

# KANSAS FARMER

FOR THE IMPROVEMENT



OF THE FARM AND HOME

Volume 49, Number 29 TOPEKA, KANSAS, JULY 22, 1911. Established 1863. \$1 a Year

**S**UCCESS in life is measured in large degree by the efficiency with which one works. Efficiency in all efforts is brain power.

Through hard work, by persistent activity of both mind and muscle, many have written their names upon Time's scroll in undying letters. Others—many, many more—by the same hard work but without the direction of the trained mind—have pitiless oblivion as their reward.

The difference is that of education—the ability to use the best mental effort where the world most needs it.

No worthy young person needs to lack education. He who fails to acquire it is cheating himself, ignoring his opportunities and denying his heritage.

—Otto Barth.



*"The Deep, Controlling Anxiety Of The Thoughtful Man"*



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**FRANK A. POWER, Director**

# KANSAS FARMER

## EDITORIAL

### FOR BETTER FARM LIFE.

In speaking of the necessity for the betterment of conditions surrounding the farmer's life in many sections of the state, C. S. Adams of Illinois recently stated that he had visited 412 farm communities in central Illinois where the land was valued at from \$190 to \$250 per acre and found that 55 per cent of the land was occupied by tenants and only 66 per cent of these held leases for periods of 5 years or more. Primary life here was not attractive. The farm children were allowed but few days in school each year as compared with 146 days for the nearby town children. The teachers received from \$35 to \$70 per month as compared with \$46 to \$150 per month for town teachers.

Out of 225 rural churches visited in 1910, 77 showed any growth in the past year, 55 have stood still, 56 have decreased and 47 have been abandoned. The population averaged 397 people to each church but only 125 were members and of these only 19 per cent attended church services and 13 per cent attended Sunday school. In the poorest communities only 9 per cent of the people went to church. One-half the people of America live in the country and from this half come the leaders. Fifty-five per cent of the famous people mentioned in "Who's Who in America" come from the farms, and any adverse conditions allowed to develop in the rural districts hurts the whole nation by taking off its supply of leaders in thought and action.

### MUMMY WHEAT.

On occasion there seems to be some one who brings up the announcement that he has discovered a sample of Egyptian mummy wheat which will produce a phenomenal growth and yield, and, as he only has a few of the berries for sale he naturally commands a high price for it. This is a pure and simple which has been proposed from time to time during the last forty years, but there still seem to be new suckers who bite, as they did at the old Alaska proposition three or four years ago. About that time it was announced by some one in the west that he had discovered an Egyptian wheat that would yield 200 bushels per acre and this fraud was immediately exposed by KANSAS FARMER. However, it was published and broadcast over the country in some of the influential journals, and its promoters have netted the promoters a very handsome sum in money before it was fully exposed. In that case, KANSAS FARMER was the first and only authority to expose the graft connected with the Alaska wheat. In case of the Egyptian mummy wheat, it simply repeats its word of caution.

It is a well established fact that wheat under the most favorable conditions will not preserve its vitality for periods exceeding ten years, and any one who claims to have an Egyptian mummy wheat which was unearthed from a tomb two or three thousand years old may have a right to claim to a curiosity but he certainly has not a claim to anything of economic value. Such wheat, if it is genuine, will not grow. If it is not genuine it could hardly be expected to be more valuable than the improved varieties which we now have as a result of all of our hundreds of years' experience of selection and experimentation. In either case it is safe to let Alaska wheat and Egyptian mummy wheat severally alone.

Several of the very best farmers in Kansas live on 80-acre farms and some of them have raised and educated large families. These farmers have never owned any more land, but they have made every foot of the 80 acre bring its share of the income. They are not market gardeners nor nurserymen nor florists. Just plain, everyday farmers and they have succeeded. Read about KANSAS FARMER prize offer on how to make an acre home.

Extra care should be taken in the harvesting of the field this year. Usually 40 per cent of Kansas' roughage is lost through careless handling. That per cent will supply all the roughage needed. Take care of the waste every year.

With which is combined FARMER'S ADVOCATE, established 1877.  
Published weekly at 625 Jackson St., Topeka, Kan., by the KANSAS FARMER COMPANY.  
ALBERT T. REID, President. J. R. MULVANE, Treasurer. S. H. FITCHER, Secretary.  
Edited by T. A. BORMAN and I. D. GRAHAM.  
CHICAGO OFFICE—First National Bank Bldg., Geo. W. Herbert, Manager.  
NEW YORK OFFICE—41 Park Row, Wallace C. Richardson, Inc., Manager.  
Entered at the Topeka, Kansas, postoffice as second class matter.

SUBSCRIPTION PRICE—\$1.00 per year; \$1.50 for two years; \$2.00 for three years. Special clubbing rates furnished upon application.

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PICTURES—Good photographs, drawings and plans are especially solicited. Senders' names should always be written on the back of each picture. KANSAS FARMER can not be held responsible for any picture submitted, except under special written agreement.

CONTRIBUTIONS—KANSAS FARMER is always glad to have correspondence on all farm, live stock or household subjects. Your name should be signed to all communications and they should always be addressed to

KANSAS FARMER COMPANY, TOPEKA, KANSAS.

### FARM BOYS' EDUCATION.

Young man,—you, who have at the close of the school year, turned your back on the "little red school-house"—what are you going to do now? That's an important question—more so today than ever before.

You are not through going to school—at least so it is hoped. The educated man is the fellow who makes the biggest dent in the world these days. The battle today is one of brains more than one of brawn, much more. Extreme competition in every business and profession, and for a dozen other reasons, the trained mind—the brain that "knows how"—is the one required and sought and the one that succeeds.

Granted that you admit the necessity of an education, where to get it and the kind to get, are important considerations. Kansas and the central west has the kind of schools you need—whether you desire to become a farmer, a doctor or a lawyer. You need not select a school far from home—the nearer home the better.

The kind of education you need depends upon what you want. Follow your own inclination. Do not mistake the feeling that because Bill Smith is making money as a lawyer, that it's the law for you—do not mistake that feeling for your inclination. Look into yourself—start an investigation of yourself—determine what you are really fitted for—let that be your inclination. Do not make the mistake in determining your fitness. Many a jack-leg lawyer would have made a great physician, or possibly a better farmer. Many a boy would have made a good mechanic is marking time on the farm. So be careful.

Many a man is a misfit in his work because his father or mother directed the course of his education and determined his calling. Parents, if the boy has a decided inclination let him follow it—don't interfere. Better a happy, prosperous farmer than a professional man desperate in his efforts to keep the wolf from the door. If the boy has no apparent and pronounced inclination—get busy, look into the boy, watch his habits, his talk and his thought and try to find out. Then advise with him—talk it over and decide—but regard the boy's idea.

Do not be in too big a hurry to determine the boy's life work. Many times when the boy has just left country school, it's too early to know for what he is adapted. Give him a few years in high school—give him a chance to see about him—to look around, to delve into things—the

chances are he will let you know plainly what he is fitted for and wants to do.

If the boy wants to farm, let him farm—but prepare him for intelligent farming. If you want him to farm but he doesn't show much inclination so to do, supply him with the best farm books and papers. Let him look over the agricultural experiment station, let him see up-to-date farms and talk with the best farmers and breeders. Send him a few hundred miles, if necessary, to see and investigate.

If you desire that the boy engage in the best business there is today encourage him in the direction of the farm. If he is determined not to farm and his inclination is in some other direction, he had better be in any other business he likes and in which he can be happy and contented, than on the farm or anywhere else.

But see that the boy gets an education. Education pays, not only in dollars and cents, but in satisfaction. It doesn't burn or blow away—it cannot be lost and is in itself working capital and in fact wealth.

### GET SEED IN GROUND

Pastures are bare and hay will be a very light crop, but there is ample time to provide forage crops. For hogs and sheep there is nothing better than dwarf essex rape, mixed with sorghum or rye. Sow 15 pounds of rape and one third of a usual seeding of sorghum or rye.

Sorghum, cow peas, soy beans, barley and Canadian peas will make good hay if sown at once on well prepared ground. Rye makes fine fall and winter pasture.

Turnips sown July 20 wet or dry, will furnish succulent feed for horses, cattle and hogs.

The present shortage of forage crops should emphasize the necessity for a reserve supply in silos. Corn put in a good silo, at the proper time, and in the proper manner, will keep indefinitely. Like souse it is always ready. Putting corn in a silo not only adds greatly to its feeding value, but conserves it for times like this when forage is cut short by drouth.

The Rock Island wheat train is meeting with an unprecedented reception at the hands of Kansas farmers. Speakers on this train are telling all about the best means of soil tilling and methods of seeding, which, together with good seed, is all there is required for increasing the wheat yield two or three times. The agricultural train is an important factor in better methods of farming.

In this age of multiplicity of words the front page feature and cartoon of the KANSAS FARMER is most refreshing. Let them be continued.—E. W. WESTGATE, Past Master, Kansas State Grange.

### GET A START NOW.

Not in years has the opportunity for "getting in on the ground floor" in the live stock business been so favorable as now.

