

# KANSAS FARMER

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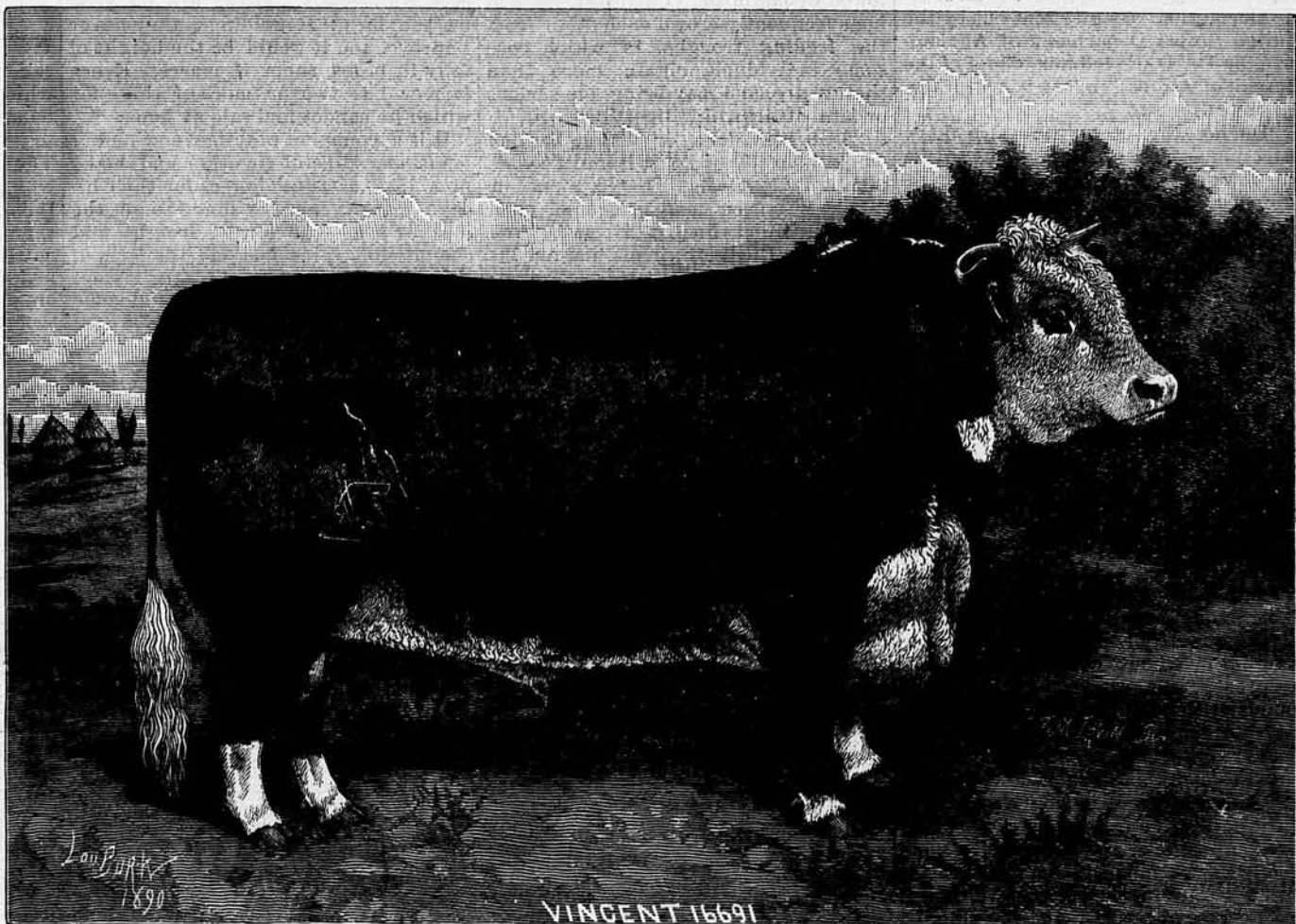
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From this herd were furnished some of the winners at the World's Fair. Write for catalogue. M. E. MOORE, CAMERON, Mo.

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**D. TROTT,** Abilene, Kas.—Pedigreed Poland-Chinas and Duroc-Jerseys. Also M. B. Turkeys, Light Brahma, Plymouth Rock, S. Wyandotte chickens and R. Pekin ducks. Eggs. Of the best. Cheap.

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**M. H. ALBERTY,** Cherokee, Kas., Registered Holstein-Friesian cattle, Poland-China and Duroc-Jersey swine, Rose-comb Brown Leghorns. Stock of all ages and both sexes for sale. Orders booked now for pigs and eggs.

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**EUREKA POULTRY YARDS.**—L. E. Pixley, Emporia, Kas., breeder of Plymouth Rocks, S. Wyandottes, Buff Cochins, B. and White Leghorns, B. Langshans, M. B. Turkeys and Pekin ducks. Chicks at all times. Eggs in season.

### POULTRY.

**HARRY T. FORBES—FINE S. C. BROWN LEGHORNS.** Eggs for sale, safely packed and sent by express to any part of the United States. Address 701 Polk St., Topeka, Kas.

**PURE-BRED LANGSHAN, BARRED PLYMOUTH ROCK AND S. C. B. LEGHORN EGGS,** one dollar per thirteen. Address Robert Crow, Missouri Pacific Railway Agent, Pomona, Kas.

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**KAW VALLEY HERD FANCY POLAND-CHINAS.**—Of the most noted families, bred for feeding qualities as well as fancy points. Bebout's Tecumseh at head of herd. M. P. Tatman, Proprietor, Rossville, Kansas.

**WHITE GUINEA FOWLS**—\$2 each; eggs, \$1 per thirteen. **Plymouth Rock Cockerels,** \$2 each; eggs, \$1 per thirteen. **White Holland Turkeys,** \$3 each; eggs, \$2 per thirteen. MARK S. SALISBURY, Independence, Mo.

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**A. E. STALEY,** Ottawa, Kansas, CHESTER WHITES AND POLAND-CHINAS. Light Brahma eggs, twenty for \$1.

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Breeder of pure-bred Herefords. Beau Real 11055 heads the herd. Young bulls and heifers for sale. Also for sale, Poland-China swine. Choice bred young boars and sows by the World's Fair prizewinner, Longfellow 29785; and Berkshire swine of the noted Duchess and Lady Lee strains of N. H. Gentry. Blamark and General Lee, both Gentry bred boars, in service.

**SHORT-HORN CATTLE**  
Poland-China Swine, Buff Cochins Fowls. Inspection invited. E. L. KNAPP, Maple Hill, Kansas

**SHANNON HILL STOCK FARM.** G. W. GLICK, ATCHISON, KAS.  
Breeds and has for sale Bates and Bates-topped SHORT-HORNS. Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Waterloo Duke of Shannon Hill No. 89879 and Winsome Duke 11th 115,137 at head of herd. Choice young bulls for sale now. Visitors welcome. Address W. L. CHAFFEE, Manager.

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**SELECT HERD OF BERKSHIRES**  
Have for sale pigs from State fair winners. Can fill classes for show. Boars for fall service. A few choice sows bred. Address G. W. BERRY, Berryton, Shawnee Co., Kas.

**J. N. ELLIS** Cameron, Mo., **Large Berkshires**  
Choice pigs of best families now ready to ship. Come or write. Satisf'n guarant'd.

**JAMES QUORLLO,** Kearney, Mo., **Large Berkshires,** S. C. Brown Leghorns and Bronze Turkeys, On H. & St. Joe, 28 miles northeast of Kansas City,

## The Stock Interest.

### THOROUGHbred STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

SEPTEMBER 27—June K. King, Berkshire swine, Marshall, Mo.  
OCTOBER 2—C. C. Keyt, Short-horn cattle and Poland-Chinas, Verdon, Neb.  
OCTOBER 3—W. H. Wren, Poland-China swine, Marion, Kas.  
OCTOBER 4—J. A. Worley, Poland-China swine, Sabetha, Kas.  
OCTOBER 5—Ell Zimmerman, Poland-China swine, Hiawatha, Kas.  
OCTOBER 10—George W. Null, Poland-Chinas, Chester Whites and Horses, Odessa, Mo.  
OCTOBER 24—F. M. Lall, Poland-China swine, Marshall, Mo.  
OCTOBER 24—J. B. Davis, Duroc-Jersey swine and cross-bred Short-horn and Red Polled cattle, Fairview, Kas.  
NOVEMBER 7—Martin Meisenheimer, Poland-China swine, Hiawatha, Kas.

### WHEAT AS A STOCK FOOD.

Never before in the history of Kansas was such vast quantities of wheat fed to growing and fattening stock as at the present time, and the practice is general throughout the West, hence the following extracts from the circular of information recently sent out by the United States Department of Agriculture, by Dr. D. E. Salmon, Chief of the Bureau of Animal Industry, will interest our readers:

"During the past year there have been numerous inquiries in regard to the chemical composition of wheat as compared with corn and oats, its relative value as a food for growing and fattening animals, and the method of feeding which would produce the best results. These inquiries have, doubtless, been suggested by the great change in the comparative prices of the grains just mentioned. In the past we have been accustomed to see a bushel of wheat sell for two or three times as much as a bushel of corn. Recently we have seen fifty-six pounds of corn sell for more than could be obtained for sixty pounds of wheat. This readjustment of the prices of grain calls for a reconsideration of the methods for disposing of the cereal crops in order to determine which is most profitable under present conditions.

"The quantity and proportion of the different proximate constituents which are present in a digestible form in 100 pounds of some of the common feeding stuffs is compared with the German feeding standards. The information which it contains should, however, be used in connection with our knowledge of the habits of animals and the practical results of feeding. We should not care to assert, for instance, that wheat screenings are in general more valuable as a food for animals than the plump, sound wheat. We may, however, safely conclude that the screenings and imperfect wheat should be fed and only the best wheat put upon the market.

"It is seen that wheat contains practically the same amount of protein per 100 pounds as oats, and that both wheat and oats contain about 30 per cent. more protein than corn. On the other hand, wheat only has about one-half as much fatty matter as corn and oats. In carbohydrates the position of wheat is about half way between that of corn and oats.

"Protein, that is the albuminoid constituents of grain, goes to build up the albuminoid tissues of the animal body of which the muscles are the most prominent part, but it may also be changed into fat. The fat in the animal body comes, therefore, both from the fat and the protein in the food which is eaten. The carbohydrates sustain the heat of the body and must be present in sufficient quantity or the more valuable fat which has already been assimilated will be used for this purpose. Young growing animals require more protein than older ones, and also more than fattening animals, in order to supply material for building up the muscles, tendons, and other albuminoid structures.

"When wheat and corn are the same price per bushel, it is preferable to feed wheat and sell corn: First, because wheat weighs 7 per cent. heavier per bushel than corn; secondly, because wheat is weight for weight an equally good grain for fattening animals, and better for growing animals; and thirdly, because there is much less value in fertilizing elements removed from the farm in corn than in wheat.

