by a stroke of apoplexy on December 11, 1907.

Dr. Mark Francis writes me that when Dr. Detmers was called to head the veterinary college in Ohio State university, he was a man in splendid physical condition and of fine mental poise; that he went into every subject with great thoroness. He kept up with the literature of the day, receiving the technical German publications. "He gave direction to the work at Ohio State that has resulted in its becoming a veterinary school of the first class." Dr. Francis says: "He kept abreast with what was going on in Europe; every few years he would spend in Germany. He would simply take some handbags and go alone, so as to be entirely free. He would visit the laboratories of Koch and Ehrlich and in September would return with the latest ideas of these men. He would tell his associates about what he had come in contact with, about what he had seen and heard and what was going on in Europe." A great many of these scientific terms had not appeared in American journals, so that many of his associates in the university had not heard of what he was speaking, and thought he was visionary.

The following are extracts from a letter from Dr. Francis:

"His lectures in the classroom were never dull. Every time he returned from Europe he brought with him some optical apparatus, usually an immersion objective that was adjustable and had some refinement in optics about it. To prove his claim, he would make photographs of diatoms that showed wonderful sharpness of the image and flatness of field. He had a microphotographic apparatus and used an ordinary kerosene lamp. This required many long exposures so that he usually worked late at night because he said that persons who had not retired and were walking about the house would create enough vibration in the building to disturb the image. Some of these exposures lasted 15 minutes or more, and if a horse and wagon happened to pass up or down the street in front of his house, he claimed the vibration would disturb his apparatus and he would have to make a new exposure.

"This brought him in contact with Bausch and Lomb people of Rochester, manufacturers of photographic apparatus and films. The American Microscopical society met at Cleveland one summer and when they adjourned, he went to Rochester and spent a day or so with Bausch and Lomb, both of whom were living then, and also at the Eastman Kodak company.

"I am telling you this long story because he was very attentive to details and insisted that there was always a physical reason for everything that happened.

"He and a professor of mechanical engineering devised some improvement in the construction of a hypodermic syringe (about 1900) that permitted the instrument to be sterilized without damag-

ing the plunger. I understand that he secured a patent on this and derived some revenue from it that enabled him to live from it the rest of his life.

"For some reason, he seemed to take a personal fancy to me and I did everything I could to help out his work. I came to Texas in 1888 and letters passed between us for 10 or 15 years. I took many of my problems up with him and he helped me a great deal. I have always felt very grateful toward him.

"He was somewhat impulsive and sometimes said and did things that he regretted very much, and that, in a large measure, delayed his plans from maturing. His personal relations with his students and associates were often unfortunate on account of 'too much pep.' Those that really knew him appreciated him fully. I feel that I owe whatever success I have attained to the training and inspiration received from him."

"As the years have passed, I think he was simply ahead of his time. The conditions in America were not quite ready for a man of his type but this was not his fault. The last time I saw him was about 1904. I saw instantly that his mind was failing and in fact, he did not seem able to recall my name and face. This was only a few months before the end."

Dr. Detmers had a large influence on the veterinary profession in connection with his research work. He had that fundamental training in sciences and veterinary medicine which made him appreciate the worth of thoro work. The special reports made to the government on hog cholera, or swine plague, show how thoro he was in all of his work. It was the general opinion of some of the men of his time that he was an outstanding scholarly man. Dr. E. W. Stanton told me some years before his death, "Dr. Detmers was a hard-working, plodding man and a man of great ability." Dr. L. A. Merillat, in an interview in the office of veterinary medicine, Chicago, said, "Dr. Detmers impressed me as an exceptionally scholarly man of that day. He stood out above the ordinary veterinarian of the times."

"The animated and heated discussions on such problems as Texas fever, hog cholera or swine plague, by Dr. D. E. Salmon of the U. S. bureau of animal industry, Dr. Paquin of Missouri, and Dr. Billings of Nebraska, and others, divided the veterinary profession for many years. The wounds were really never healed.

The livestock industry of the country is an important one, and early during the career of Dr. Detmers in this country he came across frequent cases of swine plague, or hog cholera. Some investigations were carried on as early as 1876 in Missouri. In 1878 Commissioner Le Duc of the U. S. government asked him to undertake an investigation of the disease. This work was mostly done in Illinois. He soon became convinced that it was an infectious disease and so stated in 1878; that it was caused by a small micro-organism. He did his work at

Dixon, Ill., Gap Grove, and Union stock yards, Chicago. He insisted on sanitary measures as a means of prevention.

Dr. C. N. McBryde furnishes me the following:

In 1887, a paper written by H. J. Detmers, V. S., giving his observations of the disease generally called hog cholera, and his conclusions as to its nature, was reprinted in the annual report of the department of agriculture. Dr. Detmers proposed to call the malady 'epizootic influenza of swine,' and he divided it into (1) 'The catarrhal rheumatic form,' (2) 'The gastric-rheumatic form,' (3) 'The cerebro-rheumatic form,' and (4) 'The lymphatic-rheumatic form.' The causes of the disease he divided into three classes, and he writes:

"As belongs to the first class I look upon everything that will interrupt or disturb the perspiration; in the second class I place all such noxious influences and agencies as interfere directly with the process of respiration; finally, in the third class, I put all such noxious agencies or injurious influences as tend to aggravate the disease if already existing, by aiding in making its character more typhoid, or which produce a special predisposition by weakening the constitution of the animal."