The statistics show that there is an apparent shortage of at least 10 per cent in all meat producing animals in the United States, while the census enumeration shows an enormous increase in the number of people each one of whom is a possible meat consumer.

Land is growing higher in price and it no longer pays to raise scrub stock, while the profits on good stock, well handled, are sure. Permanent agriculture is impossible without live stock of some kind and the farmer is learning that good stock costs no more to raise than does poor, while its profits are much more certain.

Considering the price of land, of help and of feeds, there is no longer any room for the scrub on the corn-belt farm and both breeders and feeders are alive to the fact that his fate is sealed. These conditions are in favor of the farmer who must have live stock and who would improve its quality, and this, in turn, is most favorable to the breeder. There is never any danger that the number of breeders will become too great or that their stock will glut the market. Many sections of our country have never had good stock and the farmers are awakening to its value, while in the corn belt proper, where good stock has been known so long, there has never been enough of it.

The reputation of our live stock has become so well known that breeders from other countries are coming here to buy. Canada, Mexico and the South American countries have been liberal buyers of American cattle and this trade should be cultivated, while right here at home the demand is going to be more and more difficult to supply.

With such prospects ahead and with prices as they now are the farmer has a chance that should not be overlooked. Nothing that can be grown upon a farm will "run into money" as fast as good live stock, not only because of its ready market, but because of the benefit it renders to the farm itself.

Get some pure-bred stock. Get it now. Get busy.

In 1890 there were 509,614 children of school age in Kansas and of these 391,420, or 76.5 per cent, were enrolled and their schooling cost the taxpayers of the state \$4,972,966. In 1910 the school census was 516,061, the enrollment 389,746 and the cost \$9,812,670. In other words, the cost per pupil enrolled in the public schools in 1890 was \$12.70, while in 1910 it was \$24.58. There are now about 13,000 teachers in Kansas and about 30,000 school officers. Think on these things and see if we are getting what we need, what we must have and what we pay for in our public schools of today.

The farmers whose corn fields are most likely to suffer this season are those who quit plowing just because there were no more weeds to kill. Those farmers who kept up their cultivation of the soil not only kept the corn over the dry spell but increased the yield. A single horse hitched to an old mower wheel or some other form of drag and driven down the rows will keep the soil in condition to make a crop on one-third the rainfall necessary for fields not so treated.

The silo is not an experiment. For 30 years it has proved to be an economic means for storing excellent feed. Every state experiment station in the country will indorse it as a means of economic feeding, and have indorsed it for a quarter of a century. A silo saves labor, as with it you can feed more stock in much less time than by any other means and do it much easier. You can keep twice as many cows as you are now keeping. You need a silo because with it you can make more money. The silo is now a necessity, and for you to compete with the man who has one you must have one, too.

# COMMON SCHOOL PROBLEMS

## Our Boys and Girls The Most Important Crop on The Farm

By W. D. ROSS



W. D. ROSS, STATE INSPECTOR INDUSTRIAL TRAINING.

The first great aim of public school education should be not to make scholars out of our boys and girls, but to make of them more efficient, helpful and happy men and women. Our schools should seek above everything else to train the average child for the common life. To be sure the avenues ought to be open and the opportunities available to the exceptional child whereby he may attain to the life of distinction; but on the theory of the greatest good to the greatest number the public school must, if it fulfills its true function, be organized on the basis of the ordinary child and his life prospects.

Is it not then remarkable as well as a lamentable fact that even the most elementary principles of scientific agriculture have been so long and so completely ignored in our schools? For agriculture is the one industry of vital importance to all humanity; it is the basis of all the world's real wealth; it is the very source of subsistence itself. When consumption overtakes production, either by reason of increased population or reduced fertility of the soil, or both, the fittest alone will survive and the weak and inefficient will starve.

And is it not more remarkable and more lamentable still, when in the very nature of things the vast majority of our girls are destined to become homemakers and housekeepers, that in our schools we have tried to train them in almost everything else except in matters of sanitation, hygiene and home economics?

But Kansas with her proverbial spirit of progress has come to see the relation between her schools and her life. The last legislature enacted a law providing that hereafter all applicants for county teachers' certificates must pass an examination in elementary agriculture and appropriated fifty thousand dollars to further the teaching of agriculture and domestic science in our high schools. Under the provisions of the latter act ninety schools have already been approved for the work by the state board of education and more will be added. Moreover intelligent farmers themselves are coming to realize that improvident impoverishment of the soil is disastrous, that to learn by experience is expensive not alone for them but for the future, that agriculture must be conducted on a scientific basis the same as any other business, and are therefore offering every aid and encouragement to this new educational movement.

With this work to be done in our high schools and with the new information and inspiration which the ten thousand teachers now taking agriculture in our normal institutes for the first time will carry with them into our country schools a new day is dawning on the farm home of Kansas.

It is not expected that every common school and rural high school will become an agricultural experiment station; but just as in law, and in medicine there is a vast body of classified knowledge which the practitioner must learn from books, so in agriculture there is a rich fund of scientific facts which if the future farmer learns in school will enable him to preserve the fertility of yet virgin soil, rehabilitate that which has already been ignorantly or wantonly exhausted and make it all produce more abundantly

than he has ever dreamed. With the large number of really excellent text books, the admirable agricultural college primers and the numerous reliable farm journals now available there is no phase of farm life which may not be studied with profit in our schools. And when there is added to this the opportunity of observation and actual experiment upon their own farms or on their own gardens which fully sixty per cent of our boys and girls enjoy there is no reason why this education may not be made practical as well as theoretical. Indeed the history of Denmark during the last forty years furnishes striking proof that this may be effectively done. At the close of her disastrous war with Prussia and Austria in 1864 Denmark found herself despoiled of her richest provinces, Holstein and Slesvig, and reduced to a few islands and "the desolate moors of North Jutland". She was then one of the poorest nations of Europe. Today she is per capita one of the richest lands in the world. The secret? A man and an

institution. The man is Captain Dalgas—the Campbell of Denmark. The institution is the Danish high school—"a kind of agricultural college peculiar to Denmark, where farmers' sons and daughters are taught history and mathematics and chemistry and the science of farming."

But it is not alone the sons and daughters of our farmers who need this work in agriculture. From the view point of common knowledge and general culture the city bred child could with pleasure and profit to himself know much more than he ordinarily does about the source and production of the things he eats and wears and uses, of the things that satisfy his needs and minister to his pleasures. And why may he not get as much of intellectual training, of mental discipline, from studying the life history, the habits and the characteristics of the plants and animals that play so important and intimate a part in his daily life as from a study of those whose Greek or Latin names he learns from the ordinary text book in botany

or zoology? Indeed from the educational side a course in agricultural botany or animal husbandry ought to probe far more effectively than the usual course in collecting and analyzing plants, or in dissecting crawfish and frogs. For the great life processes are everywhere the same and when the pupil comes to see that there is an intimate relation between the things he is studying and the life he is living there will come in with new force the element of interest—pedagogically the most important element in the educative process.

But after the last word is said Herbert Spencer's definition of the purpose of education has never been improved and remains today the best argument for industrial training in our schools. "To prepare us for complete living is the function education has to perform".

It will not, however, be enough if our schools merely offer courses dealing with the scientific facts of agriculture. They must create in the minds of an increasing number of our youth an enthusiasm for farm life, the determination to become scientific farmers.

This ought to be easy to do. There is material in plenty. The dignity, the independence, the remuneration, the comfort of rural life properly lived may easily be shown. Is not the boy who raises potatoes or cotton doing business as much as the clerk who sells them over the counter? And is not the man who produces hogs and cattle engaged in as dignified and honorable an occupation as the man who slaughters and sells them and perchance becomes a packing house magnate? True the dry goods clerk or the bookkeeper may have clean hands and wear fine linen while the farmer boy begrimes his fingers and wears a hickory shirt. But at the end of the day the city chap will be mentally and physically more fatigued than his country compeer, and he will have missed besides the life in the open, the pure air, the sound sleep, the wholesome food and the appetite to eat it which the other enjoys.

Farmers are today as a class the most independent people in the world. This for the reason that they produce so many of the things they need, and what they themselves can not use their neighbors either near or far must have. They neither have to create a demand for what they produce nor resort to the arts of the tradesman to sell it. And as the years go by, and population increases, the demand for the products of the soil will necessarily be augmented and this independence will grow.

Add to this the fact that free land has disappeared, that the tillable soil of the country is practically all now in the hands of private owners, with more to be had except at steadily increasing prices, and we see at once that not only is the independence of the farmer constantly growing, but that with the density of population ever increasing and the amount of land forever fixed the average return to the owner from each acre must be greater with each succeeding year. From the standpoint of financial reward then, there never was a time since history began when agriculture offered such inducements as it does today. Indeed if our laws remain essentially unchanged the owners of our land will become the only real monopolists of the future, and all the world will pay them tribute.

With the advent of rural free delivery, the telephone and the automobile the isolation and loneliness of the farm have disappeared and with modern means of light, heat and water service there may be added to the luxuries of the farm all the conveniences of the city.

