THE FARMER IN THE UNIVERSITY.

PRES. C. K. ADAMS, University of Wis., Madison.

Of all the institutions of human society a great university is unquestionably the most democratic. It is more democratic than the church, for the reason that within the church, as we all know, the very rich and the very poor seldom meet on the same terms. It is more democratic even than the penitentiary, for although all can enter the penitentiary on the same terms, it is not true that all have the same chance to get out.

Within the university, on the other hand, the rich and the poor meet on precisely the same terms and occupy precisely the same standing. It is true that the rich have some advantages over the poor. They can buy more books. They can join more societies. They can have more of fashionable social life. On the other hand, the poor have some advantage over the rich. They are tempted into fewer distracting influences. They have no allurements to

Let us consider this proposition a little. If we enter one of our great machine shops, we find the workmen manipulating inanimate matter, passive and obedient to their every touch. All its powers and properties they know exactly. The farmer deals with life, not only with vegetable life, but with animal life. He works on a higher platform than the machinist; he must force from nature some of her most mysterious secrets, the secrets pertaining to life and growth. Even in raising his crops he must not only woo the earth, but the air and sky and sun must smile on his efforts.

An Earnest Wish.

Ladies and Gentlemen, I must make way for the eloquent speakers who are to follow me, but I cannot close without mentioning a wish which often comes into my mind, and probably it comes into the minds of others here. It is, that before I finally lay my head on the lap of Mother Earth for my long sleep, I may have the happiness to go back on a farm again and there live for a few years "unvexed by the unholy strife that in the city frets and fevers life."

"Back on the farm again! I hear no more
The din of trade with its tumultuous roar,
The landscape glows with color, and the trees
Wave 'palms of joy' in every passing breeze."
take them away from that absorbing devotion to study which is the most potent element of success. They are constantly inspired with the idea that their future depends upon their own effort and consequently they work harder and more seldom fall in what they undertake. These advantages, as experience has abundantly shown, more than counterbalance the advantages possessed by those who are relieved of all anxiety in regard to the future.

Merit Wins.

Among students themselves the democratic spirit is a predominant force in all the walks of student life. They meet in the class room on precisely the same terms. They are required to do the same tasks. They work together in the gymnasium. They go into the same sports and into the same bathrooms. If they excel, they have precisely the same chance of getting on the football team or into the crew, or to be chosen to represent a society in joint debate. Of all classes in society students are the most intolerant of snobishness. The student community respect and applaud genuine merit wherever it is found.

This might be illustrated in a hundred ways. Every one that has long been acquainted with university life knows that the steady advancement of genuine merit over fictitious advantage is one of the most interesting and frequent occurrences of student life. A poor boy comes to the university without money. It may be that he has had so poor advantages in the way of preparation that the faculty hesitate long whether to admit him. When admitted, however, his ability and industry often begin to give him an advantage. He applies himself with desperate earnestness and forges ahead. He is apt to approach and finally pass those who have less anxieties in regard to their future, and finally perhaps graduates at the very head of his class, and when he goes out into the world to enter upon the activities of life—whatever those activities may be—he finds the world ready to welcome his ability, his industry, and his integrity. If we analyze the motives of students we shall see that, on the whole, those whom the world calls poor have a very considerable advantage over the rich, and consequently they are more likely to be crowned with a larger success.

The same conditions are likely to be found if we look into the staff of instruction. Often, perhaps generally, a majority of those who are called to the highest places in our institutions of learning were once poor boys on the farm, or elsewhere, who had to support themselves, and, who without any assistance whatever, raised themselves to positions of influence and power. In view of these facts, it is not singular that a very large share of those found in the various departments of the university, whether as teachers or as students, come from the farm.

How many farmers are there in the university. It is not easy to answer this question with precision. As you are aware, the university would not be a university unless it devoted itself to universal knowledge. We have a College of Letters and Science, a College of Agriculture, a College of Engineering, a College of Law. We have also a School of Pharmacy, a School of Economics, Political Science and History, a School of Music, and a School of Education.

Farmers in Our University.

In the College of Agriculture, with its 275 students, or thereabouts, I suppose about nine-tenths are farmers. In the College of Law no exact census has been taken, because our methods of admission do not make inquiries in regard to previous vocation. The same is true in regard to the School of Pharmacy. But in the College of Letters and Science, including the School of Economics, Political Science and History, and the School of Education, as well as the School of
Music, and in the College of Engineering exact figures are obtainable.