Dr. C. N. McBryde has furnished me the following:

"It was just at this period (1878) that congress provided for the first investigation of swine diseases by making an appropriation of \$10,000 for this purpose. The beginning of this investigation, which has been continued with short interruptions until the present time, marks a new era in our knowledge of swine epizootics and of contagious diseases in general. It was just at the time when the biological researches of Pasteur in regard to fermentation were attracting so much attention, and had already inspired Lister to make his discoveries in antiseptic surgery, and Koch to institute those researches which definitely connected the bacillus anthracis with causation of charbon. The time was propitious, therefore, for the institution of a new line of researches, in a direction which even then promised much, and which since has practically revolutionized the position of medical science as to the nature of contagion and the methods most important for its control.

"For the investigations of 1878 nine men were appointed for a period of two months each, as follows: Dr. H. J. Detmers, Illinois; Dr. James Law, New York; Dr. D. W. Voyles, Indiana; Dr. D. E. Salmon, North Carolina; Dr. Albert Dunlap, Iowa; Dr. R. F. Dyer, Illinois; Dr. A. S. Payne, Virginia; Dr. J. N. McNutt, Missouri; Dr. C. M. Hines, Kansas. The researches were to be made in the field in different sections of the country, and various remedies, suggested as applicable to the treatment of epizootic diseases, were to be tried. The result of this investigation may be summed up practically as follows: (1) Swine diseases were found destructive in the most widely separated districts of the country. (2) The symptoms and lesions enumerated were similar to those formerly given by Drs. Sutton and Law. (3) No evidence was discovered to show the existence of more than one disease which prevailed as an epizootic. (4) There was a preponderance of opinion that the outbreaks were due to contagion and that the disease was communicable. (5) The remedies tested either produced no effect or were of doubtful value for the treatment of affected animals or for guarding against the contagion."

This investigation on swine plague was so favorably received by the U. S. commissioner of agriculture and the public that the work was continued. The first report was dated July 25, 1879, the second February 28, 1880, Chicago, Ill. This was published in Special Report Contagious Diseases No. 22. The subject is considered under definition of swine plague, symptoms, contagiousness, period of incubation, prognosis and morbid changes. He uses the name *bacillus suis*. He discusses morbid processes. He made experiments with blood, and discussed sanitation, advised to not get hogs from other countries. The third report was dated December 4, 1880, Chicago, Ill., and appeared in Special Report Contagious Diseases of Animals No. 34, and along with reports by Dr. D. E. Salmon, Dr. James Law. The work of Dr. Detmers is finely illustrated, showing that he knew pathology and bacteriology of the time. Dr. Salmon's paper is quite general—spoke of bacterium termo and monococci. Dr. Law's article, too, is quite general. He speaks of bacterial intoxication and infection. Dr. Detmers made a fourth report on swine plague from Champaign, Ill., dated October 30, 1881, which was published in the report of the commissioner of agriculture, George B. Loring, for 1881-1882 (316), in which reference is made to *bacillus suis*. Dr. D. E. Salmon in the same report criticises the work of Dr. Detmers stating that *B. suis* was one of the septic bacteria. Dr. Detmers makes the following significant statement: "I do not at all claim that our knowledge in regard to them (bacteria) is by any means complete; on the contrary, I know we have only just begun to get an idea as to their life and existence, their mode of development, and propagation, their means of action, and their great importance in the animal economy."

Swine plague or hog cholera was thoroly investigated also by Dr. Theobald Smith, in this country. No one can doubt for a moment the splendid work done by this man. He published a fine volume with many fine illustrations, and named the organism *bacillus cholera-suis*. The European investigators called it *bacillus pestifer*.

None of these investigators hit on the right thing, but one is hardly justified in criticising their work. The real cause is known as a filterable virus first discovered by Dorsett and DeSweinitz and supplemented by the work of Bolton, and in general the facts concerning this disease may be stated as follows, in the words of Dr. C. N. McBryde:

"The U. S. bureau of animal industry issued Circular No. 41 under date of September 28, 1903, in which DeSweinitz and Dorsett first announced that "there is an infectious disease in this country—not distinguishable from hog cholera—which may be reproduced by infecting material which contains no hog cholera bacilli" and further "the virulent agent of this disease passes thru the finest porce-

lain filters." This was in the nature of a preliminary communication relative to the newer conception of the etiology of hog cholera, and the circular consisted of but two or three pages.

In 1905 the bureau of animal industry issued Bulletin No. 72 entitled "The Etiology of Hog Cholera," by Dorset, Bolton and McBryde. This publication recorded elaborate investigations, which included an extensive series of filtration experiments carried out with Berkefeld filters (made of Kieselguhr or infusorial earth) and Pasteur-Chamberland cylinders (made of porcelain) by which it was conclusively shown that the etiological agent or factor in hog cholera is not bacillus suispestifer but an ultra-microscopic or ultra-visible virus, one of a large group of organisms which are now termed "filterable viruses." To which should be added the splendid practical field work of Dr. W. B. Niles.

The conclusions reached by Dorset, Bolton and McBryde relative to the cause of hog cholera were subsequently confirmed by many well-known workers in various parts of the world, including the following: McClintock, Boxmeyer and Siffer of the Parke, Davis laboratories at Detroit; Ostertag and Stadie at the Hygienic Institute of the Veterinary high school at Berlin; Uhlenhut, Hubener, Xylander and Botz at the imperial board of health at Berlin; Sir Stewart Stockman and Sir John McFaydean in England; Carre, LeClainche and Vallee in France; Sir Arnold Theiler in South Africa; and Hutyra in Austria-Hungary.