When our schools begin the systematic training of farmers and farmer wives they will undertake a service rich in promise and in possibilities. Farm life offers health, independence, financial reward, comfort and peace of mind to a greater number of people to a greater degree than any other occupation can approximate. To education boys and girls to and for the farm therefore aids them individually. It at the same time shortens the bread line at both ends and thus serves society. What better things can any system of education accomplish?

## WHAT KIND OF A TRAINING

By ERNEST PHILBLAD.

The American public of the present is thoroughly alive to the importance of an education as an efficient equipment for life. In recent years the state as well as high minded individuals have given lavishly of their treasure toward the founding and support of educational institutions of all kinds, the purpose of which is to train the coming generation for life's great work. The general prosperity of the country has made it possible for a large proportion of the youth of the country to avail themselves of the opportunities offered by these institutions.

The young man or woman to whom the opportunity of advanced training beyond the high school comes finds himself in a dilemma as to what choice to make. He asks himself what kind of training will give him the best equipment for his work.

Caught by the spirit that asks quick results, the short course and the technical training school are apt to appeal to him. This will bring him into active life earlier and thereby he imagines that he is saving valuable years for the real work of his life.

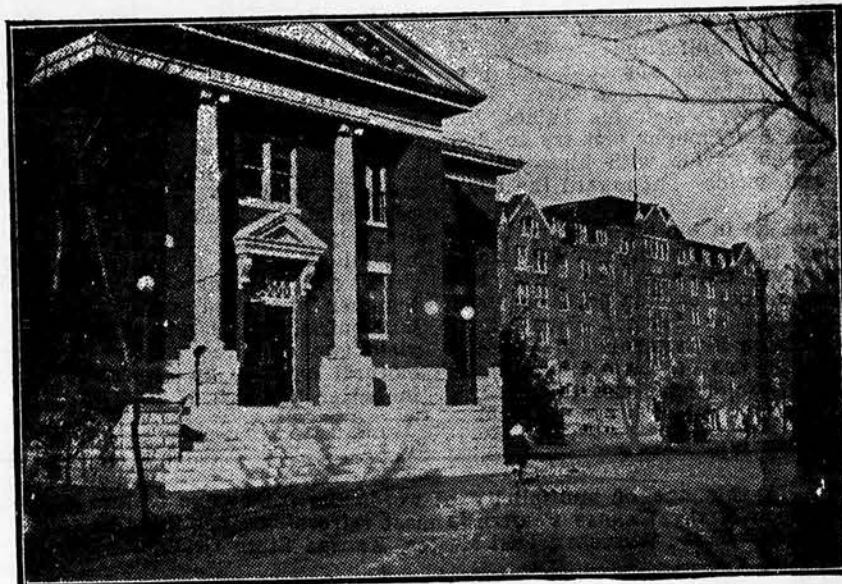
President Stryker has aptly compared the liberal training of the college with the specific work of the technical school thus: "The one process should make iron into steel and the other makes steel into tools. Specialization which is not based on liberal culture attempts to put an edge on pot iron."

In spite of the liberal expenditure of treasure by the state upon its institutions, the denominational school still retains its pre-eminence for the strong men which it has sent forth.

Recently a memorial was sent by the class of 1885 of Amherst College to the trustees of the institution. The document pleaded for the classical training of the past and urged that the number of students of the institution be not allowed to exceed 500; that teachers of recognized merit and not only scholars and investigators be retained on the faculty. The memorial emphasized the ideal of liberal culture as an asset for life and as represented by the small college. When we remember that the personnel of the class was made up of business men and professional men from all walks of life, and that it was written long after their graduation, during which time they had ample opportunity to make the test, it becomes all the more significant.

The classes in the denominational institutions are in the nature of the case smaller, a fact that guarantees the student more personal attention on the part of the teacher. Their influence for the building of character, which, after all, is the only thing that counts, is more positive. They represent the devotion of people who voluntarily sacrifice for their upkeep and the spirit of devotion prompts those who labor in them. They are in a better position to insist upon high moral ideals and eliminate vicious tendencies because of a closer supervision they can exercise over their student body.

The students come into a more intimate contact with each other and thus derive that fine training that comes from the co-operation of young people interested in high pursuits.

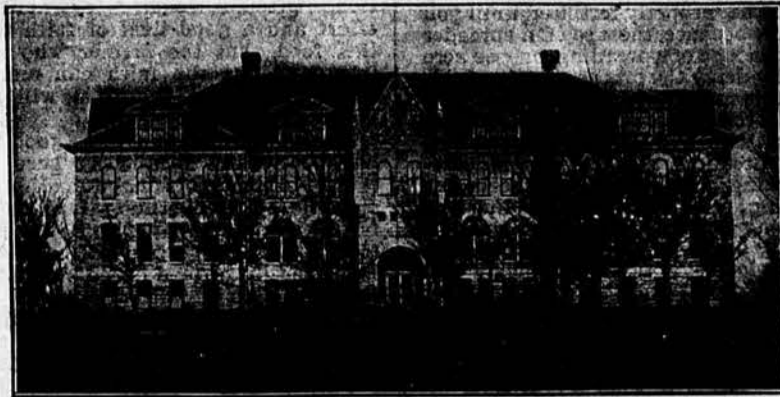


BETHANY COLLEGE, LINDSBORG, KAN.

# KANSAS' CHRISTIAN COLLEGES

## Institutions Where Culture and Refinement Are The Students Aim

By S. E. PRICE President, Ottawa University



OTTAWA (KANSAS) UNIVERSITY.

There are fourteen of them in Kansas. They have been established in every state in the union, in fact, Harvard, Yale, Princeton, and Chicago were all founded as denominational colleges. Almost every institution in this country, aside from the tax-supported institutions, were established and for many years maintained by some branch of the Christian Church. In Kansas about half of the young people attend institutions of higher learning are in this class of colleges. Their existence and the fact that so many of our choice young people are attending them implies that there are some points of advantage in this class of institutions. These ought to be considered very carefully by parents and young people. Let me point out some of these advantages.

These institutions are usually small and therefore possess all the advantages of the small college. It is generally conceded by educators that the small, well equipped college is the best place for the student during his college course. The large university is preferable for his professional and technical work. In the small college the student comes into personal touch with the head of each department and is looked after personally. If he is not keeping his work up in good shape the professor has a personal conference with him and finds out what is the matter. Then the difficulty is remedied if possible. The result is that there is a smaller percentage of failures in small colleges than in the large. An education is not the result of hearing lectures by learned men, but it is the personal touch with men of high ideals. It is inspiration quite as much as information.

There is a democracy in a student body of three or four hundred that rarely exists in a student body of two or three thousand. Every student finds his place by his merits in the class room and the various student enterprises. There is less room for cliques, fraternity factions, student politics, etc., that mar the unity and spirit of the student body.

There is a better opportunity for the development of elements of leadership because the competition is not so keen. It is easier for a student to come to the front in debates, oratory and athletics in the small student body than in the large. Powers will be developed there that would be forever latent if the student belonged to the large student body. This is suggested by the fact that a large number of our public men are from the denominational colleges. Young people are obliged to assume leadership. In that way they discover themselves, or they are discovered by their teachers and pushed to the front. It is not always true that the one who pushes himself to the front has the strongest powers of leadership.

Again, our denominational schools must of necessity be conducted on an economical basis. I do not think that any of the tax supported institutions in Kansas are extravagant. But the whole tendency in the denominational colleges is toward economy. This is

of vital importance in these times. The young person who goes out into practical life having acquired extravagant habits while in college is handicapped in a manner that will endanger his success. If he is accustomed to live within his means, to be economical, his changes for success are greatly enhanced.

One of the strongest advantages is in the moral and religious element. Founded by Christians, maintained by Christians, governed and controlled by Christians, the school has a religious atmosphere that cannot be created in any other fashion. There is larger emphasis being placed upon the moral and religious element in education today than ever before. The true man must be moral. His morality must have a basis. The teachings of Jesus Christ will furnish him the only adequate basis for his morality. These denominational schools teach the Bible, the philosophy of religion, and kindred topics. One of the results is that almost all of our ministers are

from our denominational colleges. But there are some things that these institutions must keep constantly in mind. They ought to confine their work as a general rule to what is known as strictly college subjects as distinct from advanced professional or technical subjects. That is, they ought not to undertake post graduate work. There is a temptation to attempt more work than can be handled with good results. Leave the advanced work to the graduate schools and do the fundamental work that properly belongs to the college. For this work teachers can be secured who have had adequate preparation. They may not have had the extended preparation that would be required in a university. But graduate work for the degree of A. M. or M. S. is sufficient, other things being equal, for the teacher of college subjects.

Another vital matter in these times is that the laboratory and library equipment of the denominational college shall be such that the subjects offered can be pursued as thoroughly as in any other institution. This does not mean an outlay as large as a great university. It is research work that costs in laboratory and library equipment. This is the expensive part of the great school. But for the fundamental courses in science or history or literature no larger equipment is required in the large institution than in the small one.

The denominational colleges in Kansas have recently presented to the State Board of Education articles of standardization by which each one of them is to be measured. The purpose of this action is to so provide that the public might be assured that any course of study offered by these institutions could be pursued just as thoroughly as anywhere else.

