

KANSAS FARMER

ESTABLISHED, 1863.
VOL. XXIII, No. 7.

TOPEKA, KANSAS, FEBRUARY 18, 1885.

{SIXTEEN PAGES WEEKLY.
PRICE, \$1.50 A YEAR.

EDUCATION IN COMMON SCHOOLS.

We have received a pamphlet, with the Fort Scott *Monitor* imprint, published by the Kansas State Grange, on the subject of education in the common schools. It is a noteworthy circumstance that the Grange in Kansas has for many years past at its annual meetings discussed this subject, and though a standing committee has made reports which have gone into their published proceedings, and several of which have been printed separately in pamphlet. These reports have been highly approved by the granges throughout the country. They have also attracted the attention of eminent educators, by reason probably in some measure of the fact that they come from a labor organization, and not from the profession of educators. These reports have in fact been in part a protest against some of the methods of the professional educators, as being unsuited to the practical wants of the industrial classes, who constitute so large a proportion of the people reached by our scheme of public education. While the main object of the grange educational workers has been to stimulate the members of the family class to greater attention to their duties in the education of their children, they say that the common schools, through traditional methods, devote too much time to a memorizing drill in abstract studies, and teach too little of what goes into practical use, or into the explanation of the common things of life; as, for instance, too much of abstract and advanced mathematics, beyond the use and the comprehension of the pupils, and too little of the knowledge of how to measure a board of lumber, to compute the capacity of a corn crib or the number of yards of capacity required for the rooms of the new house, or how to keep a simple expense account—too much of the abstractions of grammar and too little of how to speak and write good English; that they give little or no instruction in a knowledge of plants, of animal structure and economy, and of the laws of life and health, but expend a great waste of time to oral spelling and to the geography of the Kangaroo islands—no time to the geography of the pupil's own township and county, or to the history of his own State.

The report before us briefly refers to the subject of former reports, and then introduces testimony culled from correspondence which the committee has had with the heads of Agricultural colleges and other industrial schools throughout the country, in reference to the question as to how far our country district schools may be made schools of agriculture, horticulture and domestic economy.

President Dinwiddie of the Texas Agricultural College says to the committee: "Your former report expresses my views on the subject of technical instruction in the common schools exactly, and I endorse it most heartily."

President Fairchild of our own State Agricultural College says: "I have always read your reports in the State Grange with interest, and believe most of your facts well established. I have no doubt that much may be done towards teaching observation of nature and ready judgment in common things by teachers efficient in such training and filled with wisdom for such teaching. Many important facts in horticulture and agriculture can be brought into the country schools for the encouragement of thought and work together, and teachers of experience and

judgment can impress much of such truth upon pupils indirectly through reading lessons, elementary lessons in botany, zoology, etc."

General Francis S. Walker, President of the Massachusetts Institute of Technology says: "I entertain no doubt that the common schools of the land require very extensive modifications to fit them to satisfy the most urgent needs of the people; and, that household economy and some of the domestic arts, industrial economy and some of the mechanical arts, and, in rural districts, agricultural economy, if not some of the arts connected with agriculture, should be made the subject and practice from the most elementary stage of education upwards."

President Battle, of the University of North Carolina: "The kind of training sketched by you will make our young farmers more fond of their calling, more self-respectful, less disposed to concede superior dignity to the professions of law, medicine, etc. It would stop the tendency to crowd into the cities, and would make farming what it ought to be, generally attractive to the refined and more cultured. Habits of attention, observation and experiment being formed, improvement in agriculture would be hastened and resources of the State discovered and utilized."

President Andrew D. White, of Cornell University: "I believe that for ages altogether too much time has been wasted by bad methods in common schools, and, indeed in our educational institutions of all grades. My conviction is very strong that if in our primary and intermediate schools half a day could be taken to book work and half a day either to technical work or to cultivating the powers of observation in the fields, under capable guidance, all directly concerned—to say nothing of the State and country—would gain largely. I agree as to what you say regarding instruction by use under the impulse of thought rather than by memorizing technical grammar; and, you might have added, that technical grammar comes generally far too early in instruction. So, too, in regard to memorizing rules and theorems in arithmetic; far better to do what in the old schools was called ciphering."

These brief extracts show the drift of the interesting matter in this report. The writers uniformly deplore the lack of qualifications on the part of teachers to impart the character of instruction desired. The State Grange in adopting the report appointed a committee to confer with our educational authorities with a view to changes in our system of normal instruction to meet the want indicated. Copies of the report may be procured by addressing George Black, Secretary of the State Grange, Olathe, or F. G. Abams, Chairman of the Educational Committee, Topeka.

But few farmers through the country use ice in their dairy, yet good butter is made with difficulty in the summer without its aid, and especially is it useful in getting the butter to market in good condition. A good supply of ice should be put up for use in the dairy.

In New York a woman is paid six cents for making a shirt, and the papers speak of it as an outrage. Yet in Vermont a woman not only doesn't get a cent for making a shirt, but thinks herself mighty happy if her husband doesn't swear like a parrot at the way it fits.

Tame Grass Experience.

Kansas Farmer:

My first experience with tame grasses commenced nine years ago. Blue grass, white clover and alfalfa were sown near and around my house in April, 1875. The blue grass and white clover were nearly a failure; the alfalfa (one-eighth of an acre, sown in my front yard) was a success; first year it did not grow very tall; the second and third year it made an average growth of about two feet. Wishing to set the plot of ground with red cedars, pines and shrubbery, the alfalfa was turned under by plowing 10 or 12 inches deep and sowed to blue grass with a little red clover mixed with it, getting a good stand, and to-day I look out of the window on that ground all matted over with blue grass and clover, covered with the beautiful snow, the cedars and pines two to four feet high, making a beautiful contrast to their winter carpet under and about them.

About the middle of April, '83, I seeded ten acres to timothy and red clover, two bushels timothy and four bushels clover seed was sown on the above ten acres. A good stand was secured, too good in fact; cause, too much seed for the amount of ground; one-half or at least one-third too much seed.

The same spring I sowed an acre of the red clover with same results, except not getting it so thick as I did the timothy. My first crop, cut this last summer, made about two tons to the acre. The clover I cut twice; would make three to four tons per acre. The hay I am feeding to stock.

Last spring I sowed four acres of alfalfa, two acres of Johnson grass, and two acres of red clover, securing a good stand of each kind. The Johnson grass is a wonderful grower. I had samples at our county fair that measured over seven feet in height. This certainly is a wonderful growth even for the fertile soil of Kansas, high upland prairie at that, as mine is. This grass was cut and bound and threshed the same as wheat, the two acres yielding a little over nine bushels, machine measure, worth at the rate my seed cost me (\$5 per bushel) \$45. Now, I do not want the Editor nor the readers of the *FARMER* to think that I am puffing or recommending this grass in order to sell the seed. I have simply stated what the grass has done with me. I know nothing about the grass as a forage plant, either for hay or for pasturing. The grass with me is on trial. When the verdict is reached for or against it, I will then give the readers of the *FARMER* the benefit of such decision, if any benefit there be.

The ground for the above grasses was plowed late in the fall; early in the spring it was harrowed over twice with a heavy harrow; the 20th of April it was harrowed twice with a Thomas smoothing harrow, followed with a seeder. The flukes and hoes were removed from a Buckeye drill; a board six inches wide was attached so that each end of the board would be under the frame of the drill, directly under the grass seed attachment, the front side of the board two inches higher than the other, so that the seed falling on the board would be more evenly distributed than if allowed to fall directly from the seeder to the ground. The Johnson grass seed, one bushel per acre was sowed, same as wheat, with the board attached, the grass seeder failing to work with this seed on account of the condition of the seed. The smoothing harrow was run

over the ground once covering the seed nicely.

During summer the mower was run over the alfalfa and red clover twice, leaving the weeds and grass cut on the ground. This serves two purposes, viz.: Keeping the weeds from sapping the ground of moisture, and acting as a mulch, preventing evaporation of moisture from the ground.

A word in regard to my timothy meadow. It seems to be so thick that it don't start off right, or at least it did not last spring; it seems to be hide bound, if that will convey the idea. Will some of the readers of the *FARMER* tell me what to do to remedy it? I do not want to plow it up if there is any way to avoid doing so.

Wellington, Kas. G. W. BAILEY.

Northern Kansas and World's Exposition.

Kansas Farmer:

We are just coming out of a severe Kansas blizzard here in Nemaha county. Yesterday, all day through, and last night, a very severe north wind and flying snow drifting, giving us this as one of the coldest mornings of the winter. Stock not housed must have suffered very much in this storm.

Stock has generally wintered well with us, the weather being cold and even; a few exceptions where cattle have died in stalk-fields, by being turned in the stalks in a half starved condition and allowed to run at pleasure. A preventive to this is (I think) to feed partial feed of grain, or some digestible food before turning to stalks, and not allow them to fill themselves entirely on the dry and indigestible blades, husks, and woody stalks. As so few farmers have lost hogs, whether by the so-called hog cholera, by bad feeding, bedding, or by colds, or whatever cause, I will write more at length in another article.

I leave northern Kansas as soon as the snow drifts are out and our railroad tracks are clear again, for the World's Exposition, New Orleans, to be there and take in all that is to be seen and learned, until the 1st of March, and to be with my herd of Short-horn breeding cattle already there and on exhibition since the 1st inst. For weeks I watched our stock journals and farm papers and sent letters to learn if the cattle interests of Kansas would be represented in that exposition, and if the Short-horns especially were there, and nothing definite could be learned. I decided that Kansas should be interested and represented there, and started a herd of nine head accompanied by two young calves (eleven in all). They arrived there I learn on the 1st in good spirits, after being laid out 16 or 18 hours by a wreck on the railroad. In that herd is included some of my famous show herd, including Nelly Bly 26 and her young b. c. dropped Dec. 25th, 1884, by Mazurka Duke 52758. This youngster accompanies Nelly, not so much for what he will see and learn as for what company he will keep, and what he will have to drink. If I am too busy to write you while there, will give items on my return. Sabatha, Kas., Feb. 10 W. S. WHITE.

Mental pleasures never cloy; unlike those of the body, they are increased by repetition, approved of by reflection, and strengthened by enjoyment.

It is estimated that it costs from \$10 to \$15 to feed a steer through the winter, and some times as high as \$20 when the animal is forced.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.
 March 18—A. H. Lackey & Son, Short horns, Peabody, Kas.
 April 23—Col. W. S. White, Sabetha, Kas., Short-horns.
 May 5th—The Cass County Breeders Association will have a sale at Pleasant Hill, Mo.
 May 18 and 19—Jas. Richardson, Short horns, Kansas City, Mo.
 May 20—Powells & Bennett, Short-horns, Independence, Mo.
 May 22 and 23—Jas. E. Richardson, Kansas City, Mo., Short horns.

More About Lambing Time.

Last week we gave an article prepared by a Texan on preparation for the lambing season and the subsequent management. Below is a paper copied from the *National Stockman*, of Pittsburg, Pa., and written by E. F. Holliday. Much of what is said in both papers is particularly applicable to flockmasters every place.

As our country is growing older and our population steadily increasing, our farms are likewise becoming more valuable in the same ratio; and our flockmasters and herdsmen are not slow to perceive that their success depends on making their flocks and herds produce the greatest results in the most economical manner, and that they must no longer make the hillsides and fence corners a place of protection for them, with the canopy of heaven for a covering, and their resting place a bed of snow; but that ample shelter is required both for protection and economical feeding during the winter and spring months.