Dr. Detmers' work was many sided. In 1883 he made an investigation of diseases of sheep for the United States department of agriculture, to George B. Loring. This report was finely illustrated as were many of his other papers. It was dated Champaign, Ill., June 26, 1883. In this report he gives in detail an account of some of the animal parasites, gadfly, fluke (*Distoma*), lumbriz or worm (Rep. U. S. D. A. 1883.) For many years after these early investigations he continued to take an interest in swine plague. In 1890 he reported finding a substance which renders hogs immune from swine plague. (Rep. Ohio Station 9:38, 1891.) The scholarly investigations of Dr. Detmers were so well thought of by the U. S. department of agriculture that he was called on to investigate southern cattle fever. He published his results in the bureau of animal industry report for 1884 (426.) "My observations and experience of last year, more than ever convinced me that the (exciting) cause of southern cattle fever consists in something intimately connected with or dependent upon the peculiarities of the southern flora, and not—at least not directly—due to the climate and higher temperature of the southern states, which only indirectly exerts its influence or aids in its production and propagation." (It is curious that Dr. Ravenel of South Carolina was at one time employed by the U. S. government to study fungi with reference to this disease, so Mr. W. Diehl informs me.) He brought out the fact that native Texas cattle never contract the disease. He recognized that the disease is much less malignant than in the north. He described bacilli present

and thought perhaps they may be connected with the disease. Dr. Theobald Smith, in his brilliant researches, discovered the cause to be a minute animal parasite, not a bacterium, that lived in the Texas cattle tick. Detmers was in error in stating that it belonged to the flora of the south—a bacillus constantly present. He noted that Texas cattle spread the disease in the north but did not recognize that it was due to the ticks dropping from cattle. Detmers' work was during the early bacteriological days in this country, when everything of a contagious nature was laid to bacteria. The point is this—that Dr. Detmers did recognize that the disease was conveyed by some organism.

Dr. Detmers was busy at all kinds of problems connected with the livestock industry at the Ohio Station. In his report as veterinarian there was a discussion of the diseases of sheep, swine plague, (Ohio State 5:283-303, 1887.) Altho the Ohio Station gives a report of the veterinarian, Detmers did not, however, actually become connected with the station until July, 1888, as he tells us.

Dr. Detmers' work began with the Ohio Station in 1884. Among the chief of the problems he was investigating in 1888 was that of swine plague. In order to be up with the times he went abroad in June 1888 to investigate the research bacteriological laboratories of Koch and Ehrlich, and the veterinary colleges of Bavaria, Hanover, Saxony and Berlin. In the annual report of the Ohio agricultural experiment station (seventh and eighth) there are reports on entozoon diseases, reports on the publication of a bulletin on colic of horses for which there had been a large demand. In 1890 he gave an extensive account of lumpy jaw as then generally understood, supplemented by some original work of his own. Altho the nature of the disease was well understood in Europe, it "seems to be imperfectly or not at all understood in our own country, notwithstanding that everyone who lays claim to scientific attainment is well aware of the fact that the morbid process and the morbid changes are due to the presence of nests of radiating fungi, the actinomycetes."

His interests were manifold because at Decatur, Ala., he studied yellow fever and found a bacillus, and like many of these early bacteriologists, he was in error. It was thru the brilliant researches of Walter Reed, James Carroll, A. Agramonte, and Lazear that the method of transmission was discovered. The discovery that a protozoon parasite lives a part of its life in the mosquito was made, Dr. R. E. Buchanan tells me, by H. Noguchi many years later. As early as 1881 Dr. Charles Finlay advanced the mosquito theory.

In 1889 Dr. Detmers was busily engaged in preparing an atlas of pathogenic bacteria. He was an expert at the making of photomicrographs.

Dr. Detmers published much, and some of the papers have been referred to above. In addition, he was a contributor of articles on veterinary science to the Chicago Tribune. These were published soon after he arrived in America, probably 1866. He also edited a department in the Farm and Fireside, from April 1, 1889 to 1902; veterinary journals, American Veterinary Review, Prairie Farmer, etc.

Dr. H. J. Detmers did some notable pioneer investigating in contagious diseases of animals. He did some notable pioneer teaching of veterinary science. Notice, if you please, the courses he outlined at the Kansas State agricultural college. It was a broad outlook on the field, handicapped of course by the fact that he was brought up in an environment entirely different from our own. Imagine, if you or I were called on to take up a subject in a foreign land, we would have difficulties. Dr. Detmers made good in a large way, and this was appreciated by some of his students whose expressions I have given. The livestock interests of the country recognized his worth. The Saddle and Sirloin club of Chicago had a splendid portrait painted of him and hung in their gallery of portraits in their headquarters at Chicago. Major E. N. Wentworth of Chicago who has written in a worth while way the biographies of these men in "A Biographical Catalog of the Portrait Gallery" (1920) has said: "The tenacity with which Dr. Detmers clung to his explanation of his discovery (swine plague organism) was a fair measure of his character. He knew that he was right, as far as his experience went, and he defended his position to the best of his ability against both friend and foe, and he encountered both. As a matter of fact, Dr. Detmers knew only two kinds of people, friends or foes, and with each class he went the limit. For his friends he knew no sacrifice too great; for his foes no resistance too strong."

Dr. Detmers died December 11, 1907, at Columbus, Ohio, after a very brief illness, and less than a year after the death of his wife. He has left his impress on the veterinary profession and on veterinary investigations. He filled a large place in the hearts of his students and so let us forget our differences and give him a large place in the veterinary profession.

CHARLES CLEVELAND NUTTING

The press items of January 24 and 25, 1927, contained the sad news of the death of Dr. Charles Nutting at Iowa City on January 23. Dr. Nutting for many years was head of the department of zoology of the state university, a position he filled with great credit and honor to the university, not only because he was a great and an inspiring teacher, a fine citizen, a true friend, but a great authority on a special group of marine animals, the Hydroids of the Coelenterata. He was the leading authority in this country on this group, and this is altogether remarkable because he was hundreds of miles from salt water where they are found.