"There are certain points to be

borne in mind when one is commencing to feed wheat. Our domesticated animals are all very fond of it, but are not accustomed to eating it. Precautions should consequently be observed to prevent accidents and disease from its use. It is a matter of common observation that when full-fed horses are changed from old to new oats they are liable to attacks of indigestion, colic and founder. If such results follow the change from old to new oats, how much more likely are they to follow a radical change, such as that from oats to wheat? For this reason wheat should at first be fed in small quantities. It should, when possible, be mixed with some other grain, and care should be taken to prevent any one animal from getting more than the quantity intended for it.

"These precautions are especially necessary when wheat is fed to horses, as these animals are peculiarly liable to colic and other disturbances of the digestive organs, accompanied or followed by laminitis. Cattle, sheep and hogs frequently crowd each other from the feeding troughs, in which case some individuals obtain more than their share, and may bring on serious or fatal attacks of indigestion.

"The best form in which to feed wheat is to roll or grind it into a coarse meal. It may then be fed alone, or mixed with corn meal or ground oats. When ground fine it is pasty and adheres to the teeth, gums and cheeks so that it is not so readily masticated or eaten: In the form of a coarse meal it is relished by all animals, it is in a

ness, though matched teams of chunks, 2,400 to 2,800 pounds, sell at satisfactory prices as double workers only.

Drivers should always be broken to single harness. Four-year-olds of large size, 1,500 pounds and upward, sell well when broken to double harness at a reduction of \$15 to \$25 from a five or six-year-old. None should be marketed except when fairly well broken. If possible, none should be less than 4 or nearly 4 years old.

The market lately has shown such vast improvement, with a large number of buyers constantly upon it, that we confidently look forward to a large and fairly profitable trade to shippers from now onward to June.

A. T. Stewart, the most successful merchant known to this generation, never permitted dead stock to accumulate on his shelves. He cut its selling price daily till it found a buyer. The same cause operates against every farmer in the land. Buyers pick out your valuable horses and leave the scrubs and culls. These are no good on the farm; if geldings, they never improve, and it would be the height of folly to breed them if mares. Every farmer has two or more of these for which he cannot find sale at home.

It is a common practice now-a-days for farmers to club together and make up a load of these horses for the Chicago market, and by doing so get the market price, the lowest freight and commission rates and rid the farm of the rubbish. Now, to do this, it's not necessary that fifteen men should come to Chicago with fourteen horses and

## Anæmia

is depleted blood. The blood lacks richness and the cheeks lack color. The whole system lacks the nourishment of

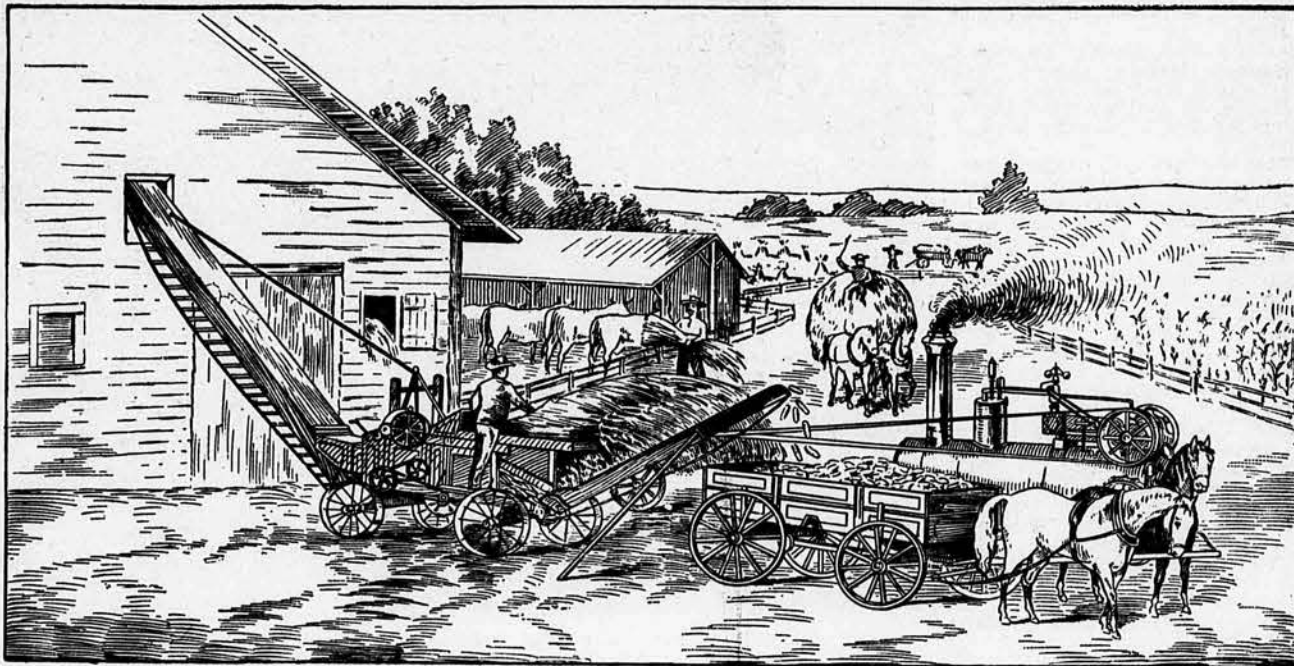
## Scott's Emulsion

the Cream of Cod-liver Oil. This nourishing, palatable food restores a healthy color, enriches the blood and tones up the whole system. Physicians, the world over, endorse it.

Don't be deceived by Substitutes!

Prepared by Scott & Bowne, N. Y. All druggists.

taken from the shock to the machine, which is stationed at the barn. The bundles are delivered from the wagon to the feeder's table on the machine. The stalks are fed to the machine, which snaps off the ears and then husks them. The stalks are CRUSHED and then passed to the shredding head or cutting head. The machine can be furnished with either the shredding head or cutting head, though shredding seems to be preferred by most persons



KEYSTONE CORN-HUSKER AND FODDER-CUTTER.

condition to be attacked by the digestive processes whether thoroughly masticated or not, and in most cases it gives the best results. Dr. Gilbert appears to have obtained better results from whole than from ground wheat when fed to sheep. Sheep feeders may, therefore, experiment with whole wheat, but wheat meal will certainly be found to give better results with all other kinds of animals.

"The number of pounds of live weight that may be produced by feeding a bushel of wheat will evidently vary according to the age and condition of the animal fed. Prof. Robertson, at the Ottawa Experiment Station, fed frozen wheat to hogs and secured from 9.1 to 15.46 pounds, live weight, from a bushel, the greater increase being from young, growing animals, and the smaller from those which were fattening."

### About Marketing Horses.

The unfortunately poor condition of the crops in many sections of the West, the very high price of corn and the scarcity of it and hay, may compel a large number of farmers to reduce their stock and sell all those not absolutely needed, and which are matured and ready for market. A few points are worthy your indulgent consideration.

All horses, to command the highest market price, should be sound, in good flesh, as smooth as possible and 5 to 7 years old. Heavy draft horses, 1,500 to 1,800 pounds, need not be broken otherwise than to double harness. Smaller horses should be broken to single har-

as then there are no sharp edges to cut the mouths of live stock, and shredded fodder can be handled with a pitchfork. The husking is so well done that all the small ears and nubbins are caught by the machine. In fact, after corn has been husked by hand and the fodder put through the machine, the machine has caught enough in many instances to pay for the whole work. This is important in this season of short corn crop. Users of this machine store the prepared fodder in all kinds of places. When there is not room in the barn mow, it is stored in sheds, in racks and even in stacks, the same as hay. Fifty per cent. of the value of the corn plant is in the fodder and 50 per cent. in the corn. This new way of handling the crop puts the fodder into such condition that there is almost no waste at all. The very best part of the plant is the lower part of the stalk, but heretofore it could not be properly prepared. This machine prepares it all in the best condition. The husking is now done earlier than by the old hand method, the ground is cleared, much cold work is avoided, a double crop is raised on the land and the crop handled at less expense. The fodder prepared by this machine has become a marketable article and is now sold in cities and towns by the load, and also baled like hay and at the same prices as the best tame hay. If you want some mighty interesting reading, it will pay you to send to the Keystone Manufacturing Co., Sterling, Ill., for their free book, "The Great Leak on the Farm."

pile up a heavy expense bill, but select one in whom you have confidence and who knows all about the working qualities of the horses. For distances less than 300 miles an ordinary stock car is regarded good enough. A couple hundred pounds of hay should be scattered in car. A full car depends upon the size of car and horses. Eighteen to twenty horses constitute a load, and it is better to have them comfortably filled than either too few or too many. When the number is less than a load they should be securely tied. Horses should be shod forward but not behind.

From January to May shipments can be made any day of the week, although Monday, for those living not too far remote, and Saturday for those living far away, are the best days.

JOHN S. COOPER,  
Union Stock Yards, Chicago.

### Lessons From the Drought.

The great drought is teaching a tremendous lesson in farm economy to many who have heretofore wasted their corn fodder. A part of the problem is how to handle the crop to get the most out of it and at the least expense. We shall have something to say at another time about cutting off the corn in the field, but at present our subject is the work of the Keystone Corn-Husker and Fodder-Cutter (or Shredder). Instead of husking out the ears by hand and again handling the fodder to cut it up, this machine does all the work at one operation. The illustration gives a good idea of the method. The corn is

Get up a club for the KANSAS FARMER.

Agricultural Matters.

OROP REPORT

Of the Kansas Department of Agriculture for Month Ending August 31, 1894.

Owing to the disappointing season with reference to nearly all crops, and the widespread desire for a conservative statement of actual conditions and results, special pains have been taken to discover in every part of the State what they were, and the following is a careful digest and condensation of the varied returns made by those on the ground. The acreage planted, as given for each crop, is that shown by returns of assessors.

WINTER WHEAT.

The area sown to winter wheat was 4,675,704 acres; of this, 2,680,437 acres, or 57.32 per cent., was harvested, making 28,165,656 bushels, or a yield of 6.02 bushels per acre on the total sown, or 10.50 on the acreage actually harvested. This is 3,531,242 bushels, or 14.33 per cent. greater than the crop of 1893, and within a trifling fraction of the estimates made by this department in its June report, which indicated 28,320,000 bushels on 2,666,671 acres likely to be harvested, or 10.62 bushels per acre. Nearly all the counties of largest production rate the quality as "medium," "good" and "very good," the latter predominating. Many counties have, of course, practically none, even for seed, while others have a goodly surplus.

SPRING WHEAT.

Spring wheat has been a failure, generally; returns from the counties where it is grown point out that the entire crop will scarcely be more than 30,000 bushels—perhaps from 12 to 15 per cent. of the seed sown.

RYE.

Of rye the acreage was 131,134, and the yield 978,658 bushels, or an average of 7.3 bushels, of quality fairly good.

CORN.

The severely dry weather prevailing over the larger portion of the State during July and August proved the previous promising outlook very deceptive, not alone as to corn, but all other crops. For the present report correspondents were asked to estimate the corn probabilities on the basis of "reasonably favorable September weather," and the outcome of their statements foretells that of the 6,404,705 acres planted, 2,016,849 will produce 41,819,309 bushels of marketable corn, or 20.73 bushels per acre. The average yield per acre of marketable corn on the entire area planted is but 6.52 bushels. This does not include the vast quantity of that which is not strictly merchantable yet of much value and available for feeding purposes. Of the standing corn it is estimated that 3,382,921 acres, or 52.82 per cent., will be cut for its fodder.

