

Thesis  
The Relation of the Agricultural  
College to the Farmer.

Robert L. Timbers 1894.

During the session of Congress in eighteen fifty eight a bill familiarly known as the "Merrill Act" was brought before that body by Hon. Justin S. Merrill of Vermont. It provided for the setting apart for each state a certain amount of land, the same to be used for the benefit of a college, which was to teach the practical side of agriculture and the mechanic arts, together with military science and tactics.

The bill passed both houses with a handsome majority and was then sent to president Buchanan for his signature but alas! from his hands it received the death blow, and the friends of the bill failing to have a two thirds vote were compelled to drop it until some future time should warrant their bringing it up again. Four long years rolled by before that time came, and when in eighteen sixty two Senator Wade of Ohio introduced the bill somewhat modified it occasioned a long and heated debate. Many of the senators thought it would lessen the public lands too much, and senator Lane of Kansas

was under the impression that as his state was then promising, what it has later proven to be, one of the leading agricultural states in the union, that the most of this land would be taken from Kansas soil and thus crossed out other necessary improvements as railroads, etc.

The bill was introduced sometime during the first of May, but was put off and other taken up in its place until the last of June when its champion refused to give way for anything and thus got his bill before the senate for discussion.

Nearly every senator had something to say on the subject, and so many days were spent in arguing and amending.

The first amendment was offered by Lane of Kansas and as Senator Wade had no objections to the amendment which was "that not more than one million acres should be located in any one state" the bill was so changed after but little discussion. Many other amendments were passed and still others offered of less importance than the time it took to dispose of them, all for the simple

reason that those who presented them were anxious to have the bill defeated.

Nearly every member of the senate was a lawyer by profession and was not in strict sympathy with the lower classes, but seeing that the champions of the bill were becoming more and more in earnest, they finally consented to the passage of the bill, and July second of the same year it received the sanction of him who was called to steer the ship of state through America's greatest war, President Abraham Lincoln.

The bill was now ready to be enforced, and the state that should take no action in regard to it within two years from the date of its passage would be deprived of the benefit of the law. Soon every state and territory in the union, with the exception of Alaska had made some provision for the establishment of this kind of a college.

Some of them placed it in connection with their universities, while others

made it a separate institution. The growth of these colleges is appalling. Fifty years ago they were a thing unheard of on American soil. Today they rank among the most beneficial in the land, and our own state can boast, not only of the largest and best equipped in the United States, but in the whole world, which cannot be said of any one of its other state institutions.

It is the purpose of an Agricultural College to set forth a sample of the best mode of farming, and the best grain, fruit and grasses suited to that country together with the best methods for taking care of them. In fact the purpose of such a College is to give a practical education. One broad enough for the farm, deep enough for the Sciences and just the right kind of an education for a person going into a foreign field as a missionary. One that will aid the civil engineer, the mechanic, the architect and the true American citizen in general.

The teacher with a broad education is better qualified for instructing the youth of our land than one who has been educated along but one line, for the simple reason that he will know when he is expecting too much of a student. He realizes that there is more than one or two branches in which the student should be educated and therefore he compels less cramming. Another advantage he has over the specialist, is, that he is fit for different kinds of work. If the occupation he is at becomes oversupplied so that he cannot earn an easy livelihood he is prepared to begin at something else.

He may also be a specialist and at the same time be versed in other matters. When he looks through the microscope he sees not only a fungus growth, but also a hidden power, which no microscope however finely adjusted can reveal to the eye of the observer. Being educated in a liberal way he can see two sides of a question and is able to converse and give information on more than one pet topic.

How unlike this is the narrow minded person. There is but the one side on every question with him. He is the only teacher in the college. His pet study should be the pet of all other students.

This is the person who is rightly called crank. He always has a biased opinion on the subject in question and if "convinced against" his will is of the same opinion still.

Now are these all the benefits derived from this class of colleges. At nearly all of them we find experimental stations with headquarters at the national capital. Here we find experiments on dairying, farming, gardening, fruit-raising and various other lines of practical everyday work, all of which are of great importance to the energetic farmer and fruit grower.

In the farm department small plots of land are measured off and planted in wheat. Some of them for finding the most suitable amount of seed to put on an acre

of land; others for finding the depth that the grain should be planted, and still others to find the best time of the season in which to plant the grain. Different varieties are tried in the same way; and, this is not confined to wheat alone, but is extended to oats, corn grasses etc. with an equal amount of care.

Bulletins are printed from time to time giving an account of the various experiments carried on in the different departments. These are sent out free of charge to any address for the asking.