Dr. Nutting, on his death, was in his sixty-ninth year, and one would think there were still some busy years ahead to make some more of his zoological contributions and enjoy a needed rest from his strenuous labors as head of the department of zoology. The university authorities did relieve him in part from his duties but a weak heart made it impossible for him much longer to stand the strain.

Your committee on necrology has asked me to prepare a sketch of his life for the Proceedings of the Iowa Academy. It is a pleasure indeed to do this because I had known him quite intimately for more than 38 years. I first met him at a meeting of the Iowa academy held in Des Moines in 1889. He and other associates helped reorganize the present academy to make it a force in Iowa. The present academy owes much to those faithful workers of long ago—like C. C. Nutting, Herbert Osborn and R. Ellsworth Call, the zoologists of this early organization.

The writer served with Dr. Nutting on many committees. He always had splendid ideas on matter of policy and publication. He did not present many papers during these 39 years but those presented were good. He once told me after the presentation of some of his papers, as "Systematic Zoology in College," "Some of the Causes and Results of Polygamy Among the Pinnepedia," "Do Lower Animals Reason?" that he used the academy proceedings to bring out certain interesting points about animals, the peculiarities of structure and general philosophical zoology before the public. In his presidential address on "What We Have Been Doing," there is a brief resume of some scientific work members of the Iowa academy have been engaged in.

Dr. Nutting for many years was one of the university representatives to deliver lectures on zoological subjects to colleges and universities. Three of these which I heard were delivered to large audiences at Iowa State college, one on "The Bahama Expedition," "The Winnipeg," or "The Explorations in the North," and "The Barbados-Antigua Expedition." He was clear and concise in presenting his subjects to the public. The fine lantern views made the matter doubly interesting. The lessons he presented were long remembered by his audience. It was indeed a pleasure to hear him because he always had an important message. On Laysan island it was the protection of the bird life. On the Winnipeg area it was to preserve the breeding places of our migratory birds.

It was the writer's pleasure to have been entertained in his home. He was a fine host and his wife an equally fine hostess. The family life was an ideal one, a simple American home in which religion was a part, and his ideas of the home was finely brought out, in "Ascending Humanity," commencement address delivered at mid-year convocation on February 4, 1925, at Iowa City. In this address he paid a fine tribute to Henry Drummond, the author of "The Ascent of Man" and that other great book "The Greatest Thing in the World," in which Drummond presents the thesis that "the greatest thing is love or perhaps better, affection." In this address a beautiful tribute is paid to motherhood, the development of the family, the clan, state and nation, and finally he advocated a spirit of brotherhood among nations. In this ascent and co-operation, then, there must be self-control, the basis of love, charity, self-sacrifice and altruism. Christ is a part of the ascent of man. He tells us "The progress of civilization may be likened to a rising tide, a succession of waves, each advancing and receding, each sweeping higher and higher and higher on this shore."

Dr. Nutting was born in Jacksonville, Ill., on May 25, 1858, and came from a fine family. His father was the Rev. Rufus Nutting, professor of Greek in Blackburn college and a Presbyterian minister. His mother was Margaretta (Leib) Hunt. Dr. Nutting married Lizzie Hersman of Hersman, Ill., August 10, 1886. Some years after the death of his first wife he married Eloise Willis of Iowa City, June 16, 1897.

Professor Nutting received his early education in the public schools of Jacksonville, Ill., prepared for college at Carlinsville, entered Blackburn college, Carlinville, Ill., in 1876, from which he graduated in 1880, receiving the A. B. degree and the A. M. in 1882. Blackburn is not a large institution. When I visited it in 1886, a few years after Nutting graduated, there were only a few brick buildings, but the work was thoro. I

often wondered how it was that Dr. Nutting turned his attention to zoology.

I find that Dr. Nutting received a great deal of his inspiration from his teacher, David Starr Jordan, who was an instructor in the high school at Indianapolis, Ind. No doubt Dr. Jordan should be given credit for inspiring Dr. Nutting to become a zoologist.

In the early 80's, Blackburn stressed liberal arts, Greek, Latin and the humanities. The sciences were incidental. Dr. Nutting's instructor must have given the young man a thorough grounding in the fundamental principles of zoology with a broad outlook on sciences in general. Otherwise he would not have been inspired to go into zoology. His great work in zoology was quite generally recognized so that in 1926 Cornell college, Mount Vernon, Ia., conferred the honorary degree of LL D on him. After his graduation from Blackburn college he became an assayer in Leadville, Colo. In 1882 he became connected with the Smithsonian institution as an explorer in Central America and afterwards in many other places,—Costa Rica, 1882; Nicaragua, 1883; Florida, 1885; Cuba and Bahamas; the Saskatchewan river, 1891; West Indies, 1888; Plymouth, England, and Naples, Italy, 1895; California coast and Lajolla, 1905 and 1909; Fiji-New Zealand expedition, 1922.

He came to the state university of Iowa as an assistant under Dr. Samuel Calvin. There can be no doubt that this was a rich experience for him. Dr. Dayton Stoner, in his fine, short sketch in *Science* (65:151), says, "In the autumn of 1886 Mr. Nutting joined the university staff as professor of zoology and curator of the museum of natural history. Four years later he was made head of the department of zoology which position, together with the curatorship of the museum, he was destined to hold for 36 energetic and fruitful years."