Mr. Guy Morrison Walker in an address "The Source of Successful Men" points out by many facts, figures, and proofs that the small Christian colleges head the list in producing the men who do things. Here is food for thought on the part of parents and young people.

### The Demand for a Business Education.

BY PRES. L. W. NUTTER, MANHATTAN BUSINESS COLLEGE.

We have read much concerning our great state educational institutions, for they are great. For instance the Kansas State Agricultural College, located at Manhattan, Kansas, is the largest of its kind in the world. Likewise the other state educational institutions of the state rank among the very best.

The State Legislature two years ago appropriated over \$2,579,000, and this year over \$2,318,000, to the support of these institutions. This is fitting and proper, and is certainly much wiser and more sensible than to be compelled to pay out double that amount for the prosecution and imprisonment of those who have suffered through the neglect of the state to furnish them proper school privileges.

Yet knowing how great these institutions are and their enormous cost and large enrollment, State Superintendent E. T. Fairchild in his report makes the statement that more money is expended each year in private and denominational schools in the state than is expended on these great institutions we have just mentioned.

If this be true, then it is time to sit up and take notice. Look what a vast number of young people of our state attend business colleges every year. Of course not all of these private and denominational schools are business colleges, but a large number are.

You can see from the above that not only a technical education is required, but also that thousands upon thousands of our citizens see the necessity of giving their boys and girls a practical business training to fit them to take up and cope successfully with the business world.

"If a father wishes to give his son a legacy, better than houses, lands, institution where he can obtain a practical business education."—Horace Mann.

"No young lady could have a better safeguard against the adversities of fortune, or a better resource in time of need, than a knowledge of book-keeping and business affairs."—Harriet Beecher Stowe.

## "Eighty Acres and a Home"

Contest Extended to August 1

**M**ANY readers request more time to complete their articles and plans and the extension is granted. The contest will positively close on this date. Here are the conditions:

If you had a bank account upon which you could draw to fit up an eighty farm as a profit making proposition and a comfortable and convenient home, just how would you spend the money?

This little farm is to be your home where you can live in comfort but at the same time it must be made to pay. Put up all the buildings and fences you need, buy all the necessary machinery and live-stock, plant orchards and wind-breaks and make a complete home but do it all as an investment that will bring profits.

Here are the prizes:

For the best articles descriptive of how you would accomplish these results, accompanied by drawings or photographs, KANSAS FARMER will give the following prizes to be awarded by expert judges.

For the best article with illustrations, \$15 in cash.

For the second best article, \$10 in cash.

For the third and fourth best articles each a five years' subscription to KANSAS FARMER.

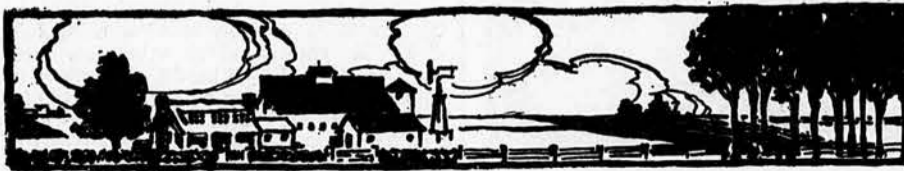
For each of the next five best articles, a three year's subscription to KANSAS FARMER.

For each of the next fifteen best articles, one year's subscription to KANSAS FARMER.

The articles and illustrations submitted are to become the property of KANSAS FARMER to be used as desired.

This competition will close on August 1.

All articles and illustrations must be personally addressed to Albert T. Reid, President KANSAS FARMER, Topeka, Kansas.



### Business Training Leads to Success.

PRES. W. H. QUACKENBUSH, LAWRENCE BUSINESS COLLEGE.

The dominant note of the twentieth century is undoubtedly industrialism. The development and perfection of telephone and telegraph systems, water and rail transportation has brought every corner of the world into intimate contact in the exchange of commodities of commerce.

This great movement has made necessary a veritable army of men and women throughout the world possessed of a special training for all the multitudinous divisions of industry. For such a man or such a woman with the ability to do a definite specific thing there never was in history the opportunity that exists today.

This is particularly true in the case of those possessing a business education. The stenographer, for example, has before him possibilities of promotion that seldom come to employes in any other capacity. Beginning at a comparatively small salary in a humble position, he quickly acquires a general knowledge of the business through his correspondence. He comes into intimate contact with the heads of departments and has an opportunity to use that knowledge in the advancement of the interest of the business and thereby secure promotion.

In every line of business the ceaseless quest goes on for better help, for men of exact knowledge who can deliver the merchant and manufacturer from the slow and wasteless process of education over which his helpers must pass. Every man in business knows that the problem most difficult of solution is the procurement of competent help.

The stories of men who have risen to positions of power and wealth through the medium of stenography reads like a tale from the Arabian Nights. Cortelyou, but a few years ago a stenographer in the post office department at Washington, has been successively chairman of the Republican Committee, Secretary of Commerce and Labor, Postmaster General,

(Continued on page 14.)

# The First Step In Scientific Farming Is An IHC Manure Spreader



**Y**OU will never get the most out of your soil, until it is properly fertilized. And it will never be properly fertilized until you use a good manure spreader, because the use of a spreader will enable you to overcome the practice of spreading on one acre what should be used on two. Why delay the profits that are rightfully yours? Why not look into this manure spreader proposition at once? Learn the many reasons why thousands of other progressive farmers are having such great success with IHC Manure Spreaders. When you examine one of these spreaders, note the extreme simplicity and great strength of the working parts; note that the beater driving gear is held in a single casting, thus there is no binding nor cutting of parts caused by the gearing springing out of alignment. Notice the roller bearing support for the apron which reduces the draft of the machine; operate the convenient levers; notice how quickly and easily the feed changing device can be shifted, and the wide range of adjustment.

## Corn King Cloverleaf Kemp 20th Century

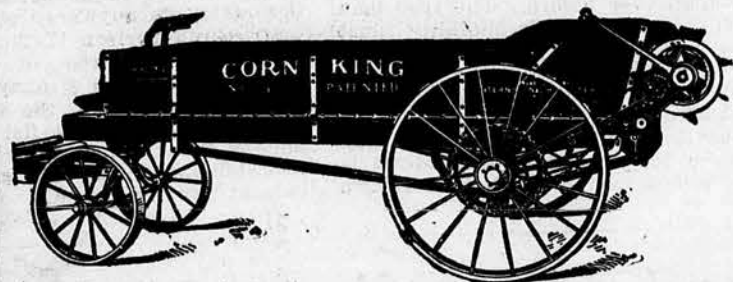
Each of these famous IHC Spreaders is simple, strong, and durable in every part. Each is instantly adjustable to spread light or heavy as your judgment tells you is best for the soil. Whether you have a large or small farm, or whether you want a spreader for orchard use—there is an IHC that will suit your requirements. Why not see the IHC local dealer at once? Let him tell you why IHC Spreaders are so remarkably successful. Get catalogues from him, or, if you prefer, write direct for any information you desire.

INTERNATIONAL HARVESTER COMPANY OF AMERICA (Incorporated)

Chicago U.S.A.

### IHC Service Bureau

The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the IHC Service Bureau.



Mention Kansas Farmer When You Write

## Better Feed=Better Stock!

—And Bigger Cash Receipts When Your Alfalfa Is Cut By

### THE POWERFUL "SMALLEY!"

**Saves Time, Cash and Labor! Feeds Stock RIGHT—With Properly-Cut Alfalfa! Put the WHOLE Job Up to the Wonder-Working SMALLEY Force-Feed Alfalfa Cutter!**

Alfalfa mills cut alfalfa 1/8 of an inch for stock feed mixtures with the amazing "Smalley" Cutter! Alfalfa cut in short lengths is a wonderful ration for feeding hogs!

Allows tremendous economy in feeding alfalfa rations!

This machine does it many times faster than human labor, cuts it into a BETTER feed and saves enormous sums doing the job!

The "SMALLEY" handles the WHOLE job alone! You just toss the alfalfa onto the powerful force-feed table. The wonderful chain feed with grip hooks shoots it along—without shoving—until it hits the roller and ZIP!—the alfalfa's ready for the stock!

## SMALLEY FORCE-FEED ALFALFA CUTTER!



Never balks! Never breaks! Never gets tired! Just stays right on the job every minute! Cuts alfalfa more uniformly than any other cutter made. It's the greatest cutter in existence! The product of 54 years' experience in making a cutter that for half-a-century has been the standard of the nation's farms! It is the World's Only Positive Force-Feed Alfalfa Cutter! Capacity, 1/2 ton to 4 tons per hour. Made in 4 sizes. It has a hundred unparalleled features—(see catalog). Our new construction feed table—the Smalley's 1911 improvement—absolutely abolishes the possibility of chains interfering with cutter knives.

VALUABLE NEW 1911 BOOK—FREE! Our new 1911 book, an encyclopedia of cutter facts, is yours for the asking. It will save you time, labor and cash! A postal or letter brings it by return mail—state name of your implement dealer—write today to SMALLEY MANUFACTURING CO. (Est. 1857) 117 Manitowoc, Wis.