We believe, in order to obtain the greatest success with the flock, that special care is absolutely essential, and more time necessarily required in taking charge of it during the spring than at any other season of the year. We think pains should be taken to keep breeding ewes in good condition throughout the winter months, in order that they may produce hardy, vigorous lambs, and to enable them to generate milk before dropping their lambs. Under these circumstances ewes will almost invariably own their lambs, but the absence of milk is as sure to produce the reverse. In order to secure the above conditions we believe the kind of feed and the amount given of the greatest importance.

We think that vegetable food, in connection with meal, is perhaps the best to produce a free flow of milk and to keep the ewe strong and hardy. There are many vegetables that are good. The sugar beet is perhaps one of the best. Those vegetables that will as nearly supply the place of grass as possible are the most desirable. We believe, also, that much depends on the judgment of the shepherd, as to the amount of food the flock should be allowed on each day. It is an easy matter to over-feed, as well as to stint, in feeding sheep, just as in any other stock, and often results in as great injury to the flock. The amount of feed we would recommend depends on the quality, food, and the size of the flock. In the case of a flock of fifty ewes, we think, with plenty of good hay (clover is the best) that one and one-half bushels sugar beets, one-half bushel bran, and one peck corn meal, given morning and evenings, is about the proper amount. That the ewes may have an ample supply of milk when they drop their lambs, such feeding should commence one or two weeks before the lambing season, and be continued until plenty of grass brings relief to the feed. In the absence of vegetable food, plenty of bran should be fed in connection with other grains. Plenty of good water is another requisite. We suggest the above as the most practical for the majority of the farmers. Those who have preparations for

steaming the food for their stock undoubtedly make the most out of it.

We think the ewes should be bred to commence lambing about the first of March. The lambs will then be found to grow much larger and stronger, and be a great deal more able to withstand the coming winter, and not sustain a "stunt" in growth, as frequently happens with those dropped late in the spring. We think full compensation is realized on the first clip of wool for all extra care and feed required by early breeding. Besides this, the lambs are not to care for just as other spring work requires our attention. It requires all the patience and enduring perseverance one can command to take charge of lambs properly. Ewes should be kept in a warm house, and not be allowed to run out any on cold days, except enough for exercise; but with this care, one must not be out of sight long at once, but be on hand whenever a lamb is dropped and see that it gets milk soon after, or it will become chilled, and be so benumbed that it must go to the fire and be rubbed and worked with perhaps a half day before it can be returned to its mother. Thus we see that prompt attention saves labor.

It often happens that ewes are not able to give birth to their lambs, either because the lambs are large or out of proper shape, or it may be the ewe has been allowed to become weak, and consequently is not able to deliver her lamb. A little assistance at the proper time in such cases will often save the life of both ewe and lamb. In giving ewes such assistance one should be careful not to be too hasty, but use plenty of grease, and give assistance every time the ewe labors. The grease will prevent so much irritation, and facilitate the birth of the lamb. Ewes should not be allowed to drink much water at one time after having gone through such an operation.

As has been said, ewes should have good warm sheds; so should all our flocks. These should be kept clean and dry, and well provided with bedding, good ventilation, etc. This requires more care in spring, as sheds are more liable to become more filthy at this season than during the winter. The house should be so divided that ewes can be kept separate from the rest of the flock after dropping their lambs. This will avoid confusion, and the shepherd will have no difficulty in finding the proper mother for each lamb as it is dropped. Ewes with their young lambs can be kept in when it is desirable to allow the others to run out. It will avoid having the young lambs trampled under foot, etc.

When lambs are from three to four weeks old, a pleasant day should be selected for trimming them. When this is accomplished the shepherd can then look over his young flock, just started, and feel that he will realize ample reward for his labor thus bestowed in the near future.

We believe many flockmasters make a great error by turning their flocks on the pastures in the spring, while the grass is young and innutritious, without continuing to feed them some hay and grain, thus allowing them to become scoured and otherwise in an emancipated condition, and also losing many pounds of wool with the trimmings. We think the best plan to prevent our sheep from becoming dirty about the tail is to shear the wool off between the legs and around the tail before turning on pasture, while it is yet clean and will sell with other unconditioned wool. Salt should not be given too freely at this season, as the grass and salt combined will cause them to run down by scouring.

Another important point is to see

that each hoof is well trimmed and in proper shape to free itself of any filth that is liable to collect, especially if there is any inclination to foot disease. In doing this just as the flock is to be turned on pasture in spring, when their hoofs are kept almost constantly moist by contact with the damp ground, the disease may be greatly retarded, if not altogether averted. If the flock is actually affected by this loathsome disease, we would recommend soaking each hoof, sound sheep and lame alike, in a solution of blue vitriol dissolved in water, five or six pounds of vitriol to ten gallons of water, keep as hot as the sheep can bear it without scalding them. A box should be used large enough to hold five or six sheep at once, thus allowing the liquid time to thoroughly soak the hoof. The hoof should be well cleaned and every loose particle pared off before placing in the solution.

Extracts About Pigs.

From pig papers in *Breeders' Gazette*, we clip a few extracts, as follows:

The disease called swine plague is not intestinal worms, pneumonia, rheumatism, kidney worm or even "cholera," if by the latter term it is understood that running off from the bowels was a leading symptom. One or more of the above troubles may precede or accompany an attack of swine plague, but the latter is sure to come in at the death and claim the victim as its own.

Swine plague is believed to result from minute bacteria taken into the system. They are believed to affect the blood, retarding its healthy circulation and therefore causing certain morbid changes, which in turn interfere with the vital organs and hinder them in the proper discharge of their functions. So much by way of supposition and theory, based on the observation and experiments of a number of the highest authorities in veterinary matters. It is undoubtedly a very infectious malady, and the greatest care should therefore be taken to prevent infected hogs from coming in contact with those in good health.

Reported observations go to show that healthy hogs are less liable to infection than others, and that the disease almost invariably finds its way into the herd through animals previously weakened in health from some other cause. Young pigs so stunted in growth as to be considered not worth caring for, and which are consequently turned out to live or die, as chance may determine for them, are not unfrequently the means of its introduction, where but for them it would have hardly found the conditions favorable for its development and propagation. If the disease is anywhere about it is most likely to find lodgment with such stock, and sooner or later show itself in animals of greater value.

We have known April and May pigs, stunted from having the "scours" when a few weeks old, to drag along through the summer, and not weigh half as much by the first of September as pigs that come in July. And yet the owners still hoped to see them "pick up" and be of some account as feeding stock after a while. But the pigs are worse than unprofitable. They are dangerous property to hold. They invite disease and cause its spread among animals that might otherwise remain in good health; or, if slightly infected, would be able to throw off the disease.

Therefore, as one means of preventing loss from infectious diseases, we should make it a rule to kill and burn, or bury deep, every stunted or puny pig on the farm. Do not trade them off, nor even give them away to become a source of loss to others, but show something of that heroic spirit we so

often read about, where persons sacrifice present or personal interests for future good, or for the benefit of their fellow-men.

Sunshine, fresh air and the absence of moisture are said to be destructive of the germs which produce swine plague. Could these conditions always exist there would be little to fear from disease. Sunshine, however, we can have only during the day, and that not every day either. But fresh air may be always had, and dry quarters also, if we are thoroughly convinced of their importance and determined to have them. Pens or sheds boarded up close on three sides, covered with good roofs and having wooden floors, will insure the conditions of dryness. The wooden floors will not only prevent dampness during rainy weather or when, at times, moisture rises in the ground, but they will also prevent the accumulation of dust; and this last is more injurious to hogs—particularly young pigs and shoats—than is generally supposed.

Old straw stacks are to be avoided. They retain moisture and afford harbor for the preservation of the diseased germs.

Pools of stagnant water are apt to contain the germ also, and even small streams are unsafe as water supplies for swine when the plague is in the country.

Wood pastures are usually considered grand places for keeping hogs; and so they are if the underbrush is well cleaned up and no accumulation of leaves, coarse grass and porous, trashy substance allowed.

Cleanliness in and about the pens and feeding troughs must be insisted on as a preventive measure, and an occasional thorough sprinkling with copperas water or carbolic acid, should not be omitted. The bedding should be renewed frequently, always burning the old.

It is advised also that when the swine plague is prevalent special care should be taken to avoid all such operations as ringing, marking, castrating, spaying, or the like that will draw blood.

If a hog or pig be hurt so that the skin is cut or broken the wound should be washed with diluted carbolic acid, to which a little glycerine may be added. This should be repeated for several days. The object is to destroy the germs which, if the disease is about, are apt to find entrance into the system through these exposed places.

Another precaution worthy of note when swine plague is abroad in the land is to keep the hogs off the pasture during warm, damp weather and in the morning when the grass is wet with dew. As above stated, sunshine, in the absence of moisture, is destructive to the germs of disease; hence, there will be less liability to infection after the grass has been dried off by the sunshine than while it is wet with dew or warm rains.

Bob Burdette says: "Don't be a fanatic. Don't be a prohibitionist lunatic. Just simply don't drink. All the whisky in America can't make you drunk if you don't drink any of it."

The Proprietors of Ely's Cream Balm do not claim it to be a cure all, but a sure remedy for Catarrh, Colds in the Head and Hay Fever. It is not a liquid or snuff, but is easily applied with the finger. It gives relief at once. Sold by all druggists. Price 50 cents. By mail 60 cents. Ely Bros., Owego, N. Y.

I have been a sufferer two years from catarrh or cold in the head, having distressing pain over my eyes. Gradually the disease worked down upon my lungs, my left ear was almost deaf, my voice was failing me. I procured one bottle of Ely's Cream Balm, and within five days my hearing was restored, the pain ceased over my eyes, and I am now enjoying good health. I recommended it to some of my friends. One of them sent for a bottle. He told me that half of it cured him. My advice is to those suffering with catarrh or cold in the head not to delay but try Ely's Cream Balm, as it is a positive cure.—John H. Vansant, Sandy Hook, Elliott Co., Ky.

In the Dairy.

Cheese Factories in England.
Professor Sheldon, in the *North British Agriculturist*, tells how cheese factories became established in England:

With the spread of modern farming, the yield of cheese became larger, and the difficulty of making good cheese was correspondingly increased. Yet farmers prospered, and as the years rolled on farmers wives were seldomer the dairy maids, and hired dairy maids became scarcer in proportion. The difficulty of finding good dairy maids seemed to culminate some fifteen or twenty years ago in the Midland counties, and men who were anxious for the welfare of dairy farming in those counties were casting about for some way or other out of the difficulty. It was admitted that cheese making was heavy and untidy work, unfit for farmers' wives, as a rule, who had the care of housekeeping and of a family of children on their hands. It was even said, so warm were people in favor of a change, that it was not woman's work at all, but should be performed chiefly by the aid of machinery, and on a scale commensurate with the use of modern appliances. At this stage of reasoning the transition from farm house to factory cheese making was easy and simple enough; but though factories were desired in many places, it was found an easier thing to talk about them than to set them going. True, they were as yet untried in England, and no one could foretell with certainty how they would fall in with the special requirements of English dairying; but they had been long in use in America, and were rapidly increasing in number in that country, while the quality of American and Canadian cheese was just as rapidly improving. These were the reasonings which led to the establishment of two factories in Derbyshire, in the spring of 1871, one in the town of Derby, and the other on the estate of Hon. E. K. W. Cook, at Longford.

During the next three or four years, some twelve or fifteen other cheese factories were started in various counties, and then the increase ceased entirely, seemingly to prove, in some measure, that the factory system of cheese making did not supply an adequate solution of the difficult problem which, in modern days, had become developed in British dairying, and which, as I may say, is still in process of solution.

How Much Milk for a Pound of Butter.