Dr. Nutting was inspired by that fine master and teacher, Dr. Samuel Calvin, who was eager and took his recreation in the "unalloyed joy of research." As Calvin once said to Nutting, "This is my recreation, my pleasure, my golf, if you please." Professor Nutting tells about the discovery of a new Protozoan in the laboratory of Dr. Calvin, which was not only appreciated by Professor Nutting, but by Professor Calvin. In the words of Dr. Nutting, "Dr. Calvin, the best teacher that ever I knew, looked at it, and his face fairly beamed in sympathy with the enthusiasm of his new assistant. His decision was instant. 'This looks like something new, drop everything else and stay with it. I will see to it that your time is occupied by none of the usual duties. Work out the life history of this new creature and prepare an account for immediate publication'." Then he tells us how delighted he was to have described

then his first new species. "It had more thrill in it than hundreds of other species described since."

Professor Nutting served as assistant at the state university until 1890 when he was elected to the chair of zoology. In the year 1895 he occupied the Harvard university table at Naples. His interest in a study of salt water animal life began with his work in Central America, Nicaragua and Costa Rica. Work in the Smithsonian institution and the United States national museum and at Naples helped him to lay the foundation for his future life work in marine zoology, especially hydroids.

He was the naturalist for the Hawaiian cruise in 1902 under United States governmental auspices on the steamer U. S. S. Albatross and this was an important one because many new discoveries were made. He was connected with many other zoological cruises as the Bahama expedition in 1893, which was prolific of many scientific papers and gave the students at the state university of Iowa a wonderful opportunity to study marine life. There were 20 persons connected with the Bahama expedition working under his direction. His account, "Narrative and Preliminary Report from the State University of Iowa" known as the Bahama expedition gives a most fascinating account of the animal life and this cruise. The headquarters were on board the ship Emily E. Johnson.

It seems to me this Bahama expedition not only accomplished a great deal in the way of collecting valuable material but is an important contribution. It required good executive ability and organization to bring about the co-ordination of the work of the expedition. The Crinoidea and Echinoderms were studied by H. L. Clark, the fishes of the West Indies and Florida by A. E. Verrill. The descriptive account appeared in *Bulletin of the Laboratories of Natural History* (7:1-252.)

The Barbados-Antigua expedition was undertaken in 1918. The report was published by the university, continuation *Bulletin from the Laboratories of Natural History of the state university* (8:1-274.) There were 19 persons, including students, under his direction on this expedition. The shores and reefs were studied as well as deep sea dredging in 150 fathoms of water. He tells us that tho the region was not as rich as the Bahama islands, Cuba and Florida Keys, it was interesting because comparatively little study had been made of the Barbados and Antigua islands and their collection added materially to the knowledge of the geographic distribution of animal life. The Antigua island is a part of the Leeward island and with the Windward island is known as the Lesser Antilles. They explored St. Thomas island, St. Croix island, St. Kitts and Antigua. Dominica is the most beautiful island of the Lesser Antilles. Dr. Nutting expressed himself in beautiful terse Eng-

lish as shown in the following extract under the head of Outward Bound, "After the strenuous life of the preceding days it was an immense relief to find ourselves on shipboard with the prospect of a restful voyage of two weeks involving one of the most delightful cruises imaginable, including visits to many of the beautiful islands of Lesser Antilles, and with nothing to do but enjoy ourselves."

In another part of the report he says, "Life at sea in these latitudes is a deliciously lazy one. The weather is usually fine, the air soft and not hot, the water the bluest of blue, and the sky blue for the most part, but girdled around the horizon with the beautiful columnar tropic clouds. We watched the countless small schools of flying fish rising suddenly, skipping along the crests for a hundred yards or so and then plunging into the water. By night we leaned over the rail and watched the sparkling phosphorescence caused by innumerable pelagic organisms."

A zoological exploration was made to Saskatchewan in July and August, 1891. A full account of this was published by the state university (Bul. Lab. Nat. Hist. 2:235.) Dr. Nutting gives a fine description of the region, the animal life in and about Lake Winnipeg and Lake Winnipegosis, and the streams. A part of the drainage system of British America, like the Saskatchewan, Nelson and a maze of lakes, is a fine breeding place for wild fowl, "one of the greatest palustral regions in the world and breeding place of most of our migratory birds." This paper is especially valuable for its account of the animal life and a comparative study of the western Arctic and temperate fauna. The paper lists the species and notes the eastern and western migrants which never occur in Iowa.

Dr. Nutting was a fellow of the American Association for the Advancement of Science, secretary section F, zoology in 1897 and vice president of the same section in 1902, and a member of the Zoological society, president central branch 1906, member Naturalists of Central States, Washington academy, fellow Iowa academy, president in 1891. President Iowa Anthropological association, 1906. His name is starred in Dr. Cattell's American Men of Science, 1906, which means that his associates in zoology recognized him as one of the leading zoologists of the country. Dr. Nutting was the leading authority in this country on hydroids and alcyonaria. He built up for the state university of Iowa one of the finest collections of this group in the country and this is a fitting monument. He was called on to work up this group of animals collected by various expeditions. Many ophiuroidea were collected by the Bahama expedition of 1893. These he described in Bulletin of Natural History of the state university (5:1).

He published many papers on hydroids. The extensive collection made by the Harriman Alaska expedition, Puget Sound and Alaska, were studied by him and extended the list of ser-tularidae (Proc. U. S. Nat. Museum). The west coast hydroids were monographed by Dr. Nutting while McLean Fraser under his direction, also studied hydroids. (Bull. Lab. Nat. Hist. 6:3). They were monographed by him in Washington Acad. (Sci. 3:157). The paper on the hydroids of the Woods Hole region was published by the U. S. fish commission. The Hawaiian hydroids collected on the steamer Albatross of the U. S. fish commission in 1906 was published by the fish commission, 1903. In a well-written paper he described the alcyonaria mainly from Japanese waters. Some were new to science. (Proc. U. S. Nat. Museum 43:1-104). During 1906 the Albatross made a cruise in the northwest Pacific securing 102 species. In a discussion of these he took up the geographical bathymetric distribution of alcyonaria. The paper on American hydroids was published by the U. S. national museum (parts I, II and III issued as special bulletins 1900-1915), and the Gorgonacea of the Siboga expedition published by the U. S. national museum (parts III to VII, 1910-1911, also issued as special bulletins).