# THE FEED QUESTION

For 25 years I farmed in central Kansas and was often compelled to solve the same feed problem as now confronts many Kansas farmers. I have not yet seen the year when, with due diligence, a sufficient amount of roughage could not be grown to winter the stock in very good condition. Often it requires extraordinary effort and a good deal of faith to get this feed, but the farmer who really tries and has the faith can and will grow it. Where there's a will there is usually a way.

During the last few days good rains have fallen in localities here and there—other spots have had only a sprinkle. If it has not rained on your farm, the safe thing is to be ready for the rain which surely will come soon. Have the extra feed crops planted and ready to start with the first rain. Don't wait for a rain before planting, but have the seed in the ground ready to grow when the first drop falls.

The chances are very much in favor of planted crops rather than sown crops. The crops to plant are kaffir corn, sorghum, milo maize and early varieties of sweet or Indian corn. Start the lister at once listing some one or several of these crops into any ground which may be fit for planting. Don't run the lister too deep. Don't plant too much seed. Plant thin and the crop will grow the faster and will not require so much moisture.

It would be a big help if the ground could be disked and cross disked before listing. So soon as the rains come, whether the crop is up or not, begin harrowing. Slant the harrow teeth. The object is to keep a surface rough, thereby conserving as much as possible the moisture in the ground as well as that which may fall. So soon as the seed is up, harrow again and keep harrowing until the plants are too large, then cultivate. The growth of a feed crop can by this method be forced to a considerable extent.

If kaffir corn, sorghum, milo maize, early Indian corn or sweet corn is planted as above directed, at this time and only limited rains should fall between now and August 10, a lot of feed will be grown and you will have saved the day.

In planting feed now, don't be sparing in number of acres. Plant as many acres as you can. At best you cannot get heavy crops. Figure that three acres under present conditions will be required to furnish as much feed as one acre under normal conditions.

An effort should also be made to shorten the feeding season just as much as possible and one way to do this is to provide fall pasture and early spring pasture by seeding pasture grains right now. Rye and oats or rye and barley sown into disked ground now may, by the middle of September, or the first of October, and continuing up until cold weather, furnish a lot of pasture, and that same rye will furnish pasture next spring, thus relieving the rough feed situation a month or six weeks at each end. The oats or barley with the rye will help the early fall pasture. The oats, of course, will kill out during the winter, but the rye will be left for pasture next spring.

Crops suggested above and planted now will not, of course, mature grain, unless the fall should be unusually favorable. It is not grain you need now so much as roughage. Plenty of good roughage is what you need. If you succeed in growing the roughage, give it good care in harvesting. The usual loss in harvesting roughage in this state is tremendous. A short year will not permit such loss. The scarcer feed is, the greater the necessity for taking good care of it.

It is well worth while to exert every energy possible to keep your present supply of live stock. You have to sell off some surplus stock, but don't sell the mature animals. It is a whole lot easier to get out of stock than it is to get into stock. If you dispose of your cattle now you will do so at a sacrifice; it will be two or three years before you can restock your farm, and then at a greatly increased price.

There is one other thing in connection with the feed condition which deserves your careful attention and that is the silo. Should you grow a reasonable quantity of green feed this year, that roughage put into a silo and every spear of it preserved in its

natural green condition will result in giving you, not only better feed, but more feed. You yet have time to buy and erect a silo and have it ready for the feed which you hope to grow and which I believe you will grow if you exercise the necessary diligence.

While thinking about the silo don't think of it for this year only, but think of it for next year. If you should have a good corn crop next year and should fill two silos, putting up just double the amount of ensilage you will need next year, you would have one silo full for use the following year in case of short pasture or in case of short roughage crops. The silo is a great thing any year. Properly handled it will absolutely insure feed.

The corn crop now growing, even though it does not ear, will make a whole lot of good feed if placed in a silo. I am daily receiving inquiries asking if immature corn can be successfully siloed. The immature corn will make ensilage. My own experience in handling immature corn justifies this conclusion. However, I wanted a verification and telephoned the Kansas Experiment Station and Professor Reed advised me that by all means the immature corn should be placed in the silo, that by so doing its fullest feeding value would be realized and that all fodder could in this way be saved. Professor Reed also stated that the silo provides the best means for saving immature kaffir corn, sorghum or milo maize. Let these immature crops partially cure on the ground before being cut. If these crops are cut when the lower blades begin to burn a little, they will make the best ensilage. The ensilage should be well tramped and thoroughly packed. Mature ensilage is heavier and, while it should be tramped, it will settle much as a result of its own weight.

The forage crops now growing will make a lot of good feed and the silo furnishes the best and about the only means of saving everything and giving you the greatest feeding value they have. Remember that the silo will enable you to feed these crops in a condition almost identical with the green fodder. You know what an armful of green corn will do for the old cow.

The New York Experiment Station reports that almost anything green can be successfully placed in the silo. That station says it pays to silo green wheat, oats, barley, cane, kaffir corn, peas, immature corn or even foxtail.

If you cannot get kaffir corn, sorghum or milo maize seed, you can use oats, barley or cow peas. Reasonably favorable conditions will grow a crop of either before frost. It is a good idea not to depend upon any one of these crops, but to plant several.

Keep in mind that if your silo is partly filled with Indian corn or any other one crop, you can later finish filling it with any other crop or crops which you may grow, and in this manner get your silo full.

You can well afford to stake your labor and money for seed against the weather. It's the man who never quits who gets there. The fellow who lies down after a single trial is too much of a quitter to deserve much success, and as a rule success does not come to him.

The conditions of this season should impress upon every farmer the value of the silo. You need the silo now. The chances are nine to one that if you try you can grow the crops to fill the silo. If you buy a silo this year you will have it and it will have done you good service in an emergency. Then, when feed grows more plentifully, you would not for the world dispense with it.

At the Kansas State Agricultural College the pastures are dried up as are your pastures, but the dairy herd is being well fed and is not even failing in its milk flow, because of an extra silo having been filled with corn ensilage last year, and that ensilage is now being fed and the college has enough of it to feed the dairy herd until grass comes. What a boon it would be to the farmers of Kansas if every man had a silo full of last year's corn!—T. A. Borman.

If you are a little dry in your locality do not play the part of a quitter. Hang on. Success comes from everlasting staying at it.

# THE FARM

Do not sell the stock because feed prospects do not look good. Try to buy the feed. You can do it. That stock of old alfalfa hay is worth more money fed to the live stock than any prize you can get for it. Like the old corn. Live stock makes the farm pay. If you sell your stock at a low figure and buy again at a high price you can't help but be a heavy loser.

The Ohio Experiment Station found could produce butter fat 9 cents cheaper per pound by using corn ensilage than it could when using hay alone. A like difference was found in milk production. The Nebraska Experiment Station found that a balanced ration of corn ensilage and alfalfa or clover produced butter fat and milk at the lowest cost.

### The Irrigation Farmer.

The three principal causes of failure farming by irrigation are over-irrigation, under-cultivation, improper application of water, and these apply to all classes of irrigation.

Many people make grave mistakes assuming that by the use of large quantities of water in irrigation, it is necessary to cultivate as carefully as when the water is applied through rain fall. This is a mistake and one that the beginner is liable to make.

First, one must use good judgment in applying the water so as not to saturate the plants and cause the ground to bake or become hard and packed, thus damaging the crop instead of benefiting same by irrigation, losing our time, cost of producing the water and damaging the land, losing interest on the investment and deterioration of your plant.

Water should be applied in deep narrow furrows between the rows of truck or trees (preferable by sub-irrigation, permitting the water to sub-irrigate as much as possible. Never allow the water to flood the surface of the ground, excepting on rice and, possibly, alfalfa or small grain crops, if it can be avoided. As soon as the water has been taken up by the soil and the ground is in good tillable condition, you should cultivate, filling the furrows, keeping at all times a good loose mulch, such as advocated in the Campbell system of dry farming. This will prevent evaporation, leaving the soil in a good productive condition. It is best, when possible to do so, to apply the water in the evening or early in the morning, especially on truck.

You will remember when nature applies the water, the clouds usually shade the earth, cooling same after the rain, and the clouds usually continue to shade the earth until the soil has properly absorbed the moisture; otherwise, scalded crops are the result.

Always follow watering with careful cultivation, as soon as the soil is in favorable condition, bearing in mind that weeds consume water and sap the strength of the soil and that the sun will absorb the water unless the loose mulch is retained. In other words, use as little water as possible and much cultivation and then good results will follow. In this way you will reduce the cost of irrigation, owing to the less amount of water used, and your land will remain in excellent condition.

The usual method of applying water: Flood the ground with too much water, little cultivation and sometimes none. The result is baked and packed soil, plenty of weeds, yellow and dwarfed plants, and irrigation pronounced a failure when it is the irrigator and his methods, or a lack of method, that is the failure.

In order that it may be clear, you will see that a reasonable amount of water, properly applied, keeping a good moist sub-soil, gives the desired results; while much water improperly applied at an increased cost means no crop but plenty of weeds and land left in poor condition.