For the purpose of ascertaining the vocations from which our students have come an examination has been made of the records of the students admitted within the last four years and these interesting results have been obtained: In the Colleges of Letters and Science and Engineering during the past four consecutive years 1,541 students have been admitted. Of this number, 96 students failed to report any occupation of their parent. These were chiefly adults, who, for some years have been self-supporting. One hundred and eighty-nine students reported the death of their father, so that more than 12 per cent. of the students entering these colleges have a widowed mother. Seventy-four students state that their fathers have retired from business. Making the necessary deduction, we have 1,180, of whom the occupations of their fathers are known. These occupations are classified as follows:

21.9 per cent. are sons of farmers and dairymen,
19.5 per cent. are sons of merchants, including grocers, meat-market men, apothecaries, lumber merchants, drygoods, hardware, clothing, and other sellers of manufactured articles.
7.6 per cent. are sons of manufacturers,
6.6 per cent. are sons of mechanics,
6.5 per cent. are sons of employees, other than those working on railroads. These include traveling salesmen, bookkeepers, superintendents, secretaries, and clerks.
3.9 per cent. are sons of railroad employees,
5.4 per cent. are sons of lawyers,
4.8 per cent. are sons of physicians, including dentists,
3.0 per cent. are sons of clergymen,
4.3 per cent. are sons of teachers, including librarians,
3.0 per cent. are sons of bankers and brokers,
3.1 per cent. are sons of real estate and insurance agents,
3.2 per cent. are sons of public officers, including officers of city, county, state, and the United States.
1.8 per cent. are sons of journalists, including printers and publishers,
1.7 per cent. are sons of hotel keepers and liverymen,
1.2 per cent. are sons of contractors,
0.9 per cent. are sons of engineers, civil, mechanical, and electrical,
1.4 per cent. are of vocations that are miscellaneous and are not easily classified.

Thus we see that the sons of farmers (and in saying "sons" throughout this enumeration I include daughters as well), even in the College of Letters and Science and the College of Engineering have a plurality of all the vocations. This percentage of farmers would, of course, be very greatly increased if the College of Agriculture were to be included. If the 250 sons of farmers in the College of Agriculture were to be added to the 259 sons of farmers in the College of Letters and Science and the College of Engineering, we should find that not far from 33 per cent. of all the students in the university come immediately from the farm.

I imagine that not a very different result would be found if we were to take a census of the staff of instruction. Certainly it is true that many of the most eminent of our professors were farmers' boys.

Our Professors.

Now, what is the life of a typical university professor? He is partly a teacher and partly an investigator. This latter part of his work is so important that I am free to express the opinion that no professor fills his place worthily unless he attempts at least to add to the general stock of knowledge already possessed.

This work of investigation is often overlooked. The opinion is more or
less prevalent that a professor's duties are limited to the work of instruction during two or three hours a day and that for the rest of the time he is a gentleman of leisure. Nothing could be more fallacious. Even if a professor were to do nothing more than to bring to his classes the ripe results of all the investigations that have been carried on in the subject in which he is called to teach he would find enough to occupy all his energies, all his abilities, and all his time. But there is far more than that to do. How vast is the debt which civilization owes to the investigations that have been carried on in the professors' laboratories! Think what has been done in Germany within the past few years. It was recently stated that the discovery of the processes by which aniline dyes are made from coal tar—a discovery made and developed in the university laboratory—brings annually to Germany a larger revenue than the current cost of all the German universities put together. Think of what resulted from the investigations of Professor Helmholtz in the laws of the transmission of sound. I have heard Professor Bell describe how he was reading the great work of Helmholtz when the idea of the telephone came to him and from the results of those investigations we have the means by which all people in the world now are made near neighbors. Think of the results of the investigations carried on by Professor Koch in bacteriology, by which it was discovered that many of the diseases which swept away thousands of people every year may be cured and perhaps ultimately altogether prevented. These same investigations made antiseptic surgery possible, by which such marvelous advances have been made within the present generation.

Discoveries Made at Our Agricultural College.

Now, similar, if less striking results have been obtained in the University of Wisconsin. I need scarcely remind you that the effort to obtain an easy and simple method of determining the quality of milk resulted in the invention of the Babcock milk test, by means of which I suppose it is no exaggeration to say that the dairymen and farmers of this state save as much annually as the entire tax paid for the university. Perhaps you have also observed that during the past year investigations carried on by Professor Babcock and Professor Russell for two years or more, in regard to the causes of the changes which take place in the flavor of cheese, have completely overthrown the old notions, and have revealed the causes of the changes that take place and the nature of the various flavors that are produced. It is unquestionably one of the important scientific discoveries of the present day. Moreover if we leave the field of these most brilliant discoveries and descend to matters of less general importance, we shall find that here also important results have been obtained. The work just published by Dean Henry on "Feeds and the Feeding of Animals," the work of Professor Woll on the analysis of beet sugar; the work of Professor King in investigating the action of underground water in the supply of the nutrition of plants; the work of Professor Goff in determining the fruits that can be profitably raised within this state; the work of Professors Craig and Carlyle in determining and teaching the methods by which stock can be properly judged; the work of Mr. McKeown in co-ordinating these various results of investigation and taking them to the farmers;—all taken as a whole, constitute a body of information, the importance of which it would be extremely difficult to exaggerate.

If I were not speaking to a body of farmers, and on the subject of "The Farmer in the University," I could point out how similar investigations are carried on in other departments; but for such a description this is neither the time nor the place. It is
enough to show that what the university is doing directly for the farmer is far more than a compensation for all that has been done for the university.