The Gorgonidae of the Coelenterata also received his attention. In one of the early contributions of the bulletin laboratories of natural history of the state university (1:97-160) he, in order to determine the relationship of the group, had to make a thoro study of the anatomy and then made some observations on living species.

Dr. Nutting was an easy and forceful writer and had the ability to make clear his discussion of a subject. Let me quote what he had to say about Frederiksted, St. Croix island, "Quite a number of our party went ashore at Fredericksted where we secured automobiles and took a drive over to Christiansted on the opposite side of the island. The roads were excellent and the novelty of bowling along between rows of stately palms and thru great sugar estates with many beautiful vistas of tropical valleys between hills that would be called mountains at home, with a glimpse of the blue sea beyond, was hugely appreciated by the Iowa folk."

It must have been a rare treat for the students to see the botanical garden on St. Kitts island, the wonderful tree ferns on the island, to visit St. Johns, the capital of Antigua, the Guadeloupe, Point a Pitre, a city as foreign as it could be, the beautiful Dominica, the most beautiful and most interesting of all the lesser Antilles, at least to the naturalist, who could see the wonderful botanic garden and the public museum.

Another illustration of his style is shown in his account of porpoises:

A short distance beyond St. Pierre a big school of porpoises gave us an exhibition of fancy swimming, hurdling and diving as they followed the ship and played along side for half an hour or so. One never tires of watching their aquatic acrobatics. We were up early in the morning of May 9 and found the low hills of Barbados, the ultima thule of our cruise in sight. Soon we could make out the trees and buildings of Pelican island which was to be our home for the next five weeks and looked very attractive in the morning light. * * * No flower bed nor collection of tropical butterflies could surpass the bright color of these fishes (speaking of tropical fishes), and we all were immensely enjoying surveying the contents as they were brought in. Of course these colors faded very soon after death and nothing in the preserved specimens indicated their real appearance in life."

He gives a fine account of the Barbados islands not as well known to Americans as some other islands like the Bahamas and Cuba. He mentions the agriculture, the profusion of flowers like Hibiscus, Bougainvillea, silk cotton tree. He was impressed with Imperial department of agriculture, the fine botanic garden. He gives as an introduction a fine description of English harbor as follows:

"The next morning we witnessed from our portholes a sight that for splendor of coloring I never saw surpassed. We were gliding thru perfectly calm water in the lee of St. Lucia off the sharp pinnacles of the Pitous twin cones, slender almost as church spires, twenty-six hundred feet high." The remainder of this book as well as the Bahama expedition are equally interesting and are well worth reading.

Dr. C. C. Nutting in "Lessons From Fiji" (Scientific Monthly 23:19-32), says:

It is even so in Fiji, the British colonials on the one hand and the Indians on the other hand, or the upper and nether millstones, between which the really fine native race seem destined either to assimilation, which seems unlikely, or obliteration, which I sadly fear is probable. The lesson is, then, that communism, altho an alluring ideal, is but an indiscreet treatment doomed by an inexorable natural law to failure when brought into competition with a people inured to the struggle for existence, by which progress is alone possible from the biological point of view.

The Daily Iowan, in commenting on the work of Professor Nutting, says:

As long as the university lives, Professor Nutting is alive, for it was he who gave so unsparingly of his services that the university might be what it is. He will live in the hundreds of deep sea museum specimens he procured and brought to the University of Iowa and in the intellect of the students he has instructed during the last 41 years.

But longest of all he will live because of the unfailing sense of duty that distinguished him as a scientist and a gentleman.

Dr. Dayton Stoner in the same publication, says:

He was extremely human and sympathetic in his contacts with

others. He could always see the other fellow's side of the question. While the passing of Professor Nutting will be noted with regret by scientists and co-workers on account of his scholarly attainments, he will be most sincerely mourned by those who had the privilege of his friendship and have known something of his appreciation of life's values. His presence on the campus, always an inspiration to his students, has meant so much to returning graduates that his absence will be keenly felt for many years to come, and no commencement occasion will seem quite complete without him. President W. A. Jessup said, 'Professor Nutting had one of the most interesting and colorful personalities I have ever known. He was a great leader in the field of science and one of the outstanding naturalists who has developed in the academic world. He shared honors with Calvin and MacBride in centering the attention of the scientific world on the University of Iowa.'

He is survived by his wife, a daughter, Miss Elizabeth Nutting, and two sons, the Rev. Willis D. Nutting of Evergreen, Colo., and Charles B. Nutting, a junior in the college of liberal arts. The funeral services were held from the Nutting home by the Rev. Mr. Rhind of the Presbyterian church, assisted by Rev. Willis Nutting who is rector of an Episcopal church in Evergreen, Colo.

The editor of the University of Iowa Bulletin News says this:

Professor Nutting was a most interesting character, recognized everywhere as a scholar, one of the last and best of the old school.