By pumping water from wells or streams, where the lift is from 50 to 100 feet, and the careful use of same, a handsome profit can be realized, depending, of course, upon the local conditions, kind and number of crops produced per annum and prices received for same.

## Don't Wait for the LIGHTNING to Strike your Home.

It means death and destruction when it comes. Why take chances? You owe it as a sacred duty to your family to guard them and their home from the fateful and terrible lightning. Don't delay. There is certain, absolute protection in

### The DODD SYSTEM of Lightning Control

Lightning causes three out of four fires in the country. Proven by statistics of fire insurance companies.

Insurance companies urge you to protect your home with the Dodd System of lightning protection. It is a matter of business with them. It saves them three-fourths of all their fire losses.

Tens of thousands of buildings are protected by D.-S. Lightning Rods. Not a one ever destroyed. It should be a matter of love and duty, as well as business, with you to protect your home. Over 2000 insurance companies (Mutual and Old Line) grant reduced insurance rates on buildings protected with D.-S. rods.

### Delay May Be Fatal! Act Now!!

Start by writing us. You will be serving your own best interests. Protection costs but a small fraction of what you have at stake. The rods are erected once for all. It is a permanent investment, adds but slightly to the cost of your buildings, and the reduced rates of insurance quickly repay the cost. See to it that you get the Dodd System, the one which affords unquestioned protection, the system which has universal endorsement. It is installed under a personal, binding guarantee to refund all money or make good your damage, if damage occurs. Note the Trade Mark below. You will find it on all genuine D.-S. rods. See that it is on the system you buy. It will pay you to read our great Lightning Book, a book you can understand. Makes everything plain. Large pages, many striking lightning pictures from photographs. Contains Prof. Dodd's great Lecture on Lightning. Your free copy is waiting. Write for it to-day.

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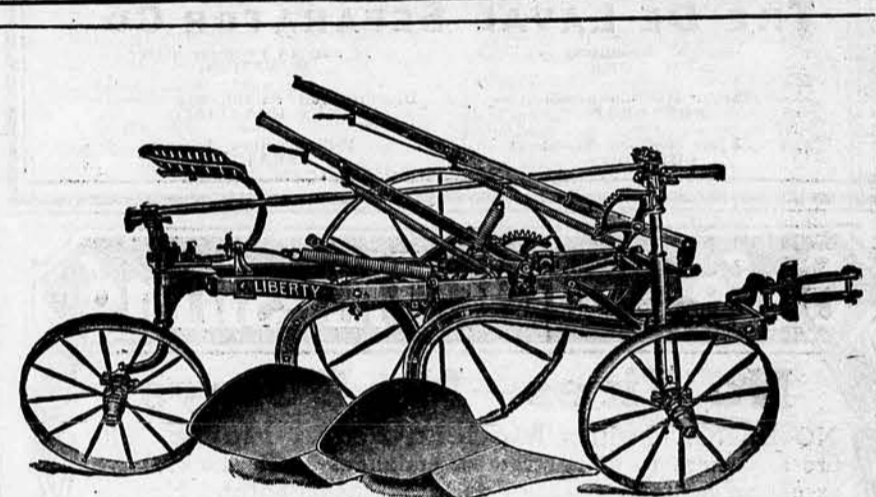


Standard Copper Cable Rods at the Standard Price

We can assure you that, in our opinion, backed by years of actual field work, the American people are just entering the greatest development in the irrigation line the world has ever known, and much of the water used for same is being obtained from the underflows, subterranean rivers, sheet or ground water, all of which are supplied by the rain, or snow from the mountains. In many instances, the rain falls upon porous formations, such as sand or gravel, porous rock or boulders, disappearing beneath the earth's surface in said formations, passing through the earth, and in some instances the water appears miles away at the earth's surface in the form of a spring or an artesian well that flows of its own accord and pressure. In many more instances the same water is being lifted to the surface by the use of two or three stage centrifugal pumps, operated by electricity where it is available, gasoline, or solar oil engines where this class of fuel can be secured. Especially is the internal combustion engine to be desired where the lift is high and a medium amount of water is desired with long pumping seasons. Steam plants are sometimes preferable where large volumes of water are secured and the pumping seasons are short, and where the fuel is cheap and close to the plant.

One or two acres of truck at all times means a good living for the entire family upon the most healthful and desirable food to be obtained, instead of living out of a tin can and borrowing money at the bank to pay for same. A reasonable acreage of corn, properly fertilized, drained and watered, and being cultivated as it should be, will mean a feed crop sufficient to make the crop, thus saving the expensive feed bills and, to some extent, gives the farmer a diversified crop, which, if put in practice will put the balance wheel in the industry and place same on a banking basis. Add to this a sufficient number of chickens, cows and the producing of your mules and horses, all of which requires much patience, some work and a small amount of investment but profits in proportion to the investment.

Most of the readers of this article will realize that the foregoing statements are correct, but the way to forcibly impress these facts upon the producer's mind, and to get them to act, we are unable to find. In the fall he realizes what he ought to have done but it is too late, and in the winter and spring he is too busy preparing his large acreage for crops, forgetting the foregoing facts, which seem to him of little importance, but, in reality, means the farming industry placed upon a banking basis, as each locality is rated in keeping with value received for crops produced over and above the cost of production.—M. E. Layne, Houston, Tex.



### Rock Island Liberty Gang with Universal (CTX) Bottoms

#### ROCK ISLAND Universal (CTX) Bottoms

Our Sulky and Gangs have the only Universal bottoms ever made—the CTX. Two years of triumphant success have proved them without a rival. We have been making high-grade Plows since 1855, and our Sulky and Gangs have always been at the head of the class. But until two years ago just one thing was lacking—

#### An All-Purpose Bottom

All plow manufacturers had dreamed of this, but given it up as impossible. When we brought out our CTX bottom the other plow makers admitted it was a good thing, but said we claimed too much for it.

#### It Has Made Good

Every claim we have made for this wonderful plow bottom has been made good by the work of the plows in the field.

#### Our Claims

The Universal (CTX) bottom works perfectly in corn-stalk land, stubble or in sod. It makes no difference whether the plow is set to run two inches deep or eight inches deep, or whether it is worked in sand, clay, light loam or waxy land. It will scour wherever any plow can be made to scour, covers all trash and won't kink sod.

#### Prove it Yourself

Buy a Rock Island Sulky or Gang and prove these claims for yourself. You can't make a mistake in buying our Plows. Ask the nearest Rock Island dealer. If you don't know who he is, write us for his name and free Plow booklet.

## ROCK ISLAND IMPLEMENT CO.

Kansas City, Mo. Oklahoma City, Okla.

**1 MAN AND ONE HORSE**

**Do Your Baling Cheaply**

Our Daisy SELF-THREADING, self-feeding one-horse hay press is the only one on which one man can do all the work. First successful self-threading device. The self-feed and automatic condenser materially increase results. Open side hopper. Write today for circular K-167 which gives prices and reports of actual work. **Geo. Estel Co. Quincy, Ill.**

**1 TON an HOUR**

**SAVE MONEY BUY NOW INDIANA SILOS!**

Don't lose money through delay. If you wait another year you lose the price of the silo. Short crops mean high priced feed. We can deliver promptly from our Factories at Anderson, Ind., Des Moines, Ia., and Kansas City, Mo. Liberal terms. Write for Catalog and our new book, Silo Profits. Sent free on request.

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Our Western Sales Agent

# HOT WEATHER

the Ideal Time to Use a

# DE LAVAL

# CREAM SEPARATOR

If there is a time when the use of the DE LAVAL Centrifugal Cream Separator is more indispensable to successful dairying than another that time is during the hot weather of mid-summer.

The use of the separator at this season usually means the difference between a profit and a loss in dairying, by accomplishing a great saving of butter-fat that goes to waste with any other method of separation and enabling the production of a higher quality of cream and butter-fat than is otherwise possible.

Moreover the advantages of the DE LAVAL over other cream separators are greatest at this season. The separation is more complete and the cream heavier and more even in texture. The machines turn more easily and the capacity is greater, getting the work through more quickly, while the modern DE LAVAL machines are easily cleaned and absolutely sanitary, which is true of no other cream separator.

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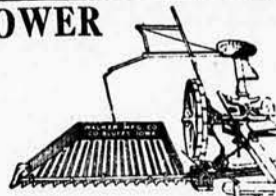
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# DAIRY



Prof. O. E. Reid, formerly Assistant Professor of Dairy Husbandry at the Kansas Agricultural College, has been made full professor in charge. No better appointment could have been made.

D. H. Otis, formerly professor of Dairy Husbandry at the Kansas Agricultural College and lately Professor of Farm Management in the Wisconsin College, has lately been made Assistant Dea of the College of Agriculture. Few men have left the impress of good work that Prof. Otis left in the Kansas institution when he left for Wisconsin. Since his work began there he has done a notable service for the dairy industry.