An Aid to Our Farmers.

Moreover, it ought to be said that there has never been a time when science and experience had so much to reveal to the farmer as they have at the present day. There is not a single subject with which the farmer has to deal which has not been in some ways enlightened by the scientific and practical experiments that have recently been going on in the agricultural colleges and the agricultural experiment stations. It is scarcely too much to say that the application of these results is absolutely necessary to the highest success.

It is brains, and cultivated brains,—that is to say, brains that have been trained and that are acquainted with the best experience of modern effect, that are needed in order to make farming successful in the most comprehensive sense. The conditions have become far more complicated and difficult by the extension of modern methods of transportation and the fact that in many ways all parts of the world are competing with each other. Nothing is more fallacious than to suppose that the simple and unaided experience of the individual farmer can insure him any success. To aid him in all of these ways, to carry to him the results of all these investigations and experiments, the agricultural college and the experiment station have been established.

Money Well Spent.

We are now hearing much in regard to the subject of taxation. I read yesterday with the greatest interest the very admirable and wise observations of the governor in reference to the necessity of revising our taxation laws. Sometimes it has been claimed that taxation in this state is excessive, but in regard to that subject one or two observations may not be out of place even here. In the first place, soon after this state was organized the policy was adopted of selling the lands that had been given for school purposes and for the university, in order to increase immigration into the state. This policy was deliberately adopted, as the reports of committees and the messages of governors show, for the purpose of attracting immigrants into Wisconsin. The policy was adopted with a full understanding that it meant forever larger taxation for purposes of education than otherwise would be necessary. Taxation in this state has indeed for purposes of education been considerable; but if there were time I could show, from the reports of the Commissioner of Education, that the amount of money annually devoted to education in this state is less at the present time than that devoted in other states adjoining us in proportion to their wealth. These conditions should not be forgotten and when we consider that of the aggregate amount of taxation paid an overwhelming preponderance is for local purposes, and not for education, we shall probably conclude that reduction in taxation, if it must be made at all, should be made in local rather than in state affairs. How much does a tenth of a mill tax for the university amount to? A tenth of a mill on one dollar is one mill for every ten dollars. It is one cent for every hundred dollars; it is ten cents for every thousand dollars and I am tempted to remark that when I was explaining this to a committee of the legislature some years ago, one of the members observed: "Then for every thousand dollars on which I am taxed I have to pay to the university the price of a glass of beer and a five cent cigar;" and I said: "Yes, that is just what it amounts to, if you pay at the rate of a tenth of a mill." It is infinitesimal compared with all these advantages that the people of the
state are receiving, for it should never
be forgotten that the university be-
longs to the people of the state; in a
very large sense, to the farmers of the
state; that it is their institution;
that it is for the education of their
sons and their daughters; and that the
future welfare and wealth and great-
ness of the state are in some large
sense dependent, not only upon the
wisdom with which the affairs of the
university are administered, but also
upon the means on which the univer-
sity is to live and do its work.

RESOLUTIONS.

The committee on resolutions sub-
mitted the following report, which was
adopted on motion of Mr. Convey:

Whereas, The great trans-Missis-
sippi International exposition to be
held at Omaha during the summer of
1898 is now in such form as to assure a
successful exhibition of the complete
resources of this country, therefore

Be it Resolved, That we believe that
Wisconsin should have a share in the
benefits to be derived therefrom by
exhibitions of our products, as far as
possible, and that our citizens should
take advantage of this great exhibit.

Resolved, That in view of the pain-
ful accident recently sustained by Mr.
W. C. Bradley, which has detained him
from taking his part upon the pro-
gram, we hereby express to him our
sympathy and the sense of the loss we
feel in his absence.

Be it further Resolved, In due appre-
ciation of the successful results of
their efforts, that the twelfth annual
closing Wisconsin Farmers' Institute
express its obligations to the good citi-
zens of Janesville for the lively inter-
est shown at each successive stage of

the undertaking, and their hearty co-
operation in making it a final success,
commending them for their enterprise
in bringing together in their Mid-winter Fair so rare a collection of the
products of the soil and of human in-
genuity, making a display of which
any state might justly be proud.

Resolved, That thanks are especially
due to all who have assisted in filling
that essential requirement in any com-
plete program, viz., the literary and
musical part. We have listened with
pleasure to the exceptionally fine reci-
tations by Miss Mabel Taylor and Mrs.
O. H. Brand, as well as the several mu-
sical numbers all well rendered, not
forgetting the young orchestra of the
state institution for the blind, whose
sweet strains will remain long upon
the ear, ever lifting the soul upward.

And, be it Resolved, That expres-
sions are due and extended to our in-
vited guests from abroad, for their
wise words of counsel. May a long life
and prosperity attend them.

Laurens E. Scott,
H. C. Taylor,
Geo. C. Hill, Committee.