Other feeding is another experiment. Stags of equal conformation are placed in different lots and fed on different feed. Others are given different treatment and in each case a record is kept of the feed eaten and wasted and also of the relative amount of gain per head.

Diseases of different animals are diagnosed and treated with the best skill the state affords. The bulletins issued here give not only the description

of the experiments, but also sketches showing the different diseases and their location, together with a history of their cause and the remedies, if there are any.

Next we may mention the horticultural department in which experiments are carried on showing the best methods of planting and tending orchard and arboreal plants, the making of grafts and cuttings, and a knowledge of the habits and lives of insects of both the injurious and beneficial kinds, also the insecticides used in destroying the different pests.

The garden is a branch of this department. From it we get a knowledge of the various vegetables, their usefulness, yield and mode of planting.

The mechanical department fills the second provision of the bill.

The work done here in wood and iron is second to none other than that done in a polytechnic school.

Young men are sent out every year who are qualified for positions in

the tactics as required in the regular army as well as to drill the cadet in the manual of arms. Now is this all the good gotten from this department. The exercises in training the body as well as the mind are of the greatest value to those participating.

This branch has been slighted somewhat at the Kansas Agricultural College in the past, but the future promises a better era for it. Measures have been taken to compel a larger attendance at drill and soon the Department will be able to prove, what was the earnest convictions of those who helped to pass the bill, namely, that this is one of the most important needs in all schools.

As a sample of some of the more important branches taught in these colleges I will mention a few found in the curriculum here. First I may mention agriculture divided into two terms and given in lectures.

These lectures start with the beginning of agriculture and the improvement of

stockbreeding following them down to the present day. Horticulture also taught by means of lectures brings the student in association with the names of the various kinds of fruit and those which have proven themselves to be best adapted to our section of the country. Then each male student is required to work in each of these departments one half term in spring of second year and again, during the fall term of the third year. Chemistry is also taught in regard to its relation with agriculture also higher mathematics as related to practical work.

Although the above facts have been gathered from the life and history of the Kansas College and represent but a mere sketch of the work this one is doing for the youth of both the New and the Old worlds we must also remember that there are still other colleges teaching along the same line, but we must also bear in mind that ours is in the lead,

And that it is the duty of every citizen of the state of Kansas to do his part in keeping it at the front.

One of the principal reasons why we should build up these colleges is that they come nearer the poorer class of people than any other institution of learning we have. It is here that the agricultural college fills a place which no other class of colleges can fill.

Many of the students find employment in the various departments and in many cases are thus enabled to earn their way through school.

They are taught that honest labor is no disgrace, and that in the more meanly occupations of life there is nothing but what can be utilized for the good of the people in general.

Life is very short at the most and when we take into consideration the small percent allotted to each of us in which to do the work assigned to each of us we must choose carefully and wisely our occupations.

Not all persons are gifted with

the power of oratory, or the essence of a good writer.

Neither can every one turn the soil to the best advantage or wield the sickle for the most good.

In older times it was considered an honor for a man to hold the handles of a plow as it upturned mother earth and so more but the higher class were granted this privilege.

How different ~~the change~~ today!

The noble tiller of the soil has become what is designated as at least one of the lowest of human beings. Perhaps none unless it is the day laborer under-rank him.

It is looked upon by man as not quite the right thing for a college graduate to make a business of farming. Why is it thus?

Has farming become more degrading or is it on account of the change of the people? We must acknowledge

that the productions of the farm form the basis for all economies.

Our sustenance depends altogether on

whether the farm produces enough food ~~for~~ to supply our wants.

Thus we find the farm must be cultivated. Now the question arises "How will we keep the boy on the farm?"

I answer educate him in that line and the principal college we have for this purpose, if not the only one, is the Agricultural College.

It is a fact that these colleges are looked down upon by some, but if we judge the work a college is doing by its output, we will find that these rank well up among the leading ones. Yes we may rightly call them the backbone of the farm, for the day is at hand when every successful farmer must know the kind of fertilizer his ground needs, also a good rotation for crops and the best kind of grasses for his part of the country and no where is this taught more fully than at these institutions.

But, you ask, "Are the colleges perfect in their teaching?" Have they no chance

for improvement? I answer yes, there is much room for improvement and they are being made every year.

A more careful manner of carrying on the different experiments together with better facilities are a necessity.

And further improvement is also necessary along some lines already in progress, but time alone can tell just how far these will be carried on.

Suffice it to say, they must keep <sup>in the</sup> advancing of agriculture or the occupation of farming will decline.