REVEREND LeROY TITUS WEEKS

The subject of this sketch was born in Mt. Vernon, Ia., February 1, 1854. It was, indeed, a shock to his many friends in Iowa and elsewhere when the news dispatches of March 4, 1927, announced his death in Council Bluffs. He led a long, active life as a farm hand, a minister of the gospel and a teacher. He had firm convictions on many things and never was afraid to express himself. It was a great pleasure for me to have known this splendid man rather intimately since the return to his native state some 12 years ago. My admiration for the man increased on closer and better acquaintance. I loved him for his fine personality, his sincerity and his high devotion to duty. In learning of his death, I wrote to a friend, Dr. Fred W. Clayton:

Dear Dr. Clayton: I have just learned of the death of the Rev. LeRoy Titus Weeks, one of God's truly noblemen, a profound student of birds, a man with a wide knowledge of science in general, a man who loved the out-of-doors and a great lover of animate things in general. A man who could express his feelings in prose and verse in a fine way. He was the real Iowa poet on bird life and nature. His poetry will live and inspire others to live with birds and flowers. He was a profound student of the Bible and an inspiring preacher, because he was so earnest and sincere. He has left his indelible impression wherever he has been, as a student, preacher and lecturer, and citizen, because of his sincerity and his fine personality.

I deeply regret that he is no longer to be with us. I miss him because I loved him, and I do recall now the pleasure it was for me last October to have him on all of our field trips in Fremont county, and the fine introduction he gave when I lectured to your students.

Dr. Weeks' earthly life is gone but he lives and will continue to live with us for his fine accomplishments and noble deeds.

I am glad, indeed, that it was my pleasure to have had a friendly visit with him last October when he and I, with some students of Tabor college, made a pilgrimage to the Fremont county state park near Hamburg, to study birds and flowers. On that fine, sunny October afternoon, we walked up and down the valley and climbed the hills. The brilliant autumn hues of the sumach, and the yellow bloom of the goldenrod and sunflower, the blue flowers of the aster, and the fitting birds in the woods were reminders of beautiful nature. Little did I think that in less than six months Dr. Weeks would no longer be with us.

The day before I talked from the same platform he did to the student body at Tabor college, he introduced me as his

friend and co-worker in the field of conservation. That evening I had a long visit with him at his home. He talked reminiscently about scientists he knew and how important it is to get the right attitude on Christianity and science.

One of his biographers, in the Tabor Beacon, has said:

After 73 years of useful and helpful activity in this world, Dr. LeRoy Titus Weeks passed on to the better life last Friday evening in the same manner in which he had lived—without show or ostentation, asking no special favors or honors, concerned not with the pains and pleasures, successes and disappointments which had come to him, but with earnest solicitation for the enterprises which he had held dear thruout his life.

Dr. Weeks was educated in the public schools of his native town and during the summer vacations worked on the M. F. Rigby farm, near Stanwood, Ia. In 1872 he did some real pioneering, going with his parents to Kansas in a covered wagon. He returned to Mt. Vernon where he attended Cornell college, receiving the degree A. B. in 1883 and the A. M. in 1902.

Here he followed the plow and the reaper and listened to the sweet song of the bobolink and brown thrasher which gave him the inspiration to love nature.

After graduating from Cornell college he became a teacher in McKendrick college, Lebanon, Ill., and then professor of English at Southwestern college, Winfield, Kan. He did ten quarters of graduate work at the University of Chicago and continued absentia work later at the University of Denver which institution conferred on him the Ph. D. degree in 1905. While traveling abroad in 1899 he did some graduate work at Oxford. Dr. Weeks was a thoro student of the classics and a great student of Shakespeare. So much was his work as a teacher appreciated that one of his former students finely equipped a room to be known as "Weeks Memorial Room" in Southwestern college.

Dr. Weeks became rector of Trinity Episcopal church, Emmetsburg in 1915 and served in this capacity until 1925, greatly beloved by his parishoners. He was received by Bishop Theodore N. Morrison from the Methodist church and ordered deacon subsequently made a priest of the Episcopal church by Bishop Harry S. Longley.

He entered heartily into the boy scout work, especially since it gave him an opportunity to study and inspire the boys to study birds. At Emmetsburg and other points in the country, he made a special study of birds and his bird contributions are valuable.

He also served as rector of the Episcopal church at Glenwood. When the Episcopal church took over Tabor college, Dr. Weeks was selected to become dean and head of the English department, a position he filled with great credit to himself and

Tabor college. He was Tabor college chaplain and served as pastor of the Congregational church. The Tabor Beacon says of his work:

After his coming to this community two years ago, Dr. Weeks merged into the life of Tabor college and Tabor community in a manner that immediately endeared him to all his associates. Altho not attempting to take part in all the community activities, and never making himself conspicuous in any manner, he rapidly became grounded in the affections of the people here to an extent that was not realized until the news came that he was no longer with us. He took a special interest in the Masonic and Eastern Star organizations, enjoyed greatly the fellowship which he found there, and contributed largely to that fellowship. Altho enjoying the benefits of an extensive education, he considered that education not as a means of advancement but as a means of service."

Dr. Weeks, on many occasions, was a visitor in Ames, sometimes on a preaching mission but more frequently in connection with the Iowa Conservation association and the conservation school. He always brought a fine message. We, at the conservation school, will miss him. Dr. Weeks was greatly interested in forestry and was an advocate of forestry conservation. He made a strong appeal for the forestry work at Ames. In the Des Moines Register of October 31, 1926, he said:

Some time ago I read an article in the Register indicating that there is a move afoot tending toward the closing of the forestry department in Iowa State college at Ames. I wish to enter an earnest protest. There are two powerful phases of reasons why this should not be done: It is bad economy, and it is bad aesthetics.

There are many able men and women who can plead for the forests and their propagation—reforestation, from the economic standpoint; so let me show cause why the forestry department should not be closed because of aesthetic reasons. Every year the number of men who are not moved and recreated by the beauty of the forests is "beautifully less." Every year the number of people who begin to sit up and take notice of the spiritual value of trees is rapidly on the increase.

The Lord Jesus Christ, the man of sorrows and acquainted with grief, was well aware of the healing influences of the woods.