### Testing Kansas Dairy Cows.

It is announced that all of the dairy cows in the State of Kansas will be tested for tuberculosis this summer, under the direction of J. H. Mercer, State Live Stock Sanitary Commissioner. By fall it will be known just how many dairy cows there are in the State that are afflicted with tuberculosis. Upon the request of Mr. Mercer, the government Bureau of Animal Industry will assist in making the tests. The promise has been secured from James Wilson, Secretary of Agriculture that his department will help during the new fiscal year, which will begin on June 30th.

Up to the present time the only tests for tuberculosis that have been made have been upon request. A recent resolution adopted by the Kansas City council has brought about a demand for tests in the eastern part of the State from which milk has been shipped to Kansas City for local consumption. The council has passed a resolution prohibiting the shipment of milk to that city if the milk comes from tuberculosis cattle. The State has only a small fund for this purpose and the demand for tests has overtaxed the fund. Throughout the eastern part of the State are dairy herds furnishing Kansas City with its milk supply, and these herds are being tested as rapidly as possible.

If the government can help this summer, as it has promised to do, it will probably spend as much as the State will, and the combined funds will test all of the cattle used for dairy purposes in the State. This will not apply to individual cows used for individual families. Only the dairy herds will be tested.

Up to the present time 3,500 cows have been tested in Kansas, and of that number less than 200 have been found to be tubercular. Not a cow tested in the western part of the State indicated the presence of the disease. What bovine tuberculosis there is is in the eastern part of the State.

### What Dairying Does.

The Ice Cream Trade Journal in a recent issue gives the following interesting information in favor of dairying:

Iowa, Georgia and Mississippi had, in 1900, approximately the same number of farm families. Their total value of domestic animals was, in million: Georgia 33, Mississippi 41, and Iowa 272. For each family their value was: Georgia \$108; Mississippi \$185; Iowa \$122.

Now look at the value of the farm products, for 1909, in millions: Georgia 104 and Mississippi 102, while the Iowa farms produced \$1,000,000 for every day in the year. Every farmer's family in Iowa produced nearly four times as much as a farmer's family in Mississippi or Georgia.

But here's the staggerer: Iowa spent \$337,190 for fertilizers; Mississippi \$932,000; while Georgia's fertilizer bill ran up to \$5,700,000.

Why did Georgia pay nearly sixty times as much as Iowa to raise each dollar's worth of produce? You think there must be a reason? You are wrong. That's exactly why it hurts—there is no reason.

But there is an answer. The answer

is in the cow—just where the fertilizer is. The Iowa farmer returns the richness to his land; the other farmers ship it away.

The entire South has a climate where it is rarely necessary to protect cattle from the winter. There is an abundance of forage and plenty of water. Then also the cotton-seed, taken in connection with cattle-raising, is the surest of all wealth-producers. When bought for fertilizer it is spread directly upon the ground, which utilizes only a small part of its value. If the same ton of cottonseed meal were filtered through a cow, the droppings would contain from ninety to ninety-five per cent of the original fertilizing value, while the farmer would have his dairy products, his cow, and a calf by way of lagnappe.

Cattle thrive upon those elements of cottonseed meal that are useless as plant food. Those elements produce meat and milk. The cow compels the farmer to raise forage, and enables him to raise it. She is the mother of diversification—enemy to the single crop and fertilizer bills.

### Raise Calves Without Milk.

Thousands of farmers and dairymen have been raising calves without milk, for many years. Don't feed butter-fat to the calves. It is worth more to sell it as cream or butter. It is cheaper to raise the calves on the excellent milk substitute, "Big B" calf meal, manufactured and sold by the Brooks Wholesale Co., Fort Scott, Kan.

This calf meal contains no cheap mill-feeds, but is made of ten of the finest ingredients obtainable for the necessary quick and healthy growth of young calves. It has been proven thoroughly satisfactory for raising calves; also for young pigs. It can be had by ordering from the company above named. Prices: 100-lb. sack, \$3; 500 lbs., \$13.75. Prices are freight prepaid. Full directions are sent with each sack. Order a trial shipment.

### Sowing Grain in Standing Corn.

The advantages of sowing wheat between rows of standing corn are many and is constantly gaining in popularity. It permits the corn to stand until fully matured, and at the same time the fall seeding is not interfered with, because the seed can be put in the ground at the proper time. Hoosier One-Horse Five Disk or Five Hoe Drills with and without Force Feed Fertilizer Attachments will be found admirable for this purpose. They possess many features not found in other machines of this class. They are made with adjustments enabling the user to employ them between different width rows. These machines are manufactured by The American Seeding-Machine Co., Incorporated, Richmond, Ind., who sell Hoosier Drills under such a fair and liberal guarantee that no risks are run in purchasing. Send to the manufacturers for a Hoosier One-Horse Grain Drill catalogue. Go to your implement dealer and insist on seeing the Hoosier.

### Caked Teats.

We have a Jersey cow which came fresh this spring and at that time one of her teats seemed to cake. We applied hot lard and turpentine and it seemed to be all right, but the milk never came back in that side. The cow has been giving five gallons a day, but now another teat is caked slightly and has no milk in it at all. She is a valuable cow and has the best of clover pasture and a small feed of shorts, bran and chop.—G. M. S., Merwin, Mo.

Ans.—Have a veterinarian pass a long milk tube and pump up the quarters with oxygen, the same as for milk fever, and repeat it in about three days. Give her a good purgative of Epsom salts and repeat it in three days. Cut her feed down and keep her in a dark stable in daytime and out at night. If her bag is heavy milk three times a day.



# LIVE STOCK

The grand champion barrow of the 1910 International Live Stock Exposition at Chicago was said to have been the best finished hog ever shown at Chicago. When slaughtered he dressed 80.22 per cent, which is very high. He was put into the show condition in which he won his championship ribbons and in which he was afterwards maintained by feeding him on a ration consisting of 50 per cent barley, 25 per cent middlings, 5 per cent oil meal, 5 per cent tankage and the alfalfa pasture.

### Bladder Deposit.

I would like some information about a deposit found in the bladder of a horse. It was about the size of an ordinary man's head. What are the symptoms and causes? What medicine should be used to dissolve the obstruction?—A. B. J., Ault, Colo.

Ans.—It is a cystic calculus and is composed mostly of carbonate of lime and some other forms of lime. It is very hard to give medicine to dissolve it and the best way is to operate. Crush it in the bladder and wash out.

### Stiff Shoulder.

I have a mare mule, 8 years old, weighing 1,400 pounds. She is stiff in her shoulder and walks as though her feet were sore. When she stands she lifts first one foot and then the other. She also lies down a great deal. She seems worse at times, depending on the weather.—C. E. S., Bucklin, Kan.

Ans.—This is a case of navicular disease and is sown at the coffin joint, just in the top of the hoof. Have the shoes taken off and her feet dressed down all they will stand and poultice them good for two days with oil meal. Then wash and when dry clip off the hair and apply cerate of cantharides from the top of the hoof up two inches and repeat it in eight days. Give her a rest on grass and if she does not entirely recover she will have to have the branch of a nerve cut that goes to the coffin joint.

### The Pure Bred Sire.

Many people recognize the value of a pure bred sire but comparatively few stop to think just how valuable he is. In building up a herd the sire is more important than all the females in the herd and if he is consistently used, it will be only a very short time until the herd is practically pure bred.

When this is true the owner gets many of the benefits that he would derive from pure bred animals but not all. He cannot sell the surplus stock for breeding purposes because he cannot give pedigrees and then the individuals in the herd are not sure to breed true because of the small amount of cold blood which still remains.

Suppose the breeder were to begin with a common herd of hogs, for illustration, and were to buy a pure bred boar. The first generation would be half bloods, of course, but if he keeps on using pure bred sires the second generation would be three-quarter bloods, the third would be seven-eighths, the fourth, fifteen-sixteenths, the fifth, thirty-one-thirty-seconds and the sixth, sixty-three sixty-fourths.

In other words, the first crop of pigs from a pure bred sire would be 50 per cent improved and 50 per cent unimproved while the 6th crop would be 98.43 per cent pure and 1.56 per cent unimproved.

It does not take long to raise six generations of pigs and when done the results are practically pure bred animals, though they would still lack the tendency to "throw back" to the original type of the dam.

For pork production this scheme is practicable and a money maker, as was shown by Mr. J. G. Arbuthnot in his recent article in KANSAS FARMER. It is an especially valuable idea in dairy farming provided it is carried out with proper tests of the cows and the good ones only retained in the herd and their heifer calves kept for its perpetuation.

It does not cost much to get a pure bred sire when the benefits to be derived from his use are considered and the ownership of a good animal has an educational value which is practically sure to lead to a desire to own a good herd.



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Put into a saucepan half a cupful of water, three tablespoonfuls of vinegar three cucumbers pared and grated and a tablespoonful of gelatine. Cook until gelatine is dissolved. Season, add a few drops of green coloring and strain into a mould. Garnish with parsley and sliced cucumbers. Serve with mayonnaise.

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# EMERGENCY FORAGE

Excerpts From Uncle Sam's Bulletin On Growing Late Seed

The situation in the central west calls for the immediate planting of emergency crops to round out the shortage of both hay and pasture. There is still time to plant half a dozen kinds of quick-growing crops that may be used as substitutes for the regular hay and pasture crops if the seed is secured and the land at once put into condition.