OATS.

The area sown to oats was 1,427,444 acres; the total harvested, 857,744, or 60 per cent. Total product, 18,385,949 bushels, or 21.43 bushels per acre on the area harvested and 12.88 bushels on the area sown. In quality the grain is reported as considerably better than was believed before harvest—mostly medium to very good.

BARLEY.

Acres of barley sown, 111,390; yield, 722,393 bushels; average per acre, 6.48 bushels, and quality good.

FLAX.

Flax occupied 127,542 acres and yielded 1,043,418 bushels, or 8.1 bushels per acre. The increase in acreage over the previous year was 22,178 acres, or 21 per cent.; in product, 281,009 bushels, or 36.85 per cent.

HAY.

Hay is a short crop. The yields, averaging them in those counties where produced, will be for timothy about three-fourths ton per acre; clover, one ton, and of prairie hay, one-half ton.

OTHER CROPS.

The condition of other crops as compared with what would be regarded a full average and rated at 100 is shown in percentages as follows: Broomcorn, 51; castor beans, 60; clover, 54; timothy, 49; alfalfa, 62; pastures, 52; sorghum, 56; Irish potatoes, 40; sweet

potatoes, 48; millet, 57; Kaffir corn, 53; milo maize, rice corn or Jerusalem corn, 52; apples, 56; grapes, 58.

In response to the inquiry as to the acreage of winter wheat likely to be sown the present autumn if season and soil are favorable, the answers indicate a total of 3,595,149 acres, which is less than one year ago by 1,080,555 acres, or 23.11 per cent. It is proper to remark that within the ten days since the correspondents closed their reports soaking rains have fallen in not less than four-fifths of the State, reviving the pastures and so softening the ground as to make plowing easy. A result of this is that nearly every team and plow available are being used in that work, preparing for the early spring sowing of either wheat or rye. Where seed can be obtained much rye is likely to be sown in many localities for fall and spring pasturage to supplement the shortage in other feeds. F. D. COBURN, Secretary.

Test of Varieties of Wheat.

Bulletin No. 12, just issued by Prof. A. C. Magruder, Agriculturist at the Oklahoma Experiment Station, contains the following very interesting and valuable report of the test of varieties of wheat.

The Agriculturist says that a necessary economy in the use of available funds caused some 200 varieties tested in 1893 to be dropped from the experiment of 1894, thus leaving but fifty varieties in this year's work. Those varieties dropped from the experiment will be taken up next season as far as available funds will permit.

A careful study of the following table is suggested:

TABLE SHOWING VARIETIES OF WHEAT TESTED DURING 1893-94.

Table with columns: DESIGNATION, Planted, ACRE YIELD (Manured, Not manured), Weight of bushel (manured, not manured). Rows include various wheat varieties like Yellow Alabama, Oregon, CURRELL, PENNQUITT'S VELVET CHAFF, etc., ending with an AVERAGE row.

ACRE WITHOUT MANURE.

The acre of wheat continuously on the same land without manure resulted as follows:

Table comparing 1893 and 1894 results for weight of grain, weight of straw, weight of bushel, and yield in bushels per acre.

STABLE MANURE ON UPLAND FOR WHEAT.

No stronger argument for the use of manure on wheat lands can be given than the results of a test made last season and recorded in columns 5, 6, 7 and 8 of the foregoing table. Twenty loads of fresh stable manure (from horses) was applied to the acre and plowed in a few days before seeding. Otherwise the seed, seeding, etc., was the same as the unmanured plots.

The test of wheat soil sown to cow

peas to be turned under was unsuccessful, inasmuch as the peas could not be sown early enough to get a growth worth turning under.

TIME OF SEEDING.

The land was laid off in 1-24 acre plats and sown every Thursday from September 7, 1893, to January, 1894. The largest yield was from the sowing of September 21, and the yield generally decreased from the earliest to the latest seeding; that of December and January yielding 4, 6 and 8 bushels to the acre as compared with 14, 16 and 17 bushels September seeding on unmanured soil, while the early seeding (September) gave on manured soil as high as 38 bushels to the acre, and the late (December and January) seeding on manured soil yielded but 10, 14 and 16 bushels to the acre.

RECOMMENDATIONS.

Save your stable manure for the farm.

Sow wheat as early as possible after September 1. Put it "in the dust" if you have no rain.

An average of all the bearded and smooth wheats gave the bearded the advantage in yield of nearly two bushels to the acre. Sow bearded in preference to smooth wheats.

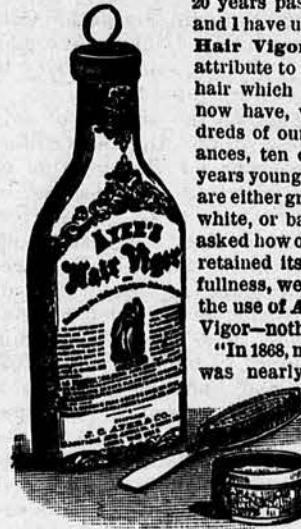
Look to the table for best varieties.

Cane Seed and Leaves.

EDITOR KANSAS FARMER:—There is considerable cane raised about here this year for the seed, and some of it will be worked into molasses. It would be a very profitable crop if it was not that it is so much work to gather the seed by cutting the heads off separately. And when the cane is to be made into molasses it is stripped of the leaves by

A Gentleman

Who formerly resided in Connecticut, but who now resides in Honolulu, writes: "For



20 years past, my wife and I have used Ayer's Hair Vigor, and we attribute to it the dark hair which she and I now have, while hundreds of our acquaintances, ten or a dozen years younger than we, are either gray-headed, white, or bald. When asked how our hair has retained its color and fullness, we reply, 'By the use of Ayer's Hair Vigor—nothing else.' "In 1868, my affianced was nearly bald, and the hair kept falling out every day. I induced her to use Ayer's Hair Vigor, and very soon, it not only checked any further loss of hair, but produced an entirely new growth, which has remained luxuriant and glossy to this day. I can recommend this preparation to all in need of a genuine hair-restorer. It is all that it is claimed to be."—Antonio Alarrun, Bastrop, Tex.

AYER'S HAIR VIGOR

subject of interest to farmers, I remain, Elmdale, Kas. A. J. HOUGHTON.

No satisfactory method of machine stripping has ever been devised. The topping may be done by loading on a suitable wagon rack before topping, taking care to have the heads nearly even and laying the canes across the rack and cutting them off with an ax or a hay-knife. Some lay the canes in bunches in the field when cut and remove the heads from a bunch with a stroke of a corn-knife.—EDITOR.

From Barber County.

Eli Benedict writes from Medicine Lodge, of a nice rain about the first of the month and the consequent improvement in the cane, which farmers are now delivering to the sugar mill. He relates that he harvested his alfalfa seed with the header and that it worked well. They have in that section plenty of good feed in the way of corn fodder, alfalfa hay, millet, Kaffir corn, wild hay and cane, and will need more cattle than are now in sight to eat it. Mr. Benedict suggests that any who are out of feed will do well to take a run down there and look up and down the Medicine river valley. They are feeding wheat to hogs and find it, when ground and soaked, the best feed they have ever used. He suggests care to use only sufficient water to wet the feed, since it is not desirable to make it so watery that they drink it. Hogs are reported scarce. Mr. Benedict inquires where he can get some big white rye for seed. He does not want the "little black rye." He also wants winter barley. [As to these matters he will do well to consult the advertising columns of the KANSAS FARMER and write to the seedsmen.]

Mr. Benedict concludes his interesting letter as follows: "Now for business. We are all going to the Garden City fair, if the railroads will give us half rates, for no other purpose than to see how the pumping irrigating system works. We must irrigate or emigrate. I hope all pump men will be there, also all kinds of machinery to raise the water, for mark this, we are going on business, to buy of whoever has the best, so you pump, windmill and engine fellows, trot out your goods and we will soon decide who has what we want."

Early Corn, Plant Early.

EDITOR KANSAS FARMER:—The farmers in Sedgwick county that planted early corn, planted it early and cultivated it well have all a good crop of corn this year, and will have, nine times out of ten, if they follow the same rule. H. FELLOWS.

Wichita, Kas.

hand, with a wooden sword or stick, same as it was twenty-five or thirty years ago. It seems like there should have been some improvement in the way of stripping made in that length of time; and that there must be some better way of gathering the seed than by cutting off one head at a time.

Won't you please give, through your columns, any information you can about the best way of stripping and saving the seed? I, together with my renters, have about twenty acres, and nearly every farmer about here has more or less. As the seed and cane has to be gathered by the middle of next month, it would be a great advantage to have the information published before that time, if you could. Hoping that you will be able to give us some information, as you about always can on any

## Irrigation.

### ADDRESS.

The third National Irrigation Congress, assembled at Denver, Colorado, September 3-10, 1894, sends greeting to the people of the United States.

One year ago at the session of this Congress held in Los Angeles, California, we provided for the creation of unofficial irrigation commissions in seventeen States and Territories, charged with the duty of investigating the physical conditions of the arid region and formulating the views of their constituents as to needed legislation, national and State. By this means we hoped to harmonize conflicting opinions and find the basis for a just compromise between extreme views of public policy. With the reports of those commissions as the material for study and debate, we hoped to be able to suggest at this time a national policy, broad, just, comprehensive, statesmanlike. We are dealing with problems that involve the happiness and prosperity of millions of freemen, the tranquility of States, the evolution of new conditions of society and of higher forms of civilization. As the result of the faithful work of the unpaid but patriotic men composing our several commissions, we have arrived at conclusions upon which we believe all Western men can unite with reasonable unanimity, and which it is our purpose to present to our countrymen, from the platform, through the press and at the fireside, until their triumph is complete.

These conclusions are given to the press simultaneously with this address, and will be framed for presentation to the Congress of the United States at the proper time.

The fundamental idea of our policy is not the separation of State and national interests, but co-operation between these powers within their proper spheres. The great end in view is to reclaim lands now useless and make them fit to sustain a vast population under conditions which shall guarantee industrial independence and human equality. We recognize these public lands as the heritage of the American people, not as the spoil of private greed. We aim to deliver to the people this precious birthright under conditions which will burden them only with the actual cost of reclamation and the return of the capital actually employed in the work, principal and interest. We recognize no private monopoly in the water which is the life current of the field and hence of the man who lives thereon. We seek to inaugurate a policy which will settle inter-State water contentions in a spirit of justice and equity. We aim to preserve and protect the forests and so to control the pastoral lands that the barbarism of frontier warfare shall be forever eliminated and this portion of the public domain made useful to the largest number of people, under conditions which guarantee security. Upon these lines we hope to inaugurate a new era of industrial development, finding employment for labor and capital and security and satisfaction for both.

But while we are about to urge the necessity of important and far-reaching legislation, we do not forget to thank Congress and the people of the United States for what they have already done for Western States and Territories. We remember with gratitude the wise and patriotic action of President Harrison in establishing large forest reservations and urge the continuance of this policy by President Cleveland. We heartily endorse the plan of Prof. Sargent, of Harvard University, providing for the education at West Point of skilled foresters, for a local forest guard and for the use of detachments of United States troops in guarding forest areas. It is impossible to exaggerate the importance of forest preservation to the economic life of Western America, because of its intimate relation to water supply for irrigation.

We also note with satisfaction that a bill donating to each Western State, under conditions, one million acres of arid lands for purposes of reclamation

recently passed the United States Senate unanimously, passed the House with only nine dissenting votes and received the prompt approval of the President of the United States. We interpret this remarkable unanimity of action as an evidence of confidence in Western men, of real concern for Western institutions. And it is our purpose to avail ourselves of the opportunity thus given, and to make the Carey law the first step in the development of a great internal policy.

We thank Congress for such appropriations as have been provided for the work of gauging streams and in investigation of water supply, but urge that larger appropriations are needed.

But while we ask such national assistance, in the way of legislation and appropriations, as the dignity and importance of the interests involved clearly demand, we assure the people of the United States that we propose to help ourselves. Our unpaid State commissions will again be organized for the purpose of securing helpful State legislation and providing liberal State appropriations for the work of scientific study of our problems, and for carrying on good administrative systems.

We especially urge our countrymen to remember that in the true sense the problems of the Irrigation Congress are of national dimensions and national import. The best solution of the difficulties that vex our statesmen and economists is that solution which would provide idle, discontented or unprosperous people first with labor and then with homes. Our panacea for existing unrest is the small, irrigated farm, producing what the family consumes as well as a surplus for market and giving to its occupants, by reason of its smallness, the benefits of neighborhood association. We ask only the opportunity and facilities to provide such homes for millions and so erect great States on what is now the voiceless desert. And this we seek to do in the name of our nationality, not in the name of individual States or sections. We know no flag except the flag of the Union. We know no destiny except the destiny of the American people. And whatever we shall accomplish under the policies we announce will add directly to the glory and greatness of our common country.

### Irrigation in Barton County.

The officers of the Barton County Irrigation Association are arranging for a big meeting on Saturday, September 29. An interesting feature will be the tests of irrigation machinery at a practical irrigation plant in the vicinity. It has been stated that the machinery test will commence early on Saturday morning and will include the use of the Weber gasoline engine attached to a "Wonder" rotary pump of large capacity. H. V. Hinckley, consulting irrigation engineer of Kansas State Irrigation Association, will be present and supervise the gauging of the water lifted. Prof. Newell, of the United States Geological Survey, will be present either in person or by representative. Prof. Robert Hay, State Geologist, will take this opportunity to add to his already large stock of information as to the strength of the available water supply. Judge J. S. Emery, Lecturer of the National Irrigation Association, will deliver an address. Judge W. B. Sutton, who is leading the irrigation movement in north-central Kansas; Judge Gregory, chairman of the State Irrigation Commission; John E. Frost, Land Commissioner of the A., T. & S. F. railroad, and many others prominent in the irrigation movement have been invited to address the convention and their attendance will insure one of the most interesting and practically profitable meetings ever held.

The meeting is being well advertised and will be largely attended by farmers of the vicinity and from a distance.



### Five World Beaters.

"SICKLES" BRAND HARNESS. All genuine stamped with this "Trade Mark." Made in five styles at \$6.50, \$9.00, \$10.00, \$15.00 and \$25.00 per set complete. The best harness for the money on the market. Ask your harness dealer for them. Manufactured only by J. B. Sickles Saddlery Co., St. Louis, Mo.

## Irrigated Farms---\$1,000!

Out of a thousand farms in **SOUTHWEST KANSAS**, of 160 acres each, we are selling a limited number equipped with an independent and permanent irrigation plant sufficient for at least ten acres on each farm. The price at which these 160 acre farms are selling is merely about what the ten acres and irrigation plant are worth.

**Before buying a farm investigate this. Special terms made for Colonies.** Call on us or write for particulars.

### THE SYNDICATE LANDS & IRRIGATING CORPORATION,

Room 412 New England Life Building, 9th and Wyandotte Sts., KANSAS CITY, MO.

### Irrigation Convention at Medicine Lodge.

EDITOR KANSAS FARMER:—"Irrigate or emigrate, which?" was the pointed question which headed the announcement of our convention. Most of us had contemplated emigrating, but did not find that step so easy to take. "I have caught a prisoner," called out the Irish warrior to his officer. "Bring him here," commanded the latter. "Plase, sorr, he won't let me," was the answer. Many of us are in a similar fix. We don't quite know whether it is correct to say that we have the land or the land has us. So we went to the convention to hear if there was anything to be said for the alternative to emigration.

The two meetings, dignified with the name "convention," were held in the opera house yesterday at 2 and 7:30 p. m., respectively. For speakers there were Mr. Robert Hay, of Junction City, and Mr. Steffee, of Wichita. At both meetings the attendance was comparatively small. Many farmers who would otherwise have been present were busy hauling cane to the sugar mill. But numbers go for little. The world is ruled by small minorities. The tail wags the dog. You ignite the twigs to start the fire. This truth applies equally to water. All that is needed is the enthusiasm in one or few to start with.

Mr. Hay, who is nothing if not thorough, had been in the county for a week previous to the meetings and knew all there was to know about existing irrigation schemes. That was not very much, but he showed us sweet potatoes grown by Mr. Wheat on an irrigated patch north of town, which was producing at the rate of \$500 per acre. He proved to demonstration that the man who irrigates and properly attends three to five acres of garden truck may, without anxiety, await the chances on the lottery of the dry farming of the rest of his quarter. He showed the possibility of irrigating this much on every farm at an expense recoverable from the first year's crop. In his own inimitable paternal manner he counseled moderation. "Hasten slowly, do thoroughly what you undertake, increase by degrees, avoid millionaire schemes, but do something in irrigation." Such is the burden of the gospel of irrigation as preached by this apostle of it. A "chump" was defined as the man who paid \$1.25 per bushel for Colorado potatoes when he could grow as good ones and sell at a profit for 50 cents per bushel. There is a vast majority of "chumps" in Kansas. And we all felt the sting. The fear of overproduction was derided. "There is no man further from a market than he who has nothing to sell." Railroads bring him no nearer to it and freight makes no figure in the selling price. If the spark has not ignited and the fire of enthusiasm for irrigation has not already started in this county it is not the fault of Professor Hay.

Mr. Steffee gave most interesting talks at both meetings. Few men are doing more in the promotion of irrigation in these regions than he. He showed that dry farming alone has always ended and will always, probably, end in failure until there is a radical alteration in the climate, that is till the millennium. He described the irrigation schemes which he had seen in operation in the adjacent counties of Kansas and pointed out the facilities which exist in this neighborhood for like work.

At the evening meeting, Mr. D. J. Aber, the County Surveyor, read a paper on the local conditions in regard to rainfall, showing conclusively the

absolute necessity of irrigation or emigration.

It is difficult to exaggerate the possible effects of such local irrigation conventions on the future of farming in this country. The results will surely be seen ere long in every farmer doing something to irrigate a small portion of his land and thus absolutely securing a living in spite of droughts and hot winds.

During the meetings steps were taken to organize a farmers' institute for the county to be affiliated with the State Agricultural Society.

W. H. REVIS.

Medicine Lodge, Kas., September 16.

Presuming that its report would be adopted substantially unchanged, the Committee on Resolutions prepared for the Denver Irrigation Congress an elaborate address to the people of the United States. The congress cared so little about its generalization that it passed the address without amendment. It fits badly with the resolutions as adopted. The address is presented on this page.

It was doubtless observed by readers of the KANSAS FARMER that the resolutions adopted by the Denver Irrigation Congress fell far short of the scope outlined in the report of the Kansas Commission, and that the Kansas delegation to the Denver congress took an active part in the reconstruction of the resolutions. From these observations it is apparent that there was not a full accordance of views of the delegation with those of the commission which made the report. This and other circumstances not necessary to recount, led to a proposition from the Kansas delegation to change the method of appointment of the members of the commission from that of selection by the State committee to that of election by vote of the delegation. This proposition was carried through the congress and the State Commission for the coming year will be elected by the delegation.

### Irrigation in Colorado.

Choice farms in the San Luis Valley, Delta and Grand Junction fruit districts, Longmont and Greeley potato belt, etc. No drought. Home market. Send address for "Irrigation in Colorado" (illustrated), free. H. W. HOWE, Real Estate and First Mortgage Loans, 1640 Curtis St., Denver, Colo.

## WATER PIPE.

Our Hard Burned Vitrified and Glazed Clay Pipe is everlasting. With our Improved Joints this pipe will stand same pressure as iron and costs about one-fourth as much. Write for particulars.

W. S. DICKEY CLAY MFG. CO.,  
Makers of all kinds of Burned Clay Goods.  
Office 800 N. Y. Life Bldg., Kansas City, Mo.

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## GOVERNMENT CROP REPORT FOR SEPTEMBER.

### CORN.

The report of the Statistician of the Department of Agriculture for the month of September shows a decline in the condition of corn to 63.4 from 69.1 in the month of August and 95 in the month of July. This is a decline of 5.7 points from the August and 31.6 from the July condition. The change is marked in nearly all of the great corn States. The present condition is 75 in Kentucky, 70 in Ohio, 55 in Michigan, 80 in Indiana, 78 in Illinois, 51 in Wisconsin, 60 in Minnesota, 40 in Iowa, 70 in Missouri, 45 in Kansas, 15 in Nebraska and 16 in South Dakota.

In most of the Southern States the condition has risen and a good crop is assured. In addition to the unfavorable prospects arising from the low condition of the growing crop, reports from eight States, viz., Indiana, Illinois, Wisconsin, Iowa, Missouri, Kansas, Nebraska and South Dakota, in response to a special inquiry, show that out of an aggregate of 40,873,984 acres planted in those States there have been cut up for fodder or abandoned 15,506,000 acres, or 38 per cent., which is a little over 20 per cent. of the entire area planted in the country. The percentages of that cut up or abandoned, by States, are as follows: Indiana, 6; Illinois, 10; Wisconsin, 21; Iowa, 35; Missouri, 16; Kansas, 53; Nebraska, 81; South Dakota, 81.

### WHEAT.

The condition of wheat, considering both winter and spring varieties, when harvested, was 83.7 against 74 last year and 85.3 in 1892. The reported conditions from the correspondents for the principal wheat-growing States are as follows: Ohio, 102; Michigan, 91; Indiana, 103; Illinois, 101; Wisconsin, 92; Minnesota, 84; Iowa, 92; Missouri, 91; Kansas, 58; Nebraska, 40; South Dakota, 32; North Dakota, 74; California, 88; Oregon, 88; Washington, 67. In the East, New York, 86; Pennsylvania, 91; Maryland, 98; Virginia reports 78; Tennessee, 78; West Virginia, 93; Kentucky, 92; Texas, 92.