There was never a tired soul or a tired body that might not realize that same restful content—out there in the woods. If you wish to realize the bleakness and hideousness and insanity-compelling environment where there are no trees, read Bret Harte's poem, "Sicily."

Go out there and camp a year or two, you men who do not believe in reforestation. Hike out, with you! Take along with you for reading, Joyce Kilmer's poem on trees.

Dr. Weeks was also one of the strong faculty members of the School of Wild Life Protection at McGregor. The early morning bird hikes will be remembered by these students as a great inspiration. The little breakfast, the field glasses and hiking clothes and the eager students who got such fine inspiration from him are worth noting. His sermons on the great out-

of-doors were a real inspiration. At Tabor, as at Emmetsburg, he took long Saturday morning hikes to study the birds. A writer in the Tabor Beacon says:

He was both a lover and a student of birds. He spent much time, up to the last, in the study of birds, and was considered one of the best authorities in this section on birds. He was a member of state and national ornithological organizations and made weekly reports to the magazine *Bird Lore* on the migratory birds of this section. As long as his health would permit he spent each Saturday in the woods observing the activities of the birds. Even after his operation in the hospital at Council Bluffs, he became restless because the nurses would not allow him to sit up by the window with his field glass and watch for birds.

The writer in the Tabor Beacon also says:

Early in his literary work, Dr. Weeks developed an interest in poetry, and showed an exceptional talent for it. His exceptional love for birds and children and God gave him many unusual inspirations for his poetic works, and in many of his poems his deep thoughts are mingled with fun and frolic in a manner that elevates the fun to a higher plane rather than belittling the eternal facts which no man appreciated more than he. His style was very similar to that of James Whitcomb Riley, and the quality was so near that he was more than once called the Riley of the west.

Dr. Weeks published a volume of poems, some of which first appeared in the *Century* magazine. His poetry breathes of the out-of-doors. I think we have had no Iowa poets his equal on the subject matter pertaining to the out-of-doors. Certainly the poetry of Dr. Weeks will be more appreciated as time goes on. He is a product of Iowa we may well be proud of.

Dr. Weeks was twice married. His first wife was Ida Ahl-born of Smith Center, Kan. The marriage occurred on June 13, 1894. She died on September 11, 1911. The second wife survives and lives in Evanston, Ill.

Dr. Weeks was a literary man in the truest sense of the word. I like his poetry because of the fine sentiment of the great out-of-doors. There is a peculiar charm in his poems, as the *Ode to the Bobolink* which was thought out when he worked on the Rigby farm in Stanwood, and first published in the *Century* magazine. How true are the following lines:

"Winkle-winkle-wonkle-winkle,
Tee-a, tee-a, tump-tinkle,"
So my tippy bobolink'll
Jubil all the day.
"Rinklety-ranklety-rumple-rinkle,"
Until night with starry twinkle
Stops his jingling lay.
Sweet is thy music, O wild little rover!
Tumbling, glee-drunk, into billows of clover;
Merry as Bacchus and sweet as Apollo,—
Thy careless foot crumpling the lily's corolla.
"Fink" "Fink."

"Inkle-y, ankle-y, onkle-kinkle,"
Teasing out the snarl and crinkle
Of the toiler's brain;
From a flaunting rag-weed teeter,
With intoxicating meter,
Flows thy silver strain.

And then, the Ode to the Brown Thrasher:

He gathers all the melodies
That echo in the grove;
He holds the wealth of all sweet things
There in his treasure-trove:

The ripple of the rivulet,
The trinkle of the rain,
The purple of the sunset,
The fragrance of the plain.

"Pickerel, pickerel, pickerel,
Stickle-back, stickle-back,
Sculpin, sculpin."

And then, read this fine sentiment in What Is It That Tugs at My Heart:

Perfection of earth in her October dress;
Perfection of sky in a gown of soft haze;
Far vistas that lure me to wonder and guess
What landscapes eternal lie hid from my gaze.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

A valley lies skirted with woods on each side,
Dear Valley of White Oak, the home of my youth;
Clear Creek and the cool "Upper Spring" with its tide
Of waters as sweet as the fountain of truth.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

My memory, river with margins of gold,
Flows thru that dear valley, and I a light boat,
Float there among lilies, where echoes are rolled,
As sweet as the song from the mockingbird's throat.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

Old Homestead, with windows swung wide to the night;
The moonlight streams in over forms that I love;
An unbroken home; sleeping sound, sleeping light,
And over them spread the white wings of a dove.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

I wander by Clear Creek with old willow rod,
A chub and a shiner or two on my string,
A greensward as soft as a mortal e'er trod,
And a foot that is light as a young eagle's wing.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

I walk over fields where 'twas I led the charge;
I feel the old itch of my hand for the sword,—
My jeweled Excalibur, keen for the targe,
When battles were on in behalf of my Lord.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

I stroll thru the moonlight again with my bride,
While the earth like an opal burns under my feet.
I feel the warm surges of life at high tide,
And the touch of her hand is supernally sweet.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

I push a gate gently:—Alone with the dead;
The underground city so packed and so drear!
I stroke the grass softly; I bow my gray head;
And I know that I, too, shall soon journey down here.
The glory! the glory! and yet, Oh, the smart!
What is it that tugs at my heart?

Nothing finer in verse on the great out-of-doors has been produced in Iowa.

✂ We will miss Dr. Weeks at our conservation gatherings at Ames, at the School of Wild Life Protection at McGregor. He will be missed by a host of nature lovers thruout this land. The communities in which he lived, loved him for his sterling qualities. He will live because of his literary productions, and the example he set to lead a pure and noble Christian life. I am indebted to W. H. Thompson and Dr. C. R. Keyes for some of the facts of the life of Dr. Weeks.