At a late meeting of the New York State Dairyman's association, held at Oswego, Dec. 16 a call was made for information as to the quantity of milk required for a pound of butter. A creamery manager from Bradford, Pa., responded to this call with the following figures:

A mixed herd of 21 cows in the eight months from April to November inclusive, 1882, averaged a pound of butter to 23 pounds of milk and averaged 202 pounds of butter per cow. Fourteen grade Shorthorns in the same time averaged a pound of butter to 20 1/2 pounds of milk, and average 241 pounds of butter per cow. Fourteen Holsteins in the same time averaged a pound of butter from 24 1/2 pounds of milk, and averaged 235 pounds of butter per cow, and eleven grade Jerseys in the same time averaged a pound of butter from 16 pounds of milk, and in 10 months averaged 289 pounds per cow. The record for the months having been lost, he could not give it in comparison with the other herds for the same length of time. The gentleman said he had been in charge of a creamery since 1882, and had endeavored to impress upon his patrons the importance of improving their stock, with what results the following statement will show: In 1882, with an average of 750 cows, it required 25 pounds of milk for a pound of butter; in 1883, with 1,100 cows, 21 pounds of milk made a pound of butter, and in the season of 1884, 20 1/2 pounds of milk made a pound of butter, and he expected to still further lessen the quantity required.

America's Pride.
True American men and women by reason of their strong constitution, beautiful forms, rich complexions and characteristic energy, are envied by all nations. It is the general use of Dr. Harter's Iron Tonic which brings about these results.

Build safe, easy stairs where needed in barns, and save breaking your bones climbing dangerous ladders.

Consumption Cured.
An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp naming this paper, W. A. ROYDS, 149 Power's Block, Rochester, N. Y.

EDUCATION PAYS!

The KANSAS STATE AGRICULTURAL COLLEGE

TO FARMERS' SONS AND DAUGHTERS

A full four years' course of study in English and Sciences most directly useful on the farm or in the home with careful training in the industrial arts adjusted to the wants of students throughout the State, with shorter courses in common branches, and all Tuition Free.

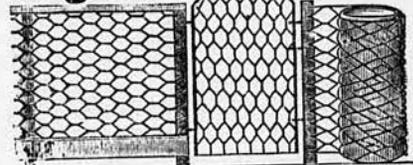
Other expenses are reasonable, and opportunities to help one's self by labor are afforded to some extent. The work of the farm, orchards, vineyards, gardens, grounds and buildings, as well as of shops and offices is done chiefly by students, with an average pay-roll \$300 a month.

THE TWENTY-SECOND YEAR OF THE COLLEGE BEGINS SEPT. 10TH, 1884.

with eighteen instructors, 395 students, buildings worth \$90,000, stock and apparatus worth \$40,000, and a productive endowment of \$475,000.

For full information and catalogue address PRES. GEO. T. FAIRCCHILD, Manhattan, Kansas.

Sedgwick STEEL WIRE Fence



Is the best general purpose wire fence in use. It is a strong net-work without barbs, don't injure stock. It will turn dogs, pigs, sheep, and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock ranges, and Railroads. Very neat, pretty styles for Lawns, Parks, School lots, and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a trial; it will wear itself into favor. The Sedgwick Gates made of wrought iron pipe and steel wire, defy all competition in lightness, neatness, strength, and durability. We make the best, cheapest, and easiest working all-iron automatic or self-opening gate, and the nearest cheap iron fences now made. The Best folding poultry coup is a late and useful invention. The best Wire Stretcher, Cutting Pliers, and Post Augers. We also manufacture Russell's excellent Wind Engines for pumping, and Gearred Engines for grinding, etc. For prices and particulars ask Hardware Dealers, or address: **SEDGWICK BROS., Richmond, Ind.**

DO YOU WANT A DOG?
If so, send for Dog Buyers' Guide, containing colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them. Also Cuts of Dog Furnishing Goods of all kinds. Directions for Training Dogs and Breeding Ferrets. Mailed for 15 Cents. **ASSOCIATED FANCIERS 227 S. 8th Street, Philad'a.**

HAY CARRIER
FORKS, PULLEYS, ETC.
Farmers who order early, will get Rock Bottom Prices. Satisfaction Guaranteed. Send for Illustrated Circular and Price List. **CEO. W. KING, Box 119, Marion, O.**

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

CATTLE.

CEDAR-CROFT HERD SHORT-HORNS.—E. C. Evans & Son, Prop'r, Sedalia, Mo. Youngsters of the most popular families for sale. Also Bronze Turkeys and Plymouth Rock Chickens. Write or call at office of Dr. E. C. Evans, in city.

W. M. D. WARREN & CO. Maple Hill, Kas., importers and breeders of Red Polled Cattle. Stock for sale. Correspondence solicited. E. R. station, St. Marys, Kas.

DEXTER SEVERY & SONS Leland, Ill., breeders of Thoroughbred Holstein Cattle. Choice stock for sale, both sexes. Correspondence invited.

JOHNSON & WILLIAMS, Silver Lake, Kas., breeders of Thoroughbred Short-horn Cattle. The herd numbers thirty head, with a Rose of Sharon bull at head.

LOCUST RETREAT FARM, Bacon & Campbell, Manchester, St. Louis Co., Mo. breeders of HOLSTEIN CATTLE and PLYMOUTH ROCK FOWLS. Holsteins excel in milk, butter and beef. They are all-purpose cattle. First-class stock for sale. Plymouth Rocks are the farmer's fowl. Pair, \$3.50; trio, \$5.00; eggs, \$1.50 for 13.

BROAD LAWN HERD of Short-horns. Robt. Patton Hamilton, Kas., Prop'r. Herd numbers about 120 head. Bulls and Cows for sale.

ALTAHAM HERD W. H. H. Cundiff, Pleasant Hill, Cass Co., Mo., has fashionable-bred Short-horn Bulls for sale. Among them are two Rose of Sharon and one aged show bull. None but the very best allowed to go out from this herd; all others are castrated.

U. P. BENNETT & SON, Lee's Summit, Mo., breeders of THOROUGHBRED SHORT-HORN CATTLE, Cotswold sheep, Berkshire swine, Bronze Turkeys and Plymouth Rock chickens. Inspection invited.

POWELL BROS., Lee's Summit (Jackson Co.) Mo., breeders of Short-horn Cattle and pure-bred Poland-China swine and Plymouth Rock Fowls. Stock for sale. Mention this paper.

W. A. POWELL, Lee's Summit, Mo., breeder of the "Povert" Hill herd of Thoroughbred short-horn Cattle. Inspection and correspondence solicited.

WALNUT PARK FARM, Frank Playter, Prop'r, Walnut Crawford Co., Kas. The largest herd of Short-horn cattle in Southern Kansas. Stock for sale. Correspondence invited.

A. HAMILTON, Butler, Mo., Thoroughbred Galloway cattle, and calves out of Short-horn cows by Galloway bulls for sale.

J. W. LILLARD, Nevada, Mo., Breeder of THOROUGHBRED SHORT-HORNS. A Young Mary bull at head of herd. Young Stock for sale. Satisfaction guaranteed.

OAK WOOD HERD, C. S. Eichholtz, Wichita, Kas. Live Stock Auctioneer and breeder of Thoroughbred Short-horn Cattle.

Hereford Cattle.

SHOCKEY & GIBB, Lawrence, Kansas, breeders and importers of Hereford cattle. Choice thoroughbreds and high-grades of both sexes always for sale.

SAROXIE HEREFORD HERD, J. Gordon Gibb, Lawrence, Kas., importer and breeder of Hereford Cattle. Stock for sale.

CATTLE AND SWINE.

GLENVIEW FARM, G. A. Laude, Humboldt, Kas., breeds Short-horn Cattle and Poland-China Swine. A good Saddle and Harness Horses.

SHORT-HORN PARK, containing 2,000 acres, for sale. Also, Short-horn Cattle and Registered Poland-Chinas. Young stock for sale. Address B. F. Dole, Canton, McPherson Co., Kas.

WOODSIDE STOCK FARM, F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred Short-horn cattle, Cotswold sheep, Poland-Chinas and Berkshire hogs. Young stock for sale.

J. E. GUILD, CAPITAL VIEW STOCK FARM, Silver Lake, Kansas, Breeder of THOROUGHBRED SHORT-HORN CATTLE and POLAND-CHINA SWINE. Correspondence solicited.

DR. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle, Hambletonian Horses of the most fashionable strain, pure-bred Jersey Red Hogs and Jersey Cattle.

COTTONWOOD FARM HERDS, J. J. Mails, Manhattan, Kansas, Breeder and shipper of SHORT-HORN CATTLE and BERKSHIRE SWINE. Orders promptly filled by express. The farm is four miles east of Manhattan, north of the Kansas river.

SHEEP.

E. COPLAND & SON, DOUGLASS, KANSAS, Breeders of Improved American Merino Sheep. The flock is remarkable for size, constitution and length of staple. Buck a specialty.

C. B. BOWWELL, Breckenridge, Mo., has 1,100 Merino rams for sale. 250 of them are registered. His own best stock rams shear from 27 lbs. to 33 lbs., weigh from 145 lbs to 180 lbs.

C. F. HARDICK & SON, Louisville, Kansas, breeders of REGISTERED AMERICAN MERINO SHEEP. Having good constitution and an even fleece of fine, dense wool. Fine wool a specialty. Come and see our flocks or write us.

A. F. WILLMARTH & CO., Ellsworth, Kas., breeders of Registered Spanish Merino Sheep "Woolly Head" \$45 at head of flock. Choice rams for sale. Satisfaction guaranteed.

MERINO SHEEP, Berkshire hogs and fifteen varieties of high-class poultry of the best strains. Bucks a specialty. Harry McCullough, Fayette, Mo.

A. J. CARPENTER, Milford, Kansas, breeder of Thoroughbred Poland-China Swine. Stock for sale. Inspection and correspondence invited.

SWINE.

F. M. BOOKS & CO., Burlingame, Kas., importers and breeders of Recorded Poland China and Large Berkshire Swine. Breeding stock the choicest from the best herds in seven States. I have special rates by express. Write.

V. B. HOWEY, Topeka, Kas., breeder of the finest strains of Poland-China Swine, for sale. Inspection desired. Correspondence invited. Blood of Tom Corwin 2d No. 2087. Hoosier Tom 1025. Bravo 3877. Give or Take 1585. Got sweepstakes on 8 out of 9 at Kansas State fair 1884.

S. H. TODD, Wexham, Ohio, breeder of Recorded S. Premium Chester White Swine and imported Shropshire Down Sheep. Send for circular with price list and particulars. It pays to get the best.

J. A. DAVIDSON, Richmond, Franklin Co., Kas., breeder of POLAND-CHINA Swine. 170 head 1 herd. Recorded in A. and O. P.-C. R. Call or write.

I. L. WHIPPLE, Ottawa, Kas., breeder of Recorded Poland-China and Red Berkshire Swine. Stock for sale at all seasons. Correspondence solicited.

CATALPA GROVE STOCK FARM, J. W. Arnold Louisville, Kansas, breeds Recorded

POLAND-CHINA SWINE AND MERINO SHEEP. The swine are of the Give or Take, Perfection, and other fashionable strains. Stock for sale in pairs not related. Invite correspondence or inspection of stock.

ROBERT COOK, Iola, Allen county, Kansas, importer and breeder of Poland-China Hogs. Pigs warranted first-class. Write.

POULTRY.

A SUPERIOR LOT OF MAMMOTH BRONZE TURKEYS at \$3 each, \$8 per trio, and Plymouth Rock Chickens at \$2 each, \$5 per trio, for sale by H. V. Pughley, Plattsburg, Mo.

W. J. MCCOOLM, Waveland, Shawnee Co., Kansas, breeds Bronze Turkeys, Light Brahma, Plymouth Rocks, Buff Cochins, and Pekin Ducks. Bronze Turkeys for sale cheap before holidays.

FAIRVIEW POULTRY YARDS, Mrs. G. Taggart, Parsons, Kas., breeder of L. and D. Brahma, B. Leghorns, Houdans, Plymouth Rocks, Langshans, F. Cochins, G. L. Bantams, Wyandottes and B. B. Games. Send for price list.

W. M. WIGHTMAN, Ottawa, Kansas, breeder of high-class poultry—White and Brown Leghorns and Buff Cochins. Eggs, \$2.00 for thirteen.

N. R. NYE, breeder of the leading varieties of Choice Poultry, Leavenworth, Kansas. Send for circular.

NEOSHO VALLEY POULTRY YARDS—Established 1870. Pure-bred Light Brahma, Partridge Cochins, Plymouth Rocks, Egg-in-season. Stock in fall. Write or prices. Wm. Hammond, box 190, Emporia, Kas.

GROUND OYSTER SHELLS FOR SALE. Five pounds, 5 cents per pound; 25 pounds 4 cents per pound; 200 pounds, 3 1/2 cents per pound. It is the best egg-producer known. Give it a trial and be convinced of its merits. Also Pure Plymouth Rock Eggs for sale—\$2 for 13; \$3.50 for 26. G. H. Flintham, 71 Kiene avenue, Topeka, Kas.

MISCELLANEOUS

PROSPECT FARM—H. W. McAfee, Topeka, Kas. For sale cheap 10 registered Short horn bulls, 1 to 3 years old. Also, Clydesdale horses.

J. G. D. CAMPBELL, Junction City, Kansas, Livestock Auctioneer. Sales made in any part of the United States. Satisfactory reference given.

S. A. SAWYER, Manhattan, Kas., Live Stock Auctioneer. Sales made in all the States and Canada. Good reference. Have full sets of Herd Books. Compiles catalogues.

Mt. Pleasant Stock Farm, Colony, Anderson Co., Kansas.

J. S. HAWES
Importer and Breeder of
HEREFORD Cattle.

I have one of the largest herds of these famous cattle in the country, numbering about 200 head. Many are from the noted English breeders, T. J. Carwardine, J. B. Green, B. Rogers, W. S. Powdrell, Warren Evans and P. Turner. The bulls in service are "FORTUNE," sweepstakes bull with five of his get at Kansas State Fair 1882 and 1883; Imp. "Lord Wilton" bull "SIR EVELYN" own brother to "Sir Bartle Frere;" Imp. "DAUPHIN 18th," half brother to T. L. Miller Co.'s "Dauphin 18th;" and "THE GROVE 4th," by "The Grove 3d."

To parties wishing to start a Herd I will give very low figures. Write or come.

THE LINWOOD HERD SHORT-HORN CATTLE



IMP. BARON VICTOR
W. A. HARRIS, LINWOOD, KANSAS.
The herd is composed of VICTORIAs, VIOLETS, LAVENDERS, BRAWTH BUDS, SECRETS, and others from the celebrated herd of A. Cruickshank, Shipton, Aberdeenshire, Scotland. GOLDEN DROPS, and URYs, descended from the renowned herd of S. Campbell Kinellar, Aberdeenshire, Scotland. Also YOUNG MARYS, YOUNG PHYLILLES, LADY ELIZABETHS, etc. Imp. BARON VICTOR 42824, bred by Cruickshank, and Imp. DOUBLE GLOSTER head the herd.

Linwood, Leavenworth Co., Kas., is on the U. P. R. R., 27 miles west of Kansas City. Farm joins station. Catalogues on application. Inspection invited.

HEREFORD CATTLE.

THOROUGHBRED BULLS and HIGH-GRADE BULLS and HEIFERS for sale. Inquiries promptly answered.

WALTER MORGAN & SON, Irving, Marshall Co., Kansas.

Correspondence.

The Oldest Inhabitant is Old.

Kansas Farmer:

The oldest inhabitant states that this has been the coldest winter, and more snow has fallen than during any winter since the settlement of the county. Where stock was properly cared for there has been no loss, but where the stock have been sheltered by a barbed wire fence, the loss has been very severe.

Mr. Wadsworth, of Larned, is wintering about 3,000 sheep here. He has good sheds and has had but little loss. There is abundance of feed in this county and stock has been brought here from other counties by the thousand head. Corn is worth 18 cents, rye 20 cents, and wheat 50 cents per bushel. Hay from \$2.50 to \$3 per ton. The farmers have been successful during the past year, notwithstanding the low prices of grain, and many new farm houses are visible, as well as full granaries, and an abundance of fine stock.

There will be more fruit trees and shrubbery set out this spring than formerly. More lists will be sold this spring than ever before. Immigrants are arriving daily, but find cheap farms a thing of the past. The dissatisfied settlers have all returned to their wives' people.

We expect a railroad this fall. Real estate is advancing in price rapidly.

Stafford, Kas. J. F. GISH.

Notes and Queries From Russell County.

Kansas Farmer:

We have a new paper started in our county (*Western Live-Stock Journal*) which claims to be published in the interest of farmers and stock men, but it does not supply the place of the *KANSAS FARMER*.

I am glad to see the question of cane for feed discussed as we think in this section that it is A. No. 1. Am sorry to hear so many fore-telling disaster to the sugar interests of Kansas, for I was in hopes to see the time when Kansas would produce her own sugar and a surplus for sale, for cane seems to be the surest crop we have.

There has been a case of calves piling up and smothering in a warm shed in the northern part of the county that I would like to ask some questions about. Mr. Alex. Minor, living about twelve miles northeast from Russell, having in his keeping over one hundred head of cattle, mostly calves, and having good warm sheds (banked up with manure) closed on three sides, he supposed they were all right; but on going out one of these cold mornings that have been quite numerous this month, he found the calves piled up and the under ones smothered—over twenty in all. Is this a common occurrence where calves are kept in large bunches, or was his shed too warm? The shed was deep (or broad from front to back.) We have always supposed in this section that shedding for calves could not be made too warm. Must calves be separated in small bunches during cold weather? Those that were smothered were all strong, healthy ones.

Stock in this county, so far as I have been able to learn, are in good condition; feed is more plenty than ever before, and is put up in good condition. Grain is plenty and cheap, and the outlook for stock of all kinds is better than ever before. There are a few cases of black leg to report. Some sheep have been lost during the severe weather; but in most cases they were old and poor or not properly cared for. Horses are looking exceptionally well for this county.

The transient class of settlers in this section have gone back to their wives' folks in most cases, and their places are filled by a class of sober, industrious citizens that have come to stay and develop the country. The schools of the county have steadily improved until they are on a par with any in the State. The prohibition law is fairly enforced, at least those who sell liquor have to do it on the sly, and are considered criminals by the better class of citizens. Our creamery in Russell was a failure, or at least the proprietor failed. We hope to see some one with more energy and good principle take hold of the situation and make a success of it.

I for one thank Mr. J. H. Dix for his recipes for curing meat and protecting trees from the rabbits.

The coyotes (or prairie wolves) seem to be

on the increase. How shall we get rid of them? Poisoning with strychnine is a failure, besides being dangerous to valuable dogs, and they don't trap worth a cent.

Wheat is bringing a better price now than at any time since harvest, and farmers are in better spirits and more hopeful for the future.

Mr. Editor, I for one would like to see you do what you can to hinder a constitutional convention, at least until the present constitution is tried a while longer. Better put the cost of a convention (if the State can spare the money) into the school fund.

I have seen a good deal in the papers about silos, those who favor it claiming that cattle fed on pressed feed seem to like it even better than fresh cut feed. Is not this caused by the alcohol that is formed by the partial fermentation in the press or does it ferment at all? I ask for information, never having seen one, and would naturally like to hear both sides of the question. There has been more snow in this county this winter than at any time before for six years, the winter of '78 and '9 being as steady cold as this, but the mercury did not mark so low.

RUSSELL CO. FARMER.

The Past and the Present.

Kansas Farmer:

The year 1884 has been numbered with those in time's great scroll of years marked "past." So far as data and action controls, it is no longer ours, but in memories and influences it is still a part and parcel of the year 1885, and in the present we may and do realize results of the acts of the past and if in that time, either, as individuals or organizations, we have been true to our best interests, then may we hope to more easily make of life, in the present, and for the future, a success.

The year gives to each and every one alike the same number of days and hours; however, it is not time itself, but its manner of occupation which decides for or against us. A retrospect may show, to some of us, large delinquencies, and in summing up the year's work, we may find that the amount done must occupy the negative side of the equation of usefulness. If such should be the case, it is not wise even then to despair, for there is yet one alternative left, namely, to so employ the present as to retrieve the past. This task will be a laborious one, and can only be accomplished by making the effort adequate to the occasion. If we have already fallen behind in the race, then it is our imperative duty to so act in the living present, that ere the close of this year we may truthfully say we have "leveled up" and now stand a man among men, or an honored body among organizations.

During the present year, both individual and national prosperity will make great demands upon the people, especially upon all educational and labor organizations, and it is a significant fact, that almost invariably have the reforms tending to the elevation of man and womanhood been originated and carried on by individuals belonging either directly or indirectly to the industrial classes. Therefore, we have a right to expect of these same classes, through co-operative organization, a greater work than has heretofore been accomplished. Thought is clamoring for liberation; the scales of justice must be removed from the hand of selfish greed; sooner or later, labor and capital must be more equitably adjusted and reconciled. These are but the demands of progress, which like time is ever moving onward, and to keep pace with it we must meet its necessities, and necessities always provide their own opportunities; therefore, it only remains for us to reach out and grasp them, and by so doing make the present year transcend the past in its efforts to bring joy, peace and happiness to the whole people.

L. L. TOOTHACER.

The hagfish has a single tooth on the roof of the mouth and two serrated plates on the tongue, while the mouth of the pike is crowded with teeth. In the shark the teeth are confined to the fore part of the mouth. In the carp they are all situated on the bones of the throat. In the parrot fish they occupy both back and front, but in most fishes the teeth are developed also on the roof or palate, and, in fact, on nearly every point in the mouth.

A dude is a 50 cent man in a 50-dollar suit of clothes.

EXCITEMENT UNABATED.

The Remarkable Experience of a Rochester Physician Fully Authenticated.

Cleveland O. Herald.

Yesterday and the day before we copied into our columns from the Rochester, N. Y., *Democrat and Chronicle*, a remarkable statement, made by J. B. Henion, M. D., a gentleman who is well known in this city. In that article Dr. Henion recounted a wonderful experience which befell him, and the next day we published from the same paper a second article, giving an account of the "Excitement in Rochester," caused by Dr. Henion's statement. It is doubtful if any two articles were ever published which caused greater commotion both among professional people and laymen.

Since the publication of these two articles, having been besieged with letters of inquiry, we sent a communication to Dr. Henion and also one to H. H. Warner & Co., asking if any additional proof could be given to us as to the validity of the statements published. In answer thereto we have received the following letters, which add interest to the entire subject and verify every statement hitherto made:

ROCHESTER, N. Y.

GENTLEMEN: Your favor is received. The published statement, over my signature to which you refer is true in every respect, and I owe my life and present health wholly to the power of Warner's Safe Cure, which snatched me from the very brink of the grave. It is not surprising that people should question the statement I made, for my recovery was as great a marvel to myself as to my physicians, and friends * * *

J. B. HENION, M. D.

ROCHESTER, N. Y., Jan. 21.

SIRS: Acknowledging your favor duly received, we would say: The best proof we can give you that the statements made by Dr. Henion are entirely true, and would not have been published unless strictly so, is the following testimonial from the best citizens of Rochester, and a card published by Rev. Dr. Foote, which you are at liberty to use if you wish.

H. H. WARNER & CO.

To Whom it may Concern:

In the Rochester *Democrat and Chronicle* of December 31, there appeared a statement in the form of a card from Dr. J. B. Henion, of this city, recounting his remarkable recovery from Bright's disease of the kidneys after several doctors of prominence had given him up, by the use of Warner's Safe Cure. We are personally or by reputation acquainted with Dr. Henion, and we believe he would publish no statement not literally true. We are also personally or by reputation well acquainted with H. H. Warner & Co., proprietors of that remedy, whose commercial and personal standing in this community are of the highest order, and we believe that they would not publish any statements which were not literally and strictly true in every particular.

C. R. PARSONS, (Mayor of Rochester.)

WM. PURCELL, (Editor *Union and Advertiser*.)

W. D. SHUART, (ex-Surrogate Monroe County.)

EDWARD A. FROST, (ex-Clerk Monroe County.)

E. B. FENNER, (ex-District Attorney Monroe County.)

J. M. DAVY, (ex-Member Congress, Rochester.)

JOHN S. MORGAN, (County Judge, Monroe Co.)

HIRAM SIBLEY, (Capitalist and Seedman.)

W. C. ROWLEY, (ex-County Judge, Monroe Co.)

JOHN VAN VOORHIS, (ex-Member of Congress.)

To the Editor of the *Living Church, Chicago, Ill.*

There was published in the Rochester *Democrat and Chronicle* of the 31st of December, a statement made by J. B. Henion, M. D. narrating how he had been cured of Bright's disease of the kidneys, almost in its last stages, by the use of Warner's Safe Cure. I was referred to in that statement, as having recommended and urged Dr. Henion to try the remedy, which he did, and was cured. The statement of Dr. Henion is true so far as it concerns myself, and I believe it to be true in all other respects. He was a parishioner of mine and I visited him in his

sickness. I urged him to take the medicine and would do the same again to any one who was troubled with a disease of the kidneys and liver.

ISRAEL FOOTE, (D. D.,)

(Late) Rector of St. Paul's Episcopal Church.
Rochester, N. Y.

"No, Laura; no. They do not open the campaign with a can opener. They do it with a corkscrew. How little, alas! do women know about politics."

H. Brewer & Co., Tecumseh, Mich., built the first Augur Tile machine in this country. An experience of twenty-five years in the business has given them practical knowledge as to the requirements necessary to the production of successful tile machinery. They make Brewer's Improved Tiffany Tile machines; Sword's patent Brick machines; Stone Separating Clay Crushers, etc. Their catalogue has just been received by us, and will be sent free on application to above address.

No girl in Norway is allowed to have a bean until she can make bread. In this connection it may be stated that Norwegian girls learn to make bread at a very early age.

All Good Democrats

will go to Washington to see the new President, and will go via the Memphis Short Route, as this route is the most pleasant and no other route offers equal accommodations and facilities. Through sleepers and reclining chair cars are run via this route from Kansas City to Memphis, where close connection is made with line of palace sleeping cars through to Washington. For a sufficient number arrangements will be made to run through sleeping cars from Kansas City to Washington without change via this favorite route. Provision will also be made for a trip to Washington returning via New Orleans. For rates and full information address J. E. Lockwood, G. P. & T. A., Kansas City.

The oldest English newspaper still existing is the *London Gazette*; but there are others, still held by private persons, which date their birth as far back as the seventeenth century. Thus the *Worcester Journal* was established in 1690 and the *Edinburgh Gazette* nine years later. The oldest London daily paper still existing is the *Morning Post*, founded in 1772. The *Times*, under its present name, dates from 1788. The first daily journal attempted in the metropolis was the *Postboy* of 1695; but the first successful venture under this head was the *Courant* of 1702; and a fac simile reproduction of the first number is given by Mr. Ashton in his book on "Social Life in the Reign of Queen Anne."

The following is a copy of a notice pasted up in the Council Bluffs, Iowa, police station: "No loafers allowed here, except police."

A HOME DRUGGIST TESTIFIES.

Popularity at home is not always the best test of merit, but we point proudly to the fact that no other medicine has won for itself such universal approbation in its own city, state, and country, and among all people, as

Ayer's Sarsaparilla.

The following letter from one of our best-known Massachusetts Druggists should be of interest to every sufferer:—

RHEUMATISM. "Eight years ago I had an attack of Rheumatism, so severe that I could not move from the bed, or dress, without help. I tried several remedies without much if any relief, until I took AYER'S SARSAPARILLA, by the use of two bottles of which I was completely cured. Have sold large quantities of your SARSAPARILLA, and it still retains its wonderful popularity. The many notable cures it has effected in this vicinity convince me that it is the best blood medicine ever offered to the public."
E. F. HARRIS,
River St., Buckland, Mass., May 13, 1882.

SALT RHEUM. GEORGE ANDREWS, overseer in the Lowell Carpet Corporation, was for over twenty years before his removal to Lowell afflicted with Salt Rheum in its worst form. Its ulcerations actually covered more than half the surface of his body and limbs. He was entirely cured by AYER'S SARSAPARILLA. See certificate in Ayer's Almanac for 1883.

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.
Sold by all Druggists; \$1, six bottles for \$5.

The Poultry Yard.

A Poultry House.

Bearing in mind that fowls are supposed to be kept for profit, it will readily be admitted that their health, comfort and thrift during the season when they yield the most profitable returns, must be especially studied. Those conditions depend chiefly upon housing, feed and care, and yard room, to the first of which let us briefly direct our thoughts.

Poultry houses may be as sumptuous as palaces, or more humble than a shanty; either style may be well or ill adapted to its purposes. It is rare that persons intending to make money from keeping fowls, winter less than about a hundred hens; but when fowls are kept merely for the uses of the family, only a dozen or twenty hens are kept through the winter. The flock increases in spring, outgrowing its quarters in summer, and being reduced to first principles again in the course of the summer, autumn and winter, by the demands of the table. Thus, by the beginning of the year the flock consists of few beside the breeding fowls, and these supernumeraries are all in the fattening coop, or soon to take their places there.

I find there are a good number of persons every year who commence keeping fowls because their means are straitened, business poor, health broken down, or for some other similar reason. They usually wish to commence on too small a capital, and anticipate immediate and very profitable returns. Great profits can always be figured out; they are very deceptive. The profits may indeed come with experience after a year or two, but it is not safe to calculate upon them; hence, for the class of persons to whom I refer, the strictest economy is essential, and the construction of their own poultry quarters will commend itself.

Winter quarters for poultry must be warm. To secure warmth, the houses must not only be tight, but must be heated either by the sun, by artificial heat, or by the warmth of the fowls themselves. Close quarters in winter are by far the most economical. Two and a half feet of floor room to each fowl in the roosting and laying room is more than sufficient; but they must have an equally large feeding room where they can go by day, and a sheltered sunny yard besides. Thus for a flock of twenty fowls a building (or, better, a room) eight feet by twelve would be required, and this should be divided crosswise by a partition. It may be a "lean-to," fronting the south or southeast, with windows in front, or made with a roof having a long slope on the south side, with an ordinary greenhouse sash to each six feet, and a short slope of roof at the rear. Such a house may have the rear walls five and the front ones three or four feet high, while the peak of the roof is only seven. This affords standing room for a man, doors five feet high at one end and in the partitions, and plenty of room for the fowls and their appurtenances of feeding boxes, drinking fountain, laying boxes, roosts, dust-bath, etc.

During cold days, well-fed fowls will keep themselves warm in the sunshine under a shelter in their yard, or in the fowl house. The night is the trying time; and in spacious houses, where the roosts are far apart, and the ventilation such as is usually approved, the poor things almost freeze, and are set back in every way. In close quarters, they will keep one another warm. They crowd together naturally on the roosts to keep warm, and prefer the highest perches for the same reason, perhaps. Hence, ventilation is a very important consideration. Suppose we have a simple lean-to house, with greenhouse sashes for light. If this has ventilation in the peak, the openings will surely let out or draw off the warm air, and the

fowls will be benefitted only by the contact with and the radiation of heat from one another's bodies. If there is no peak ventilator, the warm air will rise from the fowls on the roosts (carrying with it their breath), strike the roof, and especially the sash, where it will be chilled and flow down to the floor. Here the carbonic acid of the breath will become separated in a notable degree, while the rest will rise through the mass of fowls, getting worse and worse as it takes the same course over and over again. A ventilating trunk, standing at the rear inside of the house, having an opening near the floor, will be somewhat warmed by the atmosphere of the upper part of the room, and will draw off the cold and foul air from near the floor, so that, without being subject to any drafts, the fowls will constantly have pure and moderately warm air surrounding them. In the summer the ventilator must, of course, draw the air from the top of the room, and peak ventilating doors should be used besides.

The position of the perches should be as nearly in the actual center of the space in roosting room as circumstances will permit. They should not be in front—that is, near the low or front wall, because at this point there is always a strong draft of air down from the roof and window. They should not be against the rear wall, because there is some draft here also, and this space must be kept clear for a passage-way, in the style of house which we are considering. The place of most even conditions, most free from drafts and most convenient, is therefore away from both walls. The perches should be low, not over two and a half feet high. In a low house two feet would be better. One reason for this is, that heavy fowls often hurt their bodies or their feet in flying or "flopping" down from high roosts; another reason is that the fowls on low perches are kept clear of the upper and lower air currents and the foul air. The perches should all be easily removable, separate, broad or half-round, on the same level and equally distant, in order that all the fowls may have an equal chance, and that they may not crowd too much.

A dry hillside, facing the southeast, is, in this country, generally a most favorable position for a hen house. If there is no danger from a rush of water, or from water in the soil, it is well to sink the floor nearly or quite to the depth of the front wall, and to use the earth which comes out to bank up against the rear wall. The walls may be of plank, stone or brick—the last probably preferable; the floor of cement, boards or (what is perhaps better than either) coal ashes sifted, leveled, wet, and pounded hard—about three inches thick. This makes an admirable floor—one from which the manure is easily scraped up, which is easily repaired, hard, dry, cheap, and may be laid at any time of the year.

The stone and brick work of a poultry house should be laid in very good cement mortar, and well pointed. This sets so hard that hens will not pick it out for lime; besides, it affords fewer crevices for vermin. The wood-work is best made of planed stuff, so that it can be painted in the joints when put up. This fills all cracks, and reduces the hiding place for lice to a minimum. The painting does not interfere with subsequent whitewashing, when that becomes desirable. Before the hens are put into a house, the windows must be protected by slats or (better) wire netting, or they will be quite likely to fly through.

Double-glazed sashes will be found a great protection; they are almost essential. The additional cost is not great. In moderately cold weather, the moisture from the breath of the fowls does not deposit upon these, while on single glazed sashes it not only deposits but drips. In very cold weather, the frost deposits on the single sashes to the thickness of half an inch in one night sometimes, but hardly at all on the double glass. The air space between the two glasses is a wonderful non-conductor of terrestrial heat, while both the glass and the air space let the heat of the sun pass through them nearly as easily as its light. Thus the heat once let in is trapped, so to speak, for it cannot get out, at least not by the way it came in.

I have given the plan for a small house. The principles of construction remain the same for large and small houses—low buildings; light from the south, southeast, or southwest; about two and a half feet of floor room to each fowl in the roosting room; low roosts and good floor; ventilation in winter.—*M. C. Weld, in Country Gentleman.*

LA MASTER & FERGUSON'S NEW REMEDY! A Sure Cure and Preventive of

Hog Cholera!

WHAT THE REMEDY WILL DO:

It will put your hogs in fine condition. It will improve their appetite. It stops coughing among hogs. It regulates the bowels, and arrests disease in every instance.

WHAT THE REMEDY HAS DONE:

TOPEKA, KAS., November 1, 1884.
L. MASTER & FERGUSON—Sirs: After losing eighty head of hogs by cholera, I began using your Remedy, and can say it has checked the disease and entirely cured many of the sick ones. I heartily recommend it not only as a preventive but a cure. My hogs are all doing well.
Yours, &c., H. H. STANTON,
Prop'r Pacific Hotel.

We guarantee this Remedy to be superior to any Hog Medicine, and we are ready to prove it by a practical test. Ask your druggist for it or send direct to us. Take no other.

One and a half pound Trial Package, sent for \$1.00. Ten-ounce can, 60 cts per pound. 25 pounds for \$12.50. Write for circular and Treatise on Hog Cholera. Address LA MASTER & FERGUSON. AGENTS WANTED. Topeka, Kansas.

BURNS'

Hog Cholera & Quinsy Cure.

Not Only a Preventive but a Sure Cure.

To introduce this remedy, I will on receipt of \$1.00, and 16c. for postage, send one package of the above medicine, and guarantee it to cure four hogs of the above diseases, or 25 chickens of Cholera, or I will refund the money. Price, \$1.00 a package or \$10.00 a dozen. For testimonials, address Wm. McK. BURNS Concordia, Kas.



PRINCESS.—1 hrd fleece, 26 1/2 lbs.; fourth fleece, 26 1/2.

R. T. McCULLEY & BRO., LEE'S SUMMIT, JACKSON CO., MO.

Breeders of PURE SPANISH MERINO SHEEP—Vermont Register 400 Rams unequalled for length and quality of staple, constitution and weight of fleece; 240 selected by R. T. from the leading flocks of Vermont, especially for retail trade. The line of blood, coupled with the high character they possess, insures a reproduction of their excellent qualities. At prices to correspond with wool.

Also, Light Brahma and Plymouth Rock Chickens and Bronze Turkeys. All orders promptly filled and satisfaction guaranteed. Catalogue free.

THREE SHORT-HORN Bulls!

Good Ones.

For Prices and Pedigrees, write to

C. STONE, Jr.,
Leavenworth, Kas.

INCUBATOR.

JACOB YOST, the Inventor and Manufacturer of the Kansas Economy Incubator,

offers to manufacture and sell them at the following low prices, with full instructions:

No. 1, 100-Egg capacity, \$12; No. 2, 150 \$15; No. 3, 250, \$20.

Or, on receipt of 50 cents, he will furnish a book containing directions how to make and use this incubator. Also how to make a good brooder to mother the chicks, and what and how to feed them to make them ready for market in 8 or 10 weeks; also how to manage your hens to keep them laying all winter, as well as how to prevent disease; besides a sure cure for roup and cholera.

This incubator is a success. I have hatched 75 per cent. of the eggs without testing, and raised 90 per cent. of the chicks with my Brooder.

JACOB YOST,
Address P. O. box 818, North Topeka, Kas.

TO KANSAS FARMERS AND RANCHERS:

We have correspondents in the Eastern States and special facilities for handling

KANSAS FARMS AND RANGES.

If you have a Farm or Ranch to sell or exchange, send complete description. Address

Kansas City Real Estate and Loan Ass'n
Room 29 Shadley Building, KANSAS CITY, MO.

IVERS & POND PIANOS

UNEXCELLED IN
Beauty of Tone, Elegance of Finish,
—AND—
THOROUGHNESS OF CONSTRUCTION.

The IVERS & POND PIANOS are the result of the most extended experience, greatest skill and ample capital. Eighty of these pianos have been purchased and are in daily use by the *New England Conservatory of Music*, the most important musical college in the world.

Sold by responsible Dealers everywhere throughout the United States.

Fully Warranted for Five Years.
Illustrated catalogue furnished free on application.

GENERAL WARE-ROOMS,
597 Washington St., Boston, Mass.

WELLS, RICHARDSON & CO'S NEW IMPROVED

BUTTER COLOR

Used by best Creameries and Dairies BECAUSE it is the Strongest, the Purest, the Brightest and the Best. — IT WILL NOT — Color the Buttermilk or Turn Rancid. It contains no Acid or Alkali. It is not our old Color, but a new one so prepared in refined oil, that it cannot change.

— MAKES —

BEWARE of imitations, and of all other oil colors, for they get rancid and spoil the butter. See that our trade mark, a dandelion blossom, is on the box, and the signature of Wells, Richardson & Co., is on the bottle and TAKE NO OTHER. If the dealer does not keep it, write us to know where and how to get it without extra expense.

YELLOW BUTTER

Sold by druggists, grocers and merchants. Four sizes, 15c, 25c, 50c, \$1.00. WELLS, RICHARDSON & CO., Burlington, Vt.



Is CHEAP, STRONG, easy to apply, does not rust or rattle. Is also A SUBSTITUTE FOR PLASTER, at Half the Cost; outlasts the building. CARPETS and RUGS of same, double the wear of oil cloths. Catalogue and samples free. W. H. FAY & CO., Camden, N. J.

LOWEST PRICES AND BEST MILLS

SINGLE MILL, \$185.

LIGHT DOUBLE MILL including 50 & 23 in. Saws, 15 H. P. Portable Engine and Boiler, Drive-belt and Lever Setting Head Blocks, \$950.

HEAVY STANDARD MILL, including 60 & 30 in. Saws, 40 H. P. Engine and Boiler and Drive-belt, \$1575.

ENGINES & BOILERS, STATIONARY, and on Wheels, 10 to 100 H. P. Send for Catalogue. C. & A. POTTS, Indianapolis, Ind.



Stewart's STOCK REMEDY. Is a Tonic, Appetizer and Blood Purifier for all live stock. The best Condition Powder in the world. 25 CENTS.

NEW 'Singer' Model Sewing Machines only \$15

Including an \$8.00 set of extra attachments of 9 pieces and needles, oil and usual outfit of 12 pieces with each. Guaranteed perfect. Warranted 5 years. Handsome, durable, quiet and light running. Don't pay \$30 to \$50 for machines no better. We will send ours anywhere on earth before paying. Circulars free. Save \$15 to \$35 by addressing 231 N. Dearborn Ave., Chicago, Ill.

THE UNION HORSE-POWER

Has the Largest Track Wheels, DOUBLE GEARED, No Rods, Chilled Bearings and LEVEL TREAD.

Union Thresher Separator and Cleaner, Premium Farm Grist Mill, Feed Cutters, etc. Write for Descriptive Catalogue FREE. W. L. BOYER & BRO., Philadelphia, Pa.

Self Cure Free

Nervous Debility, Loss of Manhood and Weakness, etc. A favorite prescription of a noted specialist (now retired.) Druggists can fill it. Address DR. WARD & CO., LOUISIANA, MO.

The Home Circle.

Two Women.

A grandma sits in her great arm chair;
Balmly sweet in the soft spring air.
Through the latticed, lilac-shadowed pane
She looks to the orchard beyond the lane.
And she catches a glimpse of a woman's
dress
As it flutters about in the wind's caress.
"That child is glad as the day is long—
Her lover is coming—her life's a song."
Up from the orchard's flowery bloom
Floats fragrance faint in the dark'ning room
Where grandma dreams, till a tender grace
And a softer light steals into her face.
For once again she is young and fair,
And twining roses in her hair;
Once again blithe as the lark above,
She is only a girl, and a girl in love!
The years drop from her their weary pain;
She is clasped in her lover's arms again!
The last faint glimmers of daylight die,
Stars tremble out on the purple sky,
Ere Dora flits up the garden path,
Sadly afraid of her grandma's wrath.
With rose-red cheeks and flying hair
She nestles down by the old arm chair.
"Grandma, Dick says, may we—may I—"
The faltering voice grows strangely shy.
But grandma presses the little hand:
"Yes, my dearie, I understand!
"He may have you, darling!" Not all in
vain
Did grandma dream she was a girl again!
She gently twists a shining curl:
"Ah, me! the philosophy of a girl!"
"Take the world's treasures, its noblest,
And love will outweigh all the rest!"
And through the casement the moonlight
cold
Streams on two heads—one gray, one gold.
—Ex.

Surely the happiest life for man
Is not the fevered life that brings
A storm of stubborn questionings,
And baffled ends where all began.
But his who neither looks behind,
Nor on the shadowy space before,
Nor swerving sideways to explore
Life's darkness learns that he is blind.
Who, heedless of all vain dispute,
And weary voices of the night,
Seek only to observe aright
The bit of path before his foot.
Think not to please all men, strive as you
will,
'Twere vain impossible; for there remaineth
still
The man whom naught can please or satisfy
By noble effort or by full endeavor,
By warmest impulse, in no way whatever,
Of such as he, set heart and mind at ease;
Go on thy way, and take no heed of these,
For so 'twill be forever.

Some Health Hints.

Rheumatism.—Those subject to rheumatism very often feel tired, dejected, with or without loss of appetite. The body may not ache, but it does not feel fresh. Probably there is a little headache, but more often a fullness in brow or eye-balls, and the patient has but little heart for his ordinary employment, and things that interested him only the day before, now appear devoid of any value. If he thinks back, perhaps he will remember that for a day or two previously he has not been living quite so abstemiously as he ought. Well, he may call this little illness a mere fit of indigestion, if he pleases, but it is indigestion of a kind that has detrimentally increased the uric acid in his blood. Let him take a Turkish bath at once, if his doctor will permit it, and live by rule again.

The living by rule includes a certain amount of daily exercise in the open air. Without this, no rheumatic person can expect to be long free from aches and pains and wearisome ennui—almost as bad to bear as pain itself. As to diet, it will greatly depend on the age. The young require more nourishment than the middle-aged, but old people must have their little often, and it must be well cooked and easy of assimilation.

Sleeping Rooms.—Persons who are moderately intelligent on other topics, appear to have small thought, or that very perverted, on the subject of hygiene in their sleeping rooms, and especially those occupied by children. The ventilation of a bed chamber cannot be too carefully attended to; and, as says Horace Mann, "seeing the atmosphere is forty miles deep all around the globe, it is

a useless piece of economy to breathe it more than once." Yet nine mothers out of ten will carefully close all the windows, "for fear of colds and night air," and leave two or three children to sleep in a stifling atmosphere, and see no connection between the colds and throat troubles they have, and the vitiated air she compels them to breathe night after night. Let the morning air and sunshine into the bed-room as soon as possible after the occupants have risen, and if there be no sunshine, and it is not raining, let in the air. Do not make up beds too soon after they are vacated. You may get your house tidied sooner, but it is neither cleanly nor healthful to snugly pack up bed clothing until the exhalations of the sleepers' bodies have been removed by exposure to the air.

Cistern Water.—Cistern water is generally better for washing purposes than to drink. The water collected in the cistern is mostly rain water, which comes from the roofs. Cisterns may be built of iron coated with coal-tar paint to prevent them from rusting, but probably the most common are made of brick work, lined with cement. The nature of cistern water will depend largely upon the kind of roof from which the water is collected. It should never be obtained from a zinc or tin roof, as there is danger of enough metal being dissolved by the action of the water to make it poisonous. If some simple device can be made so as to shut off the admission of water into the cistern at will, it will greatly facilitate the possibility of obtaining cleaner water. By this means the first flow of water from the roof is turned aside, and dust, leaves, excrement of birds, etc., are prevented from getting into the cistern. Every cistern should be provided with a pipe for ventilation, and also covered so as to prevent anything but air and water getting into it. In addition to this, cisterns should frequently be thoroughly cleansed, certainly three or four times a year, and even oftener if necessary.

About Colds.—It is not a correct practice after a cold is caught, to make the room a person sits in much warmer than usual, to increase the quantity of bed-clothes, wrap up in flannel and drink a large quantity of tea, gruel or other slops, because it will invariably increase the feverishness, and in the majority of instances prolong, rather than lessen, the duration of the cold. It is well known that confining inoculated persons in warm rooms will make their small-pox more violent by augmenting the general heat and fever; and it is for the same reason that a similar practice in the present complaint is attended with analogous results, a cold being in reality a slight fever. In some parts of England, among the lower order of the people, a large glass of cold spring water, taken on going to bed, is found to be a successful remedy, and, in fact, many medical practitioners recommend a reduced atmosphere, and frequent draughts of cold fluid as the most efficacious remedy for a recent cold, particularly when the patient's habit is full and plethoric.

White and Black vs. Color.

A writer in the *Scientific Monthly* repeats the often-made statement that the white paper printed with black ink, of our books, is the chief source of the prevailing defective eyesight of the civilized nations, and suggests a change to colored paper with inks of complementaries—green paper and red ink, for instance. He argues that the rays of the sun are reflected by a white body and absorbed by a black one, and that we print our newspapers and books in direct opposition to the plainest correct principles of optical science. A book or newspaper as now printed being read by us, the eyes do not see the letters, which being black are non-reflective; the outlines of the impressions of the type reach the retina, but they are not received by the spontaneous action of that organ. The white surface of the paper is reflected, but the letters are discriminative efforts of the optic nerves. This constant labor irritates the nerves, and when long continued, exhausts their susceptibility. As proof, the writer cites the well-known fact that the human eye cannot long sustain the glare of a white surface without injury. The sunlight reflected from fields of snow, unrelieved by colors of other objects, or from white sand of the desert is, the world over, productive of ophthalmia.

There is some truth in this; but it is the "too much" only that hurts the eye,—and

that can be produced by colors even sooner than by white. Where letters are to be seen at all, there must be an impression made upon the optic nerve. This impression must be of sufficient strength to make its ends vibrate, which vibrations in turn produce in the nerve cable the chemical changes that reach the brain, where sensation results. The white light affects all the optic nerve ends, since it is a "combination" of all colors, while each color affects only a part of these (Van Bezold.) Now, it seems evident, that if the whole eye responds to light waves, it will not become tired as soon as if certain parts only are affected. To be visible, the light from colored and gray surfaces contrasted with that of letters of different hues, must be much stronger than that from a white surface with black letters upon it. It would not be possible to read in the subdued light of our studies if the leaves of our books were colored in some secondary or tertiary color; and stronger light would hurt the eyes, even if the above theory about partial affection should not be a fact.

As far as the first objection is concerned, it is evident that we do not "see" the black letters, except as empty spaces of certain forms, very much as a teacher sees the absentees in his class; but experience and logic prove that the contrast between white and black is greater than that between any two colors. No one will say that the difference between something and nothing is not greater than the difference between that something and one of its parts. Analogies from the field of sound prove that "not seeing is after all seeing."—*Prof. Walters.*

Recipes.

Here is a new way to make a rice pudding. Wash a small teaspoonful of rice in cold water; then put it into a quart of cold milk; add salt and sugar and vanilla to your taste, and a small lump of butter. Put this into the oven two hours before it is to be eaten; stir it occasionally. Follow these directions carefully, however skeptical you may be, and you will be pleased with the result.

Excellent pies are made of canned currants. Take one cupful of them, half a cupful of sugar, one tablespoonful of flour, beaten with the yolks of two eggs. Bake with an under crust, then frost the top with the whites of the two eggs and two tablespoonfuls of powdered sugar. Be sure to beat the sifted flour with the yolks, then there is no danger of little lumps of undissolved flour spoiling the good look of the pie.

Beef dripping, which is so useful in place of lard in many dishes, should be clarified; this may be very readily done by pouring boiling water over it, and stirring it so that the impurities will be washed out, and will settle to the bottom. Let it cool, and the dripping will rise to the top; if it is not quite so clear as you would like to have it, put it into a clean sauce pan, and after beating it, strain it through a piece of muslin.

A nice dish for dessert is made by soaking half a pint of tapioca in cold water for two hours, then let it boil gently until it softens, slice canned peaches and put into a pudding dish, and pour the tapioca over them. Bake until the tapioca is perfectly tender; serve with sugar and cream. Dried or evaporated peaches may be used for this dish, and if they are properly cooked and softened it is almost as good as when the canned fruit is used.

Gen. Grant's political views, before he became a candidate for the presidency, were the subject of much speculation. A gentleman who was with him at the West, before he was appointed lieutenant general, told him one day that he had just been asked what his politics were. "Did you give the parties any information?" was the quiet query. "I did not," was the answer, "for I don't know what your politics are." Knocking the ashes from his cigar, the General continued: "When I resided at the South I had the opinions and prejudices of southern people against the Republican party. I brought those opinions and prejudices with me when I came to Illinois. Had I taken active part in politics, I should have been with the party opposed to the Republicans. I watched Mr. Lincoln's course, and was satisfied with his patriotism. But these are not the times for parties. Indeed, in this crisis there can be but two parties—those for the country, those for its foes. I belong to the party of the Union. 'Those who were

most earnest in carrying on the war and putting down the Rebellion have my support. As a soldier, I obey the laws and execute the orders of all my superiors. I expect every man under me to do the same. When Mrs. Grant left Washington for her western home she remained a short time in New York at the Fifth Avenue hotel. Several gentlemen called upon her, and in the course of the conversation congratulated her on the elevation of her husband, and expressed a hope that he would be successful in this campaign. Her whole manner, quite dignified and reserved, seemed to express surprise that any one could doubt his success. Pausing a moment she replied: "I have no doubt but the General will succeed, for he is a very obstinate man." This remark ended the conversation.

Englishwoman Wants to Know.

I do not quite understand the "rice stitch;" is it crochet? Have any of the lady readers tried the recipe for French candy in the FARMER a few weeks ago? Under what conditions does the candy "dough" harden?

I should so much like to hear a little about the culture of peanuts, where to get seed, and to know whether they would be likely to buy them (say a few bushels) at the country stores, or whether they would have to be shipped.

I should like to get a start with bees; how should I set about it?

Kate Mercer and her mother were in the ship's cabin (June 1884.) The vessel was tossing and rolling; the winds were howling; the waters bursting through the vessel; and the crew were working hard at the pumps, while the passengers were running about, screaming and wringing their hands. They knew if help did not come speedily they must all perish. Kate sat quite still and her calm face quieted many of the ladies; even the Captain called her a brave little girl. Her mother was faint with fear when Kate drew out her Bible and said: "Mother, the Captain's chart is no good now; I'm going to ask him to look at mine."

Captain Joyce started to see the frail child making her way on deck, but she checked his speech. Holding up the open Bible, she said—"Captain, let us all ask the Great Captain to save us. He can still the storm."

Not a word of answer only a sudden rustling, and hundreds were on their knees praying the Master of the storm to help them. Lightning and thunder were making great confusion, but all kept their places; all prayed as those about to perish only can pray. Suddenly a white speck is seen in the distance—"A sail! a sail!" is sobbed rather than spoken from man to man. The strange vessel came nearer and nearer, and soon all were safe on board. God had preserved them in answer to prayer. So let our prayers ascend to the Mighty Captain, daily, hourly, and let us believe He will answer those who "ask in faith, nothing wavering."

ENGLISHWOMAN.

[The peanut subject will have attention next week.—Ed. K. F.]

As a rain-drop foretells a storm, so does a pimple upon the human body indicate health-destroying virus in the blood, which can be neutralized and expelled only by Dr. Harter's Iron Tonic.

50 ELEGANT, New Embossed and Satin CHROMO CARDS, name on, 10c. F. Lawrence, Hartford, Wis.

40 Love-Hest Chromo Cards you ever saw. 40 styles with name 10 cents. O. CARD CO., Yellow Springs, Ohio.

50 Perfumed, Embossed, hidden name, &c. Cards. Sample Book and 51 scrap pictures 10c. Globe Co., Northford, Ct.

50 Embossed, Perfumed and Hidden Name CARDS and Acts Sample Book for 7c. 50 Emb. Pictures &c. AMERICAN CARD CO., NORTHFORD, CONN.

50 CARDS all perfumed, New designs, little beauties, Gold Chromo, Verses, Motives and Hidden Name, with an elegant prize, 10c. Ivory Card Co., Clintonville, Ct.

WANTED.—Ladies or Gentlemen to take nice light, pleasant work at their own homes (distance no objection). Work sent by mail. \$2 to \$5 a day can be neatly made. No can a thing. Please address at once, Glob. M'g Co., Boston, Mass., box 5344.

Fun, Facts and Fiction.

SATURDAY EVENING DANCE!

A PAPER FOR THE PEOPLE.

Devoted to Society, Lodge, Amusement and Dramatic News, good literature, etc. Will be published especially for the State of Kansas. Terms, \$2 a year; \$1 for 6 months. Specimen copy free.
Address H. O. FROST & SON, Publishers, Topeka, Kansas.
Clubbed with the KANSAS FARMER for \$2.75.

The Young Folks.

If We Would.

If we would but check the speaker,
When he spoils his neighbors' fame,
If we would but help the erring,
Ere we utter words of blame;
If we would, how many might we
Turn from paths of sin and shame.

Ah, the wrongs that might be righted
If we would but see the way!
Ah, the pains that might be lightened
Every hour and every day,
If we would but hear the pleadings
Of the hearts that go astray!

Let us step outside the stronghold
Of our selfishness and pride;
Let us lift our fainting brothers,
Let us strengthen ere we chide;
Let us, ere we blame the fallen,
Hold a light to cheer and guide.

Ah, how blessed—ah, how blessed
Earth would be if we'd but try
Thus to aid and right the weaker,
Thus to check each brother's sigh;
Thus to talk of duty's pathway
To our better life on high!

In each life, however lowly,
There are seeds of mighty good;
Still, we shrink from souls appealing
With a timid "if we could;"
But a God who judgeth all things
Knows the truth is, "if we would."

How a Great Manufacturing Concern Grew Up.

In an illustrated description of the Baldwin Locomotive Works, of Philadelphia, the *Scientific American* last summer gave the following interesting account of the origin and growth of this now immense establishment, showing that like most of the leading manufacturing concerns of the present day, it was started on a very modest scale, with little idea by its founders of the magnitude it was to attain:

The Baldwin Locomotive Works, of Philadelphia, had an humble beginning. Mathias W. Baldwin, the founder, was a jeweler and silversmith, who, in 1825, formed a partnership with a machinist, and engaged in the manufacture of book-binders' tools and cylinders for calico printing. Mr. Baldwin then designed and constructed for his own use a small stationary engine, the workmanship of which was so excellent, and its efficiency so great that he was solicited to build others like it for various parties, and was thus led to turn his attention to steam engineering. In 1831 he built a miniature locomotive for exhibition, which was so much of a success that he that year received an order from a railway company for a locomotive to run on a short line to the suburbs of Philadelphia. The difficulties attending the execution of this first order were such as our mechanics now cannot easily comprehend. Tools were not easily obtainable; the cylinders were bored by a chisel fixed in a block of wood and turned by hand; the workmen had to be taught how to do nearly all the work; and Mr. Baldwin himself did a great deal of it with his own hands. It was under such circumstances that his first locomotive, christened Old Ironsides, was completed and tried on the road, November 23, 1832. It was at once put in active service, and did duty for over a score of years. It was a four-wheeled engine, weighing a little over five tons; the driving wheels were 54 inches in diameter, and the cylinders $9\frac{1}{2}$ inches in diameter by 18 inches stroke. The wheels were of heavy cast-iron hubs, with wooden spokes and rims, and wrought iron tires, and the frame was of wood placed outside the wheels. The boiler was 30 inches diameter and 7 feet long. The price of the engine was to have been \$4,000, but only \$3,500 was actually paid for it by the railroad company. The Ironsides attained a speed of 30 miles an hour, with the usual train, and was said at the time to be superior to English locomotives then made, on account of its "light weight, small bulk, and the simplicity of its working machinery."

In February, 1834, Mr. Baldwin completed his second locomotive for a railroad in South Carolina. In it was embodied a "half-crank" improvement, for which he obtained a patent. The driving wheels were made of solid bell metal, the combined wood and iron wheels previously used having proved objectionable. The general features of this second locomotive were followed in most of the machines built by Mr. Baldwin for several years. Five locomotives were built in 1834, when the new business was

fairly under way, and in 1835 a building was erected for the work, which occupies a part of the present site on Broad street, this original structure now forming the storeroom boiler shop and principal machine shops. In the six years from 1835 to 1840 inclusive, 152 engines were turned out at the works; and, though there were not many changes in design, there was a call for larger engines."

In 1842, Mr. Baldwin patented what has since been considered the greatest of his improvements in engine building, the six-wheeled connected locomotive, with the four front drivers combined in a flexible truck. The first engine of this class weighed twelve tons, and its performance was so successful that orders for similar ones came in rapidly. The adoption of this plan of building also led to the immediate increase of the weight of locomotives, and in 1844 several were built weighing eighteen and twenty tons. From this time on the works steadily grew until they finally reached their present immense proportions. The area now covered by the works on Broad street, Philadelphia, is rather more than nine acres. When running full, they give employment to 3,000 hands, and are capable of turning out 600 locomotives a year, or two for about every working day of the year. Their actual production for the last forty-two years ran from 14 locomotives in 1843 to 557 in 1883, showing a grand total for the 42 years of 6,986.

There are about 15,000 locomotives of all kinds in actual use in the United States, the Pennsylvania railroad leading with 1,100, the New York Central coming next with 700, after which come in order Chicago, Milwaukee & St. Paul; Baltimore & Ohio; Erie; Chicago & Northwestern; Philadelphia & Reading, and Chicago, Burlington & Quincy. The Baldwin Locomotive Works has furnished a large proportion of these, but it has further made locomotives for almost every country in the world. Russia has been a liberal purchaser, many have gone to Central Europe, Australia has many of these American engines, and South American roads have been principally supplied from here.

The Mouse-Eating Spider.

About three years ago I succeeded in getting a live specimen at last, or rather three of them, all together, in a nice box fronted with wire netting. I bought them from a native, who sells cigars and walking-sticks on the market wharf in Bahia, a town on the coast of Brazil.

For some time after they commenced their voyage they ate nothing, though I put flies and cockroaches into their cage. Then I offered them bits of fresh-killed raw beef, which they seemed to suck; and then, as if this had whetted its appetite, to my great disgust one killed the other two and sucked them till only the dry shells were left of them, bloating itself visibly in the process.

When it began to get cold I filled up the box with hay, under which it retired and went to sleep, and in that condition was forwarded by rail from Southampton to the Zoological Gardens in London, where I next saw it in a splendid glass cage, labeled with a Latin name several inches in length, and composed expressly for it.

They called it the "mouse-eating spider," because it seemed to prefer the bodies of young mice to anything else. At first it used to drain them of blood as vigorously as it had served its late companions, but after a bit it got to know there were more in the larder, and that it could have as many as it wanted, so it would cut out the top of the head with its sharp nippers, suck the brains and leave the rest.—*Pleasant Days.*

A railroad conductor bet Gorman, of Quincy, Ill., that he could not pick up 100 eggs laid on the ground a yard apart inside of thirty five minutes. The eggs were to be picked up and deposited in a basket, one at a time, and the basket was to remain stationary where the first egg was placed. Gorman thought he had an easy walk-over, but the railroad man placed the eggs in a straight line along the side of the depot, and the basket at one end, so that Gorman had to run up and down the line with each egg separately. At the end of twenty minutes he had picked up only twenty-five of the eggs, and had to give up the contest. A local mathematician figured up that it would take about six miles of travel to pick up the 100 eggs.

How the Big Bear of Santa Rosa was Caught.

The moon was nearly full. It was one of those marvelously clear nights such as the countries of dry air alone can show, when the moon seems like a ball of quicksilver hanging in the sky only half a mile away, when every cliff or scar or jutting crag in the mountain stands out and overhangs the mountain's base, and the deep shadows of the canyons seem solid hills of jet trying to overtop the giant mass beside them. About 250 yards away, upon the leeward side of the dead cow, the party halted and tied their horses, while some of them went ahead on foot to reconnoiter. Behind a little knoll, a hundred yards or so from the bait, they stopped. Over the dead animal half a dozen coyotes were snarling and feeding, but no bear was there.

Hours passed away, when there was a sudden lull in the noise of the coyotes, and they began to sneak away from the bait. The crack of brush was heard, too, in the chapparal, and in a minute a huge mass of shaggy blackness emerged. At nearly two o'clock in the morning the bear had finally decided to eat, and started toward the carcass.

Quickly the men went back for the horses. The horses knew as well as their masters what was coming, and each one trembled like a leaf as the great horse-hair girth was "cinched" as tightly as the long running strap could draw it. Don Francisco Machado, one of the owners of the ranch, was selected to make the first throw. They rode quietly up to within about one hundred yards and then, like a flight of arrows, the six horses shot forward beneath the impulse of the spurs. If such a charge be not "into the jaws of hell" it is very much like it. Certain it is that more men can be found to lead a charge like that of the Light Brigade than to lead such a one as Don Francisco led.

At the clatter of the hoofs the bear rose with a savage growl from his supper. Right up to within fifteen feet of the brute rode Don Francisco, with his brother, Don Juan Machado, and a friend close behind him. Another brother, Don Jose Machado, and two other horsemen split off and pressed upon the other side of the victim. Wheeoo, wheeoo, went the noose twice around the rider's head as he approached the bear; whizz went the noose as it flew from his hand. With a faint zip it fell over the bear's head and in a twinkling the other end of the rope was wound around the horn of the saddle and the noose drawn tight with a sudden jerk. The bear, instead of being pulled off his feet or trying to loosen the riata, made a rush for Don Francisco, but the quick horse he rode sprang forward fast enough to keep the riata tight, and in a moment another noose, from the hand of Don Jose, dropped over the bear's head from behind; but it also went under one foot, making the noose catch over the shoulder. Vanly the horse set himself back upon his haunches. No horse could hold such a hold as that, and Don Jose had to drop his riata.

Don Francisco now tried to jerk the bear sideways so as to get him off his feet or to get him to raise his feet so that they could be easily noosed by his companions. His horse sprang beneath the spur like a snake from coil, but the riata tightened on a weight no horse could overthrow. Meanwhile noose after noose aimed for the bear's legs whizzed through the air. But he would not keep a foot clear of the ground long enough for a successful throw, and his movements were so irregular that it was impossible to base calculations upon them so as to cast the loop in time. But in a moment more zip came another loop over the bear's head and fell full around his neck. As it tightened he rose upon his feet, while both loops were pulling in opposite directions. In a twinkling his paws were beneath them, in a moment he had them both in his mouth. Such strength surprised and alarmed his spectators. The air was filled with Spanish ejaculations, and the worst of it was that both fore paws were now so protected that neither one could be lassoed. Amid the "Carrajo!" an "Carrambas" and "que diablo es este" one of the riatas, frayed and cut half in two by teeth and claws, parted beneath the strain, and before another cast could be made the second one gave way. The great bear was again free, and two of the best hands were empty.

But the bear was free for but an instant. The very incarnation of fury, he made a

rush at Don Jose, whose horse wheeled with a whirl that would have landed an ordinary rider in the claws of the enemy. Just as he rushed upon him, open-mouthed and raging, another noose came with a sudden snap around his head, catching in his mouth and tightening on the instant behind his teeth and behind his ears. As he reared upon his feet another one fell over his head upon top of the first one, and by the two he was jerked over backward, and then there was a wild confusion of horses and men and ropes and bear and Spanish interjections and cries of "Agarra un pie," "Pronto," "De veras es el diablo," etc. Before one of his feet could be secured he had so cut the second riata around his neck with his claws that it gave way and had turned himself over and was again upon his feet. The noose in his mouth still held, and as he raised one paw to get that loose, zip landed another loop right over the paw. In a twinkling that paw was outstretched, pulling the bear so that he raised the hind foot upon the other side. Quicker than it can be told that foot was caught up by a dexterous fling from Don Francisco and outstretched. Another riata was cast over his head, and by the aid of the two he was pulled backward, while by the riatas on his feet he was swung around. A horseman stood ready in front and another behind, each with riata in short coil and with a small noose ready to pick up the two loose feet. The front one was snapped the first time he raised it clear enough from the ground for the noose to pass under; and as this paw was outstretched and the bear fell upon his belly the last foot was taken in a twinkling and the monster lay spread out upon the ground as flat and helpless as a dead frog.

His hide was on exhibition for months at Los Angeles and was the wonder of all old bear hunters. His head was more than the strongest man in the party could lift clear of the ground, and his weight was estimated at 1,800 to 2,000 pounds.—*Forest and Stream.*

A gentleman who fell asleep with a lot of matches in the pocket of his pea-jacket, woke up and found that he had a smoking jacket on.

Kansas City to New Orleans.

I have much pleasure in advising you that for the especial accommodation of the large number of people in the west who will attend the World's Fair, at New Orleans, the Memphis Short Route South is now running two daily through trains, each way, between Kansas City and Memphis, with a daily line of Pullman Buffer sleeping cars, Kansas City to New Orleans.

No other line runs through cars between Kansas City and New Orleans. There is no other direct route from the West to the South.

J. E. LOCKWOOD,
Gen'l Passenger and Ticket Agent.
Kansas City, Mo., Dec. 5, 1884.

WASHBURN COLLEGE

TOPEKA, : : : KANSAS.



WINTER TERM BEGINS WEDNESDAY, JAN. 7, 1885.

OPEN TO BOTH SEXES.

Four Courses of Study—Classical, Scientific, Academic, Business, Personal supervision exercised. Separate Christian Homes provided for young women. Ten Instructors employed. Excellent appliances of Library, Apparatus and Cabinet. Expenses reasonable. PETER McVICAR President.

GUIDE TO FRUIT CULTURE

It is a sumptuously illustrated book of over 70 pages. It tells how to grow fruits of all kinds, gives honest descriptions of all WORTHY SMALL FRUITS and others, representing the largest stock in the United States. It contains full instructions for planting, pruning, and obtaining Fruit Trees and Plants, and is replete with information invaluable to all interested in fruit culture, especially beginners. Price, with plates, 10 cents; without plates, 5 cents. Price-Lists FREE.

J. T. LOVETT, Little Silver, N. J.

THE KANSAS FARMER

Published Every Wednesday, by the
KANSAS FARMER CO.

H. C. DEMOTTE President
E. S. BROWN Treasurer and Business Manager
H. A. HEATH General Business Agent
W. A. PEFFER Editor

TERMS: CASH IN ADVANCE.

Single Subscriptions:
One copy, one year, \$1.50
One copy, six months, 1.00

Club Rates:
Five copies, one year, \$5.00
Eleven copies, one year, 10.00

A person may have a copy for himself one year free, by sending us four names besides his own, and five dollars; or, ten names, besides his own, and ten dollars.

ADVERTISING RATES

Made known on application. Orders from abroad for advertising must be accompanied by the Cash.

KANSAS FARMER CO.,
Office, 273 Kansas Avenue, Topeka.

Forty-five iron establishments that had closed, started up during January.

Bull City, Osborne county, has a Shipping Association, for marketing stock and farm products.

At a meeting of the stockholders in Lawrence the other day it was decided to hold the Bismarck Fair September 7 to 12.

We have on file a letter from F. M. Mallenbruch