In the principal wheat States there has been considerable improvement in condition since July report. In parts of the wheat region the crop is fully up to expectations, and in other parts the yield has exceeded anticipation. Michigan reports show much of rust, smut and shrinkage, etc. In Ohio, Indiana, Illinois and Iowa the crop is good and yields beyond expectation. In Minnesota the yield through the larger part of the State is favorable, but in a section comprising about one-fourth of the State, where little or no rain has fallen, the crop will be far below an average.

In some portions of North Dakota the yield is disappointing, but the reverse is the case in a majority of the counties. High winds in South Dakota have shelled wheat in the northern part of the State. In Washington some of the late spring wheat has suffered from the hot weather of August and the yield is below expectation. In eastern Oregon the yield is above the average, while in the western part of the State it will be below an average, owing to injury by the aphid. In many parts of California the quality of wheat has been improved by rains.

### OATS.

The average condition of oats is reported at 77.8 as against 76.5 on August 1, 77.7 on July 1 and 87 on June 1. The decline, therefore, since June is nearly 10 points. In the preceding ten years condition was lower on September 1 only in 1890 and 1893. The average of the ten-year period, 1885-94, is 83.1. As this is the last report on the condition of this crop for the present season, it may be taken as indicating a crop considerably below the average.

The range is from 31 in South Dakota to 100 in Indiana and 101 in Idaho. The States of large production report as follows: Illinois, 96; Iowa, 75; Wisconsin, 91; Minnesota, 80; Indiana, 100; Pennsylvania, 75; New York, 66; Kansas, 44; Nebraska, 41.

Damages from grasshoppers and the army worm are reported in a few localities, but the chief cause of low condition in many States has been the drought, although a considerable part

of the crop was harvested before the worst effects of the dry spell were felt.

The States of the Rocky mountain system show high condition, and the same is true of the Pacific coast region with the exception of Washington, where the hop louse injured the crop to some extent.

### OTHER CEREALS.

Rye.—The returns for rye show an average condition of 86.9, against 82 a year ago and 88.5 in 1892. It was lower in 1887, 1890 and 1893, but higher in every other year of the past decade. The States of large production report as follows: Pennsylvania, 87; New York, 97, and Wisconsin, 92.

Barley.—The condition of barley has risen nearly 2 points during the month, the September average standing at 71.5 against 69.8 in August. This shows a falling off from the June condition of nearly 11 points and indicates a light yield. It is the lowest September average during the decade 1885 to 1894, the average during this period being 86. The range is from 27 in South Dakota to 102 in Montana. The States of large production report as follows: Iowa, 55; Wisconsin, 90; Minnesota, 89; New York, 66.

Buckwheat.—There is a decline in the September condition of buckwheat of 12.5 points from that of August. The condition of this cereal, 69.2, is the lowest recorded during the decade. The two States of New York and Pennsylvania, which produce more than half of the entire crop of the country, report 79 and 71 respectively. The chief cause of the low condition is the drought.

### POTATOES.

On September 1 the average condition of potatoes for the whole country was 62.4, or nearly 12 points lower than for the preceding month. This is the lowest September condition in the last decade. Condition for same month last year, 71.8, and for 1892, 74.8.

### TOBACCO.

The condition of tobacco, taking the country through, is 74.5, ranging from 51 in Missouri to 92 in Connecticut and North Carolina. The average for Kentucky is 68. In portions of some States the crop has been damaged by an excess of rain, and in others, especially in parts of Virginia, it has suffered from hail and wind storms; but the chief cause of the low general average is the widely prevalent drought.

### COTTON.

The September report shows a decline of 5.9 points from the August condition, which was 91.8 against 85.9 for this month. The condition of the plant in the month of June was 88.3, rising to 89.6 in July and to 91.8 last month, as stated. The August condition for the year 1893 was 80.4 and the September condition for the same year was 73.4, a falling of 7 points. The September condition for this year is 12.5 points higher than that of 1893.

The State averages are: Virginia, 100; North Carolina, 88; South Carolina, 86; Georgia, 84; Florida, 82; Alabama, 86; Mississippi, 85; Louisiana, 91; Texas, 84; Arkansas, 89; Tennessee, 84; Missouri, 93.

The principal cause of the decided decline in condition since the last report was excessive rainfall throughout the larger part of the cotton belt, producing too great growth of weed and checking development of the fruit, also causing shedding, rotting and rust. The condition in Texas has changed but slightly and reports predict a good crop, if weather proves favorable for harvesting. In parts of Georgia the crop is from two to three weeks late and the yield will depend largely on length of harvest season and the postponement of frost. The reports from Mississippi show extensive blight, rot and rust.

In Alabama there is much of rusting, shedding and premature opening of bolls. In Arkansas correspondents report that during the first ten days of August the temperature was below normal and there was a lack of moisture, which checked growth; but from the 10th to the 15th the temperature rose, accompanied with heavy rainfall, which caused new growth of weed, shedding of squares and small bolls. Boll worms and caterpillars are doing some damage in parts of Texas and

Alabama. The general tenor of reports is, "too much rain and heat, causing too great growth of weed and too little of fruit."

### FRUIT.

Apples.—The average condition of apples has declined during the past month from 44 to 40.8. Condition is highest in New England, where percentages range from 69 to 89, and in the mountain and Pacific States, where the range is from 50 to above the normal.

Peaches.—The condition of peaches is now 21.1. But three States east of the mountain States have a condition of 60 or over, viz., New Hampshire, New Jersey and Michigan. The highest condition is in Colorado—94. California follows with 89.

Grapes.—The returns show a poorer prospect for grapes than at the same date in several years past, though the condition of this fruit is plainly higher than that of apples or peaches. The low condition is generally ascribed to the late frosts of spring, which killed the sprouts on most early varieties.

### RICE.

The September returns relating to rice are very favorable, the general average, 89.4, being but 1.6 points below that returned for August. The loss by States is as follows: South Carolina declined 1 point, 100 to 99; Alabama, 5 points, 90 to 85; Louisiana, 3 points, 86 to 83. On the other hand, Georgia, Florida and Mississippi show improved condition. The condition in North Carolina has remained stationary.

### SUGAR CANE.

The reports on this crop are in general favorable except in the case of States where it cuts no figure. Its condition in Louisiana averages 100, and in the Gulf States it ranges from 89 in Texas to 98 in Georgia, while in South Carolina it is 99.

### CLOVER SEED.

The area under clover seed is reported at 71.9 per cent. of that for 1893. This reduction is due to the fact that the prevalence of drought caused many clover fields to be cut for fodder that would otherwise have been saved for seed. Condition is given at 63.3, which is much below the average, thus indicating a very short crop.

### STOCK HOGS.

The number of stock hogs for fattening as compared with last year is represented by 90, a reduction of 10 per cent., and the average condition as to weight and size by 91.3, a deficiency of 8.7 per cent. The lowest figures as to both number and condition are found in the returns from drought-stricken Western States. Except in a few localities hog cholera and other diseases have figured but slightly as causes for the reduction of either number or condition.

### Death From Second-Growth Sorghum.

EDITOR KANSAS FARMER:—Mr. Joseph Diefenbach, a well-to-do farmer of Sedgwick county, Kansas, about two months ago, cut a piece of sorghum which he had raised for forage; after letting it stand in cocks for nearly six weeks he hauled it from the field and turned in about sixteen head of cattle of various ages, "to eat the scatterings," which were then perfectly dry. "In less than fifteen minutes eight of the cattle began to stagger and fall. One died within a half hour, and in three hours four of the largest and oldest were dead." One was cut open but nothing indicated the cause.

I have referred this case to the State Veterinarian, Dr. Geo. C. Pritchard, and the substance of his reply, given herewith, suggests that it was the green sprouts or second growth, instead of the cured fodder, that did the mischief, and should be of interest to other stockmen, whom it may save from similar loss. Dr. Pritchard says:

"Second-growth sorghum, under certain conditions, is very destructive indeed to cattle, small quantities killing them almost instantly, and this unlucky experience was undoubtedly due to the fact that the cattle ate the second growth instead of the 'scatterings' as supposed. Just what the destructive agent in it is I am unable to say. I have had the opportunity to make several post-mortems upon cattle that had died from eating second-growth sor-

ghum, and in all have found congestion and inflammation of that portion of the mucous membrane of the rumen (paunch) which comes in direct contact with the sorghum. It is indeed astonishing to note the destructiveness of a small quantity of second-growth sorghum when brought in contact with the stomach of bovines, under certain conditions, and experiments should be made to determine, if possible, what the conditions are which produce these serious results. In the meantime my advice to all would be never to assume the risk of turning cattle upon second-growth sorghum."

Topeka, Kas. F. D. COBURN.

### Burn Fire Guards.

EDITOR KANSAS FARMER:—The urgent need of this will be apparent to those living on the prairie and in sparsely settled regions of the State. The disastrous and fatal timber fires of Minnesota emphasize the necessity of immediate protection from fire on our prairies. In a season like this, unparalleled for drought, when everything is dry as tinder, and in consequence no plowing has been done, the necessity becomes imperative. Without fire-guards the efforts of man to arrest a prairie fire in a strong wind, in the present dry condition of our prairies, would be as futile as though he tried to stop the wind. "But how can we burn fire-guards when the ground is too dry to plow for them?" you will ask. Very easily. Place a large barrel of water on a sled. Have a hole bored in the bottom of the barrel next the chine, which must there project just beyond the back of the sled. Attach a small V trough across the back of your sled under the hole in the barrel. Let the bottom of the trough be slightly open and lined with tin, which must be perforated with small holes, to serve as a sprinkler. Pull the plug out of the hole and start your sled over the prairie. It will wet the grass. It will be as safe to burn between two such strips of wet grass as between the usual guards of a few plowed furrows. A wagon with an extra supply of water should accompany the sled. JNO. J. CASS.

Allison, Kas.

### WORLD'S CARNIVAL CITY.

St. Louis Offers a Continuous List of Attractions—Her Unrivaled Fall Festivities Commence September 5, and Hold Full Sway Until October 20, 1894.

The successful series of carnival seasons inaugurated by the citizens of St. Louis some fifteen years ago, continue as ever for the season of 1894, and from the morning of September 5 to the evening of October 20 the city will be one scene of gayety and splendor. Many new, novel and unique features have been added to the long list of standing attractions, and from every point of view this reign of high carnival will outshine all previous attempts.

THE ST. LOUIS EXPOSITION, the only one of its kind in the United States that has lived year after year with flattering results, will throw open its doors to the public September 5, and remain in a state of activity until the evening of October 20. Sousa's Grand Concert Band has been re-engaged for the season and will give the usual number of concerts during the afternoons and evenings. The entire Missouri exhibit which appeared at the World's Fair will be transplanted here, and find space in the commodious building.

The exhibitors, both foreign and home, will present new ideas in displaying their goods, and, in addition to other features, a full complement of specialty artists will perform on the stage of the Music Hall.

THE GREAT ST. LOUIS FAIR, which will open Monday, October 1, and continue during the week, promises to afford many pleasant surprises. The "Midway Plaisance" feature at the World's Fair will be reproduced in full, and the people of the West and Southwest given an opportunity to see in real life the inhabitants of every civilized and uncivilized country on the face of the globe.

The "Streets of Cairo," "Old Vienna," "Moorish Palace," "Hagenbachs," "Ferris Wheel," etc., will be faithfully portrayed.

His Royal Highness, the MIGHTY VEILED PROPHET and retinue, will enter the gates of the city on the evening of October 2, and parade through the principal thoroughfares as of old. Visitors to the city will arrive at the handsome new Union station, the largest railway edifice in the world, and the most perfect in every appointment. Great inducements to visit the Carnival City are offered via the MISSOURI PACIFIC RAILWAY AND IRON MOUNTAIN ROUTE, from all points on the system.

For a complete program, giving each week's attractions in detail, address any agent of the company, or H. C. Townsend, General Passenger Agent, St. Louis, Mo.

## Horticulture.

### TOMATOES FOR MONEY.

This was a topic discussed at the recent meeting of the New Jersey State Horticultural Society, by Messrs. Baker and Russ, who detailed their practice to an interested audience.

Mr. Russ divided tomatoes into three classes: Early, medium and late; the latter class being canning tomatoes, were not worth considering in this case. He prepared his hot-beds about February 12, with some fifteen inches of New York stable manure and five inches of soil. Seed put in as soon as the bed is made will be coming up while the heat generated is greatest and too much for them, so, after waiting three or four days for the first heat to pass off, he then sows the seed, and thinly, so as to get strong, stocky plants. Keeps the temperature about 40° or 50°. By the last of the month they are potted out, transplanted in cold frames, and thence to the field in April, when the weather is mild enough. Commences to pick from June 20 to July 1. The field receives \$18 to \$20 worth of manure and 600 pounds of commercial fertilizer per acre. Ships to Newark and New York; has sent as high as 700 baskets a day. Grows twelve acres and realizes \$125 to \$150 per acre, or about \$75 net, each acre.

Variety grown, a cross between General Grant and Richmond. Generally uses new ground every year, but has seen them grown three years in succession on the same ground. Farms sixty-three acres, and uses about \$1,500 worth of manure and fertilizer per year.

Mr. Baker starts his plants about the middle of February, in beds, at a temperature of about 60°; sows seeds thin and aims to get a slow, sturdy growth; when four inches high transplants in wood boxes, 4x5 inches, one plant to the box. Fills the boxes about three inches deep with a compost of hog manure, crude fish and bone flour, balance in good soil, the boxes are then set on a bench in the house and well cared for. When about six inches high they are removed to a cold frame, keeping the temperature at about 40°. At twelve to fifteen inches high they are in full bloom with young tomatoes set. When set in the field in April these plants represent a space of about fifteen inches square, and are as thick as your thumb. They are wet thoroughly before taken to the field. The wagon is lengthened to sixteen feet, which holds a good many plants, and when turned out of the boxes the roots are entire and present a solid mass of earth and roots. A compost of manure is then used with a handful of commercial fertilizer added, containing 5 per cent. of ammonia, 10 per cent. of phosphoric acid and 6 per cent. of potash. These plants do not wilt, and in twenty-four hours have started a new growth. Begins cultivating next day to loosen up the ground trampled on. In about two weeks applies about one ounce of nitrate of soda to the plant, about a foot away; if rain follows this will show its effects in five days. In two or three weeks makes a second application.

Cultivates frequently till the plants fall down. Picks ripe fruit by June 20. Some varieties will give ten, fifteen and twenty fruits from the crown setting; others one, two and three. Quality in early tomatoes is not what he is after. Gets \$2 or \$3 a basket for his early tomatoes; when other growers come in with later and better quality of fruit, his is out of market. His method of handling the plants, saving all the roots, and avoiding any check from transplanting or other causes from the start, with liberal treatment, are the prime factors of his success with early tomatoes.

The boxes used resemble the old Hallock berry boxes and come from Michigan in the flat, costing \$2.50 to \$2.75 per 100, and a man will put together 500 a day. Used condemned tin cans from the canneries before finding these boxes, but prefers the latter as far better in many ways. It must be evident to every one who has had any experience with the tomato that the plants procurable of seed houses and stores are of little value, owing to their

thick, crowded and drawn up growth. A single plant, grown with plenty of room to expand laterally, and not drawn up, is worth ten of those leggy, weak spindlings, usually obtainable, and if carefully transplanted with the roots entire, will not require two or three weeks to recuperate, as is generally the case with the others.

Economy in the labor of handling these, as well as other crops, is the key-note to success in these days of fierce competition. A striking case of system and management was illustrated by a potato-grower at the meeting of the State Board. In digging, the potatoes were picked into bags about the field and it took a half to three-quarters of an hour to load them up, the team having to stop at every bag. He saw the necessity of economizing time, and ordered the bell rung at a quarter before twelve, as a signal to quit digging and hitch to the wagon and load up. The loaders, fearing they would have to work overtime, persuaded the driver to go on without stopping, and they followed, putting the bags in the wagon as it came along. There was no time lost in talking, the wagon was loaded, driven to the cellar, and the potatoes were in the bins before the driver got his horses fed. By study of these and similar economies the speaker claimed he had reduced the cost of a 200 bushel to the acre crop to 12 cents a bushel. It is the brain of the employer, rather than that of the employe, which must be used in saving time and needless labor.

### To Prevent Cabbages From Bursting.

"This consists simply in selecting the heads which show signs of bursting or ones nearly ready to do so, and starting the roots by pulling the cabbage partially out of the ground or by cutting off some of the roots with a hoe. Personally I prefer pulling," says a writer in the *National Stockman*. "Putting both hands under the head I pull until many of the roots are loosened and then the plant is pushed over to one side. This treatment effectually stops the bursting, and not only that but the cabbage continues to grow lustily and I have had the gratification of seeing heads thus treated grow to double the former size and weight, and all due to this starting the roots which checked the growth enough to prevent bursting, but not enough to hinder further development. There is no excuse for allowing cabbage to burst when so effectual means is at hand to prevent it."

The monthly meeting of the Shawnee County Horticultural Society will be held on Thursday, September 27, in the Grange hall, at Mission Center. We are invited to have a joint meeting with the local Grange. Everybody come, anticipating a good time.

PHILIP LUX, Treasurer.

The fall is an excellent time to haul out the manure for the garden. There is not so much danger of it wasting on the ground as there is in the manure pile under the eaves of the stable and barn. The ground will take up all the fertility released by the rains and hold all the valuable parts until the plant life in spring shall demand its surrender. It is so much handier also to do the work in the fall when nothing else is pressing.

This is the season of the year when the strawberry-grower is tempted to neglect the berry patch in the hope that the weeds will not grow enough to do much harm. Now, of all times, is the occasion when careful and thorough work in exterminating the weeds needs to be emphasized. You will find it profitable to look after this matter and send the patch into winter quarters clean and in the best of order. Weeds will be numerous enough next berry season without adding any by reason of carelessness now.

Mr. Alexander Sanderson, Choudrant, La., says: "Having used Ayer's Pills at least twenty-five years, I would say that for all diseases of the bowels, stomach and liver, which can be remedied by pills, these are always effective. They keep the system in perfect order."

"Garland" Stoves and Ranges are no higher in price than the worthless imitations. Ask to see them.

### Oklahoma and the Kickapoo Country.

Special correspondence KANSAS FARMER.

Much has been said about Oklahoma, the beautiful country, yet the half has never been told concerning her capabilities, in climate, soil production and general resources. Her rich prairies and wood lands, her many ever-flowing rivers ensconced between great stretches of fertile valleys, and an abundance of choice timber make her the envy of home-seekers from every part of the United States. In conversation with settlers in my recent visit to different parts of the Territory, I found them well pleased and highly elated over the future of Oklahoma as an agricultural and fruit-growing body of land, the majority of whom came into the Territory almost if not quite penniless, and are to-day the peaceful owners of as fine farms as can be found anywhere within the jurisdiction of our government.

The climate of Oklahoma is a combination of the best to be found in Kansas and Texas, and her soil is superior to either of the two named States. The water supply is abundant and of the best quality, and no matter how dry the seasons may get, one will always find running water in Oklahoma. Springs abound in nearly every part of the Territory, and the best of well water is readily procured at a depth of from twenty to fifty feet. The rainfall is quite evenly distributed, save in the extreme western portion, where the Territory borders on the semi-arid section commonly known as the plains.

The march of progress is clearly seen on every hand, in ample railway facilities, well-built cities, good markets, fine churches and public school houses too numerous to mention. According to returns made by the Territorial Auditor, from the assessors' reports for 1894, the population of Oklahoma is 212,110, and the six largest towns are Guthrie, Oklahoma City, Enid, Perry, El Reno and Kingfisher, in the order named. Guthrie is the capital and contains a population of nearly 8,000. She is an up-to-date city. The average mean temperature of this country is 60° above zero, the thermometer hardly ever falling below 30°; severe "spells" of atmospheric changes are unknown.

### THE KICKAPOO COUNTRY

is indeed a choice body of land, and lucky is the person who comes into possession of

in the depressions, are found groves and clumps of post oak, burr oak, pecan, elm and walnut trees, with prairie glades and stretches of clean, open prairie between. Some cottonwoods are found along the streams. The following kinds of trees grow in great profusion: Pecan, wild plum, hickory, elm, red oak, post oak, jack oak, burr oak and white oak, walnut, persimmon, black haw, red haw, cottonwood and mulberry. In the woods are many open stretches where tall, blue-stem grasses fatten the Indian ponies and cattle.

That this country is well adapted for all classes of agricultural pursuits there can be no question, for the reason that the finest crops have been raised by the Kickapoo Indians for years, even with their crude appliances, limited knowledge, and inferior skill. Speak the name "North Fork" to one who has seen its beauty, richness, and glorious possibilities, and he will instinctively recall one of the most fertile spots on the American continent. Its bottom lands are broad; its rich soil is from three to ten feet deep, and there is scarcely an acre that can not be cultivated. As long ago as 1878, and for subsequent years, the Indians raised fine specimens of potatoes, pumpkins, melons, corn and "garden truck" on their little patches of ground.

In the Canadian bottoms the Kickapoos have small corn patches. Being naturally opposed to work, the "Kick" feels his whole duty done when planting is over, and scorns such trifles as cultivation, and the finding of full plump ears on healthful stalks is little short of a miracle and speaks volumes for the fertility of the soil here.

Back a few miles from this meandering river, the bottom lands gradually rise into rolling prairies, which are covered with a luxuriant growth of broad blade grass and blue stem, making the finest of prairie hay. In the timbered portions of the uplands there is rarely any underbrush, and as one views the landscape it is a strong reminder of the carefully kept private and public parks of the Eastern States. For miles of travel these superb and inviting scenes are continually in view. The interspersing of timber and open prairie extends over the whole reservation, and the timber supply is more than enough for all home improvements, such as building a house, fencing the land, and supplying fuel for the short winter season. To have material close at

hand for fences and buildings that can be had for the mere cutting doubles the value of the land to a new settler of moderate means.

The bottom lands of the Deep Fork differ in appearance from those of the North Fork. The soil of Deep Fork has a reddish color, and the uninitiated might think it non-productive. Experience shows, however, that after plow-



FORDING A STREAM IN THE KICKAPOO COUNTRY.

a quarter section within its domain. The day of opening will soon be here, therefore be ye ready, for the Kickapoo country is the cream of the Territory. According to the Santa Fe folder, the Kickapoo reservation is eighteen miles wide from east to west, with an average length of twenty-six miles, and contains about 200,000 acres, of which the resident Indians will take 24,000 acres in their allotments. It lies due east of Edmond, Oklahoma City and Norman, on the Atchison, Topeka & Santa Fe railroad. From all three points it is probable that there will be ample stage and wagon accommodations when the opening takes place, and at any of them provisions and outfits can be cheaply obtained. Chandler, near the northeast corner of the reservation, is also a good outfitting point, there being a fine wagon bridge south of the city. Chandler is reached by daily stage lines from Guthrie, on the Atchison, Topeka & Santa Fe railroad, or by stage from Sapulpa, on the Frisco line.

No more beautiful or fertile tract of land possessing greater natural resources is to be found in the entire Indian Territory. It is nearly triangular in shape, and is bounded on the long (or south) side by the North Fork of the Canadian river. The northern boundary is the Deep Fork, a good sized stream which drains a large section of country and receives the waters from four or five smaller tributaries in this reservation, each fed by a great number of perennial springs. Several of these springs are unusually large, and surrounded by picturesque scenery where the cooling water breaks forth from its rocky confines.

In the southern central part of the reservation are a number of remarkably clear, fresh, sweet springs. In one place there are a number within one hundred feet of each other, giving forth enough water to supply a city of 50,000 people. The Dripping springs and the Kickapoo springs are well known to travelers crossing the country from the Sac and Fox country to Oklahoma City. In the central part of the reservation is Quapah creek, which after a long period of drought had water in it.

Four or five tributaries of Deep Fork run almost the entire distance across the reservation from the south side, and bordering each is a beautiful valley from one-half to three-fourths of a mile in width. The streams live through the most prolonged droughts. The North Fork and Deep Fork valleys contain nearly 500 quarter sections.

Timber is plentiful. Scattered here and there in the bottoms, on the hillsides and

ing and exposure to the sun and air it immediately mellows down to fine condition, and has no superior for fertility, lasting qualities, and capacity for holding moisture. It is a warm, strong soil, and is equally good for corn, cotton, and the smaller grains. Sandstone is abundant, varying from red to coffee color, and can be quarried into blocks of large size.

Apples, peaches, grapes and berries are in their native clime here, and grow to perfection. This reservation is in the same latitude as the States of Arkansas and Tennessee, which are well known for their abundant crops of luscious fruits. On the older Indian reservations, a few miles east of the Kickapoo country, all the staple fruits yield abundant crops, and under the skillful management of the farmer and horticulturist the Kickapoo lands will soon team with fruits from garden and orchard.

The climate is all that can be desired, neither too far north nor south. There are four distinct seasons; the winters are mild, without blizzards, while the summers are at all times comfortable for outdoor work. The summer nights are always pleasant, being cooled by the trade winds from the south or southeast, which never fail to blow.

With its combined advantages of fertile soil, well distributed living water, abundant timber, and superiority over the higher prairie country farther west, a fruit-raising section in the Kickapoo reserve is a most inviting place for home-seekers. All that now remains is for the President to fix an opening date, and this little paradise will be ready for occupancy by white farmers at only \$1.50 per acre, of which half is due in two years after entry and the balance in five years.

That there will be a great rush for this small triangle of land is a foregone conclusion. Already hundreds of boomers are camped on its borders awaiting the opening day. To make sure that all who read this article may have opportunity to reach the Kickapoo country, if so desired, I advise to send their address to Geo. T. Nicholson, General Passenger and Ticket Agent, Santa Fe Route, Topeka, Kas., and he will keep you posted as to the day of opening, how to get there by the quickest and safest way, and he will also furnish you such other information concerning the Territory as you may wish.

TOPEKA, KAS.

Finest location in the State—Wichita Commercial college—Y. M. C. A. building.

## In the Dairy.

Conducted by A. E. JONES, of Oakland Dairy Farm. Address all communications Topeka, Kas.

### Milk and Cheese Brain Food.

Is skim-milk or cheese brain food? A paper by M. Becamp, which M. Freidel has just read to the Paris academy, gives an affirmative answer. Mr. Becamp has for some time been devoting himself to the study of caseine. He has found that it chemically differs from all other albuminoids with which he is acquainted. One of its properties is, when burned pure, to make no ashes.

He experimented on burned caseine, not with the view of coming to the conclusion he now enunciates, but to an opposite one, namely, that there is no phosphorus in caseine. In a number of experiments he found that absolutely pure caseine contains 735 parts out of 1,000 of organic phosphorus. He has also demonstrated the presence in caseine of sulphur, and, therefore, that this substance is made up of carbon, hydrogen, nitrogen, phosphorus, sulphur and oxygen. Milk and cheese are accordingly brain restorers.

### About Thermometers.

Three systems of marking thermometers are used on the other side of the Atlantic, known as the Reaumur, used chiefly in Germany and Russia; Fahrenheit, used in England, Holland and the United States, and Centigrade, used altogether in France, and very generally adopted in scientific work, both in England and the United States.

The gradation of all three systems is based on the difference between the boiling and freezing points of water. Reaumur fixes zero at freezing point and boiling at 80 degrees. Fahrenheit makes freezing point 32 and boiling 212 above zero. Centigrade fixes freezing point as zero and boiling as 100. Of the three, the Centigrade is much the simplest and most easily read, therefore we think it the best. It is now used in all experiment stations and is slowly coming into general use in America. The difference between the three systems may be shown thus:

	Reaumur.	Fahren- heit.	Centigrade.
Boiling point.....	80°	212°	100°
Freezing point.....	0	32	0
	14 2-9	0	17 7-9

### Dairy Notes.

It is better to feed a little grain before than after the milk begins to shrink.

There are many Western farmers who could quickly make an investment in a separator a profitable one.

The dairymen who succeed best are they who hold their customers year in and out by the excellence of their product.

Regularity is an important item in dairy management and should be applied to all parts of work, from feeding and milking to marketing the product.

One advantage of the establishment of a creamery in a neighborhood is that it teaches farmers the importance of keeping better grades of cows and giving them better care.

As in many other branches of farming, the best success is achieved in butter-making by those who commenced on a small scale and intelligently studied the business, regarding no detail, however insignificant it might appear to others, beneath their notice.

The proper way for increasing the yield of butter is to secure a breed of cows giving a milk with a high content of butter fat, giving the animals proper nourishment, and keeping them in a clean and healthy condition. The proper treatment of a herd of cows, together with neatness in the dairy, not only will give an increased yield of butter, but will also enable the producer of it to get an increased price.

The value of butter, cheese and milk sold in Kansas in 1893 was \$4,846,738.79; and the milk cows in the same year were worth \$11,347,060. From a business standpoint, it is the duty of every man that makes a pound of butter or

cheese to see that their interests are not jeopardized by the oleo traffic. Our State should have as good a law as Iowa or Massachusetts to guard this great home industry, the Kansas dairy.

The product of a dairy may be increased by adding to the number of cows and by increasing the yield of each cow. As between these two methods, successful dairymen have found the latter plan the better one. The yield of each cow is increased by intelligent feeding, and the best way of all is to weed out the inferior animals, replace them with good stock and then feed them judiciously. By following this plan fifty cows will yield twice as much milk as under the former system, and at no greater expense. This is certainly much better than increasing the number of cows.

The best method of making a good and sweet butter in large quantity is careful selection of cows and careful feeding and care in the dairy. The proper attention to neatness and the sterilization of the vessels used about the dairy will secure the growth of a ferment which properly ripens the cream and excludes other ferments, which produce all kinds of injurious changes in the milk. All vessels used in the dairy should be subjected every day for some time to the temperature of boiling water, to absolutely exclude all putrescent bodies and fermentative processes from the dairy, save those which are necessary to the normal ripening of the cream. The farmer who attends to these details will have no occasion to invest his money in fraudulent nostrums for increasing the product of his dairy and the magnitude of his profits.

The dairy industry of the United States is already one of great importance in agriculture and is rapidly increasing in magnitude. In the agricultural experiment stations of the several States investigations are in progress relating to the influence of the breeds of cows on milk and butter production. These studies extend also to the cost and effect of different feeding stuffs in their relations to the yield of milk and the percentage of butter fat therein. The advantages of deep and shallow setting of milk, the influence of temperature on the percentage of cream obtained, the profit of using centrifugal separators, and the use of the by-products of skim-milk and milk sugar are all in process of investigation for the benefit and information of dairy farmers. In some States dairy schools have been established where students are taught the science and art of dairy farming. Even if in former times there may have been some apology for the use of nostrum and humbug in milk and butter production, the advancement of knowledge on these subjects will no longer excuse it.

About this time, as the almanac says, fix up the cow stable. Fix it up so that it will be warm there for the cows next winter. Don't forget that it should also be ventilated. Provide for this important feature in a special sense. Proper ventilation is as necessary to perfect health as suitable food. Keep that thought before you when the "fixing up" is going on. Don't neglect the horse's stable either. Above all don't neglect yourself in the fixing up. In consulting the welfare of your cattle and stock do it in a manner that will lighten your labors at stable and barn. Try warming the water your cows drink this winter. Of course to do so is some bother, but the result will pay handsomely. Look around to see how the advantages that suggested themselves on cold days last winter can be made. Plan out now, gather the tools and material at the point where they are to be used and commence operations in good time. Don't let winter catch you unprepared in this important matter. It may be an open one or it may be a "hard" one, but in either event it is your duty to provide a comfortable home for your cattle and stock. We write these lines to stir the careless dairyman into action. We expect to refer to the subject again in the near future. We heard so much about the suffering of cattle last winter that was caused by the thoughtlessness of their owners that we believe there is a large field to be worked in this direction. Fix up as a matter of duty. If that does not move you do it as a means of conserving your own selfish interest. Anyway, fix up stable, barn, shed and pen for the period when the winds blow cold, and the days are sharp and frosty.

**REMEMBER** there are hundreds of brands of White Lead (so called) on the market that are not White Lead, composed largely of Barytes and other materials. But the number of brands of genuine

## Strictly Pure White Lead

is limited. The following brands are standard "Old Dutch" process, and just as good as they were when you or your father were boys:

"Southern," "Red Seal," "Collier."

If you want colored paint, tint any of the above strictly pure leads with National Lead Co.'s Pure White Lead Tinting Colors, a pound of color to 25 pounds of lead. The best merchants sell them, the best painters use them.

A good many thousand dollars have been saved property-owners by having our book on painting and color-card. Send us a postal card and get both free.

St. Louis Branch,  
Clark Avenue and Tenth Street, St. Louis.

NATIONAL LEAD CO.

## The Poultry Yard

### Feeding Places.

EDITOR KANSAS FARMER:—From this time on until spring it is very important to feed the poultry more or less in order to keep in a good thrifty condition. In feeding to the best advantage, so as to maintain the best health and thrift, and at the same time avoid any unnecessary waste, good feeding arrangements are necessary.

One or more broad boards—the size and number being dependent upon the number of fowls to be fed—make good places upon which to feed more or less grains as well as a good part of the soft feed. One advantage with this is that they are easily cleaned and can be readily moved. It is not best, however, to feed all of the grain on boards. One of the very best means of affording exercise to the fowls during the winter, or, in fact, at any time when they are more or less confined, is to scatter litter, like leaves, straw or even chaff, upon the floor of the poultry-house, and then feed grains, like corn, oats, sorghum seed or something of the kind, by scattering it among this litter. It will afford exercise and a means of diversion to the fowls to hunt it out, and not only maintain better health but help materially to keep the fowls from learning bad habits.

Good, tight troughs are convenient for feeding milk, curd, corn meal mush or any kind of soft feed that it is not desirable to scatter out so that the fowls will trample it down.

But when boards are used, care must be taken to keep clean, and one of the best ways of doing this is to take up regularly and scald, using hot water into which sal-soda has been dissolved.

Fermented food is almost certain to induce disease, and it is far better to prevent disease by taking care to keep everything connected with them clean than to cure a disease after it once gets started.

The feeding places should be protected from the cold during the winter, should be as convenient as possible and should be large enough so that all of the fowls can have a fair opportunity of securing their share of feed. The particular style can be made to suit the taste of the maker, only provide them in good season.

Eldon, Mo. N. J. SHEPHERD.

### Home-Made Condition Powder.

EDITOR KANSAS FARMER:—This condition powder comes highly recommended: Ground linseed meal, 2 pounds; phosphate of soda, 4 ounces; chalk, 2 ounces; gentian, 4 ounces; ginger, 2 ounces; charcoal, 5 ounces; salt, 1 ounce. Grind all the materials to a fine powder and thoroughly mix. Give a tablespoonful in the soft food, every other day, to every five hens.

It contains nitrogen; the phosphate is a mild stimulant; the linseed meal promotes digestion; the phosphate of soda is soluble; the chalk and charcoal correct acidity; the salt supplies that material; the ginger is stimulating, and the gentian promotes health and assists digestion. E.

Neglect of the hair often destroys its vitality and natural hue, and causes it to fall out. Before it is too late apply Hall's Hair Renewer, a sure remedy.

### A Little Good Advice to Fanciers.

EDITOR KANSAS FARMER:—Whenever you find any good article or a good recipe do not think you can remember it, and throw the paper to one side, but clip it out, lay it to one side till you get enough to arrange nicely, then paste in a scrap-book. You will be surprised how often you will refer to it, and, best of all, how useful it will be. Now, to make it more interesting, every reader of this paper who has a good, tested recipe should send it to this paper and have it printed, that every other reader may have the benefit of it. Practical experience is what we want to make this department of the paper interesting. Don't say you can't, but just try it for a few months and see the result. L.

### Weight and Yield of Eggs.

A correspondent furnishes the following:

Geese, 4 to the pound; 20 per annum.  
Polish, 9 to the pound; 150 per annum.  
Bantams, 16 to the pound; 60 per annum.  
Houdans, 8 to the pound; 160 per annum.  
LaFleche, 7 to the pound; 130 per annum.  
Hamburgs, 9 to the pound; 200 per annum.  
Turkeys, 5 to the pound; 30 to 60 per annum.  
Game fowl, 9 to the pound; 130 per annum.  
Leghorns, 9 to the pound; 150 per annum.  
Black Spanish, 7 to the pound; 150 per annum.  
Plymouth Rocks, 8 to the pound; 120 per annum.  
Langshans, 8 to the pound; 150 per annum.  
Brahmas, 8 to the pound; 130 per annum.  
Guinea fowl, 11 to the pound; 160 per annum.  
Ducks, 6 to the pound; 30 to 60 per annum.

### Notes From a Practical Poulterer.

Be regular in feeding and caring.

Keep the best and earliest pullets for laying.

Have a good reason for every change in the management.

Watch that cat. No matter how honest it may seem or to whom it may belong, it will bear watching.

While the hens are maturing they should not be fed too much fattening foods, as this will often prove unhealthy.

Eggs are going up in price and those April and May hatched pullets should be getting ready to lay. If they do not, see why.

Generally, with poultry as with other classes of stock, it will not be found profitable to keep old stock. Young, vigorous fowls of all kinds will return the most profit.

"Like begets like," and a good layer will beget a good layer. The qualities of a strain of fowls may be improved and their egg production increased as well as their plumage, size, etc.

One acre of good stock hens will prove more profitable in twelve months than four acres of wheat or corn, and instead of exhausting the land they improve it. But they must be properly divided and housed.

Chickens to eat are well enough, but eggs we must have. Eggs come nearer being current cash than any other product of the farm or door-yard. Twelve eggs are good for twelve cents, and the more egg-producers we have the more cents will follow as a natural consequence.

See Chicago Sewing Machine Co.'s advertisement in next week's issue.



The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER.

SHRUNKEN HIP.—A three-year-old colt got injured in the stifle two months ago and for a while it could not step on the foot.

LIVER FLUKES IN SHEEP.—Can you tell me what ails my sheep? My ewes swell in the udder and discharge watery matter; the belly swells so that it is difficult for the sheep to go about.

ODEE, Kas. Answer.—If you will kill and examine one of your worst cases I think you will find the trouble is caused by the liver fluke (Distoma Hepaticum).

LUMPY-JAW.—I have a cow that took lumpy-jaw about the first of June. About the middle of August the lump was as large as a teacup but not attached to the bone.

Answer.—Might it not be possible that the lump is from some other cause and your cow has not got actinomycosis? While you have given quite a quantity of iodide of potassium you have not followed the directions very closely; neither has sufficient time elapsed to effect a cure.

Answer.—Make liniment of equal parts of raw linseed oil, turpentine and aqua ammonia, mixed, and rub well into the shrunken muscles three times a day until the skin is sore.

iodism are well marked, loss of appetite, languor, etc., instead of increased appetite; and this treatment should continue for two or three months.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

September 17, 1894. CATTLE—Receipts, 2,947 cattle; 515 calves. There was a scarcity of good cattle, the best being little better than feeders.

Chicago.

September 17, 1894. CATTLE—Receipts, 12,000. Active. Beef steers, \$3 50@6 35; stockers and feeders, \$1 50@3 40; bulls, \$1 40@2 00; cows, \$1 00@2 75.

St. Louis.

September 17, 1894. CATTLE—Receipts, 3,000. No decent natives on sale. Native steers, common to best, \$3 40@4 25.

GRAIN AND PRODUCE MARKETS.

Kansas City.

September 17, 1894. WHEAT—Receipts for forty-eight hours, 60,400 bushels; last year, 231,000 bushels. The market was a bearish one, but at the prices, 1/4@1/2c lower than Saturday, there was a fair demand.

RYE—Receipts for forty-eight hours, 600 bushels; last year, 600 bushels. But little coming in—not enough to test the market.

BUTTER—Choice table goods continue to come in slowly; in fair demand at steady prices; low grades quiet and go to packers.

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The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING.

gathered cream, 10c; fine fresh, good flavor, 16c; fair to good, 13c. Dairies—Fancy farm, 15@16c; fair to good lines, 10c.

POTATOES—Offerings good and market dull. Car lots to the trade, 40@50c per bushel.

FEATHERS—Prime geese, 35c per pound; dark and soiled, 30c; mixed and old, 15@30c; 1 per cent. tare on small sacks and 3 per cent. on large.

GROUND LINSEED CAKE—We quote car lots sacked at \$26 per ton; 2,000 pounds at \$27; 1,000 at \$15 00; less quantities \$1 50 per 100 pounds.

Wool—The market is dull but steady. Missouri and similar—Fine, 8@11c; fine medium, 10@12c; medium, 12@14c; combing, 18@15c; coarse, 11@13c.

Chicago. September 17, 1894. The following table shows the range of prices for active "futures" in the Chicago speculative market for the speculative grades of the commodities.

Table with columns: High-est, Low-est, Closed Sept. 10, Closed Sept. 17. Rows: WHEAT, CORN, OATS, PORK, LARD, S. HBS.

WHEAT—Cash—No. 2 red, 53 1/4c; No. 3 red, 51 1/4c; No. 2 hard, 53 1/4c; No. 3 hard, 51 1/4c.

St. Louis. September 17, 1894. WHEAT—Receipts, 6,200 bushels. No. 2 red, cash and September, 50c; December, 52 1/2@52 3/4c; May, 53 1/4c.

OATS—Receipts, 15,000 bushels. No. 2 mixed, cash, 54 1/4c; September, 54 1/4c; December, 49 1/4c; May, 50 3/4c.

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PROPOSED AMENDMENT TO THE CONSTITUTION.

Substitute for Senate Joint Resolutions Nos. 1 and 2.

Be it resolved by the Legislature of the State of Kansas: two-thirds of the members elected to each house thereof, concurring therein.

SECTION 1. The following proposition to amend the constitution of the State of Kansas is hereby submitted to the qualified electors of the State for their approval, or rejection, namely: That section one, article five of the constitution of the State of Kansas be amended so that the same shall read as follows: "Section 1. Every person of the age of 21 years and upwards belonging to the following classes, who shall have resided in Kansas six months next preceding such election, and in the township or ward in which she or he offers to vote, at least thirty days next preceding such election shall be deemed a qualified elector. 1st: citizens of the United States. 2d: persons of foreign birth who have declared their intentions to become citizens of the United States conformable to the laws of the United States on the subject of naturalization."

SEC. 2. This proposition shall be submitted to the electors of this State at the general election of the Representatives to the Legislature in the year eighteen hundred and ninety-four, for their approval, or rejection; those voting in favor of this proposition shall have written or printed on their ballots "For the suffrage amendment to the constitution;" those voting against the said proposition shall have written or printed on their ballots "Against the suffrage amendment to the constitution;" said ballots shall be received, and shall be taken, counted, canvassed and returned in the same manner and in all respects as provided for by law; as in the case of the election of Representatives to the Legislature.

SEC. 3. This resolution shall take effect and be in force from and after its publication in the statute book.

I hereby certify that the above resolution originated in the Senate January 16, 1893, and passed that day February 8, 1893.

PERCY DANIELS, President of Senate. W. L. BROWN, Secretary of Senate. Passed the House March 1, 1893. GEO. L. DOUGLASS, Speaker of House. FRANK L. BROWN, Chief Clerk of House. Approved March 6, 1893, 3:50 p. m. L. D. LEWELLING, Governor.

STATE OF KANSAS, OFFICE OF SECRETARY OF STATE, I, R. S. OSBORN, Secretary of State of the State of Kansas, do hereby certify that the foregoing is a true and correct copy of the original enrolled resolution now on file in my office, and that the same took effect by publication in the statute book May 18, 1893. IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal. Done at Topeka, Kansas, this 25th day of July, A. D. 1894. R. S. OSBORN, Secretary of State.

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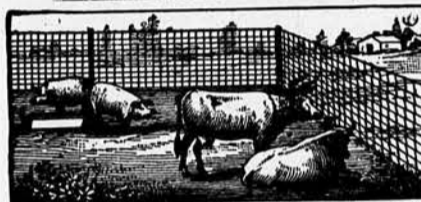
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