For hay there may be planted millet, cowpeas, sorghum, soy beans, and Canada field peas and barley. These same crops are suitable for pasture purposes, and, in addition, rape, rye, and winter varieties of wheat. The whole corn plant may also be used.

The aim is to state briefly enough essential facts relative to each of these crops to enable intelligent selection. The vital point now is the recognition of the situation and the prompt planting with least possible delay of some crop that will supplement the pastures as quickly as possible and fill empty barns with hay for winter.

### MILLET.

Common millet is one of the best varieties of millet to sow as an emergency hay or pasture crop, since it yields well under trying conditions of soil and climate. It matures for hay in 50 to 80 days from the date of sowing. As a pasture, stock can be turned on it within a month after seeding. Use one-half to three-fourths of a bushel of seed per acre. If seeded for an early grain crop or on corn land burned up by drought, disk the land thoroughly and harrow the seed in or sow on shallow plowed land well harrowed down. Other good varieties of millet are Hungarian and German.

### SORGHUM.

For fodder sorghum should be sown as early in July as possible. Early Amber, one of the best varieties, requires 70 to 100 days to mature for fodder, and the Orange varieties about 10 days longer. In some sections cowpeas and sorghum are sown together at the rate of one-half to 1 bushel of cowpeas and 1 bushel of sorghum. This makes better hay or pasture than sorghum alone. As a summer pasture the mixture is especially relished by sheep, cattle, and hogs.

### COWPEAS.

Cowpeas and soy beans may be successfully sown for hay or pasture as late as July 20. Both crops are equal or superior to clover in feeding value and are relished by every class of stock on the farm. Cowpeas will give from 1 to 3 tons of hay per acre. New Era is one of the earliest varieties, maturing seed in 60 to 80 days after sowing. Other early varieties are Early Blackeye and Michigan Favorite. Whipperwill, while a little later, is a more vigorous grower and a general favorite for hay or pasture. In Missouri and Kansas a cowpea hay crop can be grown after an early grain crop has been removed. New Era is one of the best varieties for this purpose. The most satisfactory results are likely to be secured by seeding on well-prepared ground in rows 27 to 30 inches apart, at the rate of about half a bushel per acre, keeping the rows cultivated. If seeded broadcast at least 1 bushel should be sown and the crop harrowed in. Cowpeas sown in standing corn at the last cultivation will furnish a large amount of pasturage, and this method of handling the crop is recommended.

### BARLEY AND PEAS.

Barley and Canada field peas seeded together at the rate of about 1 bushel of each make an excellent pasture and soiling crop, and if seeded by July 15 will mature for hay. The hay is relished by sheep, horses, and cattle and is a rich protein forage for dairy cows, while the pasture is especially valuable for hogs and lambs. The yield varies from 2 to 3 tons of cured hay per acre and the hay is fully equal in feeding value on the farm to the best mixtures of clover and timothy. Oats are frequently seeded with Canada field peas for forage, but after July barley makes a more rapid growth than oats and is less subject to rust. A mixture of

barley and peas may be seeded together with a grain drill on well-prepared, fertile soil, preferably clay loam, or broadcasted and harrowed in, covering 2 to 3 inches deep.

### RAPE.

This is strictly a succulent pasture crop of especial value for hogs, growing lambs, and fattening sheep. It may be sown in corn at the last cultivation, using about 3 pounds of seed per acre and lightly harrowing it in. Much better results will be obtained by seeding the crop alone on fertile clay loam or black soil, sowing either in drills 30 inches apart and at the rate of 2 pounds per acre, or broadcasting at the rate of 3 pounds per acre, covering about half an inch deep. The crop will be ready for pasturage within 50 to 60 days from seeding, and on good soils will furnish 20 to 30 tons of green forage. An acre of rape on good land will furnish pasture two or three months for about 20 hogs or as many lambs fed light grain rations in addition. Dwarf Essex rape is the variety to grow. Cattle and sheep should be gradually accustomed to rape, and well filled up on other feed before turning in to graze, otherwise they may bloat.

### RYE.

This crop can be sown in the standing corn at the last cultivation in July and will afford considerable pasturage for all stock. It is often thus sown either alone or mixed with rape for lambs or sheep being fattened for market. If seeded on especially prepared ground the crop will come on much earlier and give considerably more fall feed. Seed at the rate of 1 1/2 bushels per acre. Winter varieties of wheat if sown at once will also afford a large amount of fall pasture.

### CORN.

Every farmer knows the value of corn as a supplement to a pasture crop late in summer, for which purpose it may be used for cattle as soon as it is tasseled out and for hogs as soon as the ears have reached the roasting stage. Not so many realize that an acre of corn stover—the crop left standing after the ears have been taken—is as valuable for feeding to cattle and horses as an acre of timothy. With a short hay crop, therefore, every effort should be made to carefully handle the corn crop. The feeding value in the stalk and leaves of the corn plant increases up to maturity, but if the stalks are allowed to stand in the field after ripening there is considerable loss. This loss at the Iowa Experiment Station two months after ripening amounted to more than one-half of the value of the stalk.

Investigations show that of the feeding value of corn stover about 27 per cent is in the stalk and leaves above the ear, 26 per cent in the husks, and 47 per cent in the stalk and blades below the ear. When left standing in the field many of the lower leaves dry up and are blown away or beaten down by rains into the ground and lost. Farmers are urged to cut corn for grain as soon as the ears are well dented and a few dry blades appear. Thus handled the maximum feeding value of the crop with reference both to grain and stover will be secured. Put the corn in good-sized shocks and after husking out the ears put a number of shocks together. Large shocks lose less food constituents by weather and fermentation than small shocks. If the stover is put into the barn it must be thoroughly dry to prevent molding. Except for convenience of handling it is not necessary to shred corn stover, as apparently its feeding value is little if any increased thereby. By cutting and shocking the feed value of stover is increased one-third to one-half over what it would be if left standing in the field. With a short hay crop this loss should be obviated by gathering and shocking the corn.

### SUMMER PASTURES.

An excellent plan in providing against shortage of pastures is to grow each year some of the supplementary crops, such as rye, millet, cowpeas, rape, or sorghum, mentioned above to be used during the dry season. An excellent annual pasture can

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FIELD NOTES.

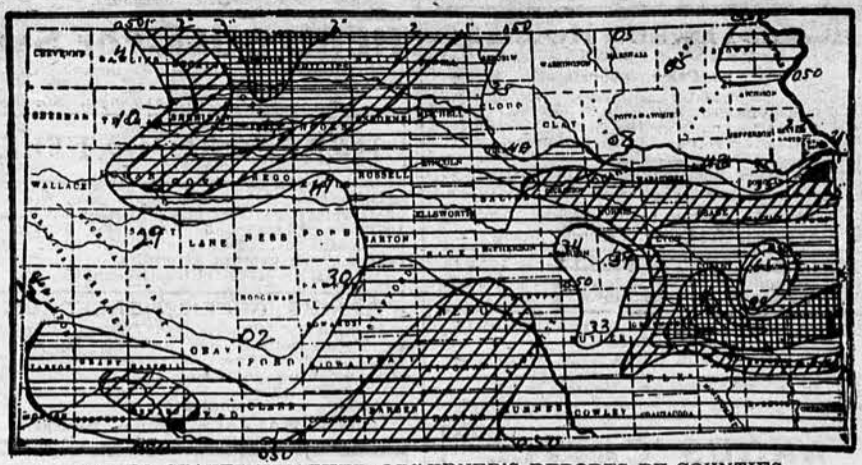
W. E. Long's Big Polands. One of the good breeders of big-type Poland Chinas who has reported recently is W. E. Long of Meriden, Kan.

Colonel Lafe Berger Booking Sales. We had the pleasure of calling on Colonel Lafe Berger last week.

R. M. Finch's Poland Chinas. R. M. Finch of Sheridan, Mo., is the owner of one of North Missouri's very fine herds of big-type Poland China hogs.

KANSAS CROP REPORT

Rain chart prepared by T. B. Jennings from reports collected by the Weather Bureau.



UNITED STATES WEATHER OBSERVER'S REPORTS BY COUNTIES.

INCHES: SCALE IN. Less than .50, .50 to 1, 1 to 2, 2 to 3, Over 3, T, trace. Allen—Recent rains have greatly benefited growing vegetation and a good corn crop seems assured.



The above shows a group of the fine Shorthorns owned by H. H. Holmes of Great Bend, Barton County, Kansas.

Keep On 51759, sired by Keep On Jr. 37716, he by Keep On 28553. This is an extra high-class big-type boar with extra heavy bone, great length of body and will weigh 800 pounds.

The O. M. Furnas Poland Chinas. The writer called on O. M. Furnas at Oxford, Kan., last week and found as good a herd of Poland Chinas as we have looked at this year.

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Headed by Metal's Choice by Mo. Metal, he by Bell Metal. Eighty early spring pigs...

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For Sale—Few large type fall boars sired Monarch Mogul out of my best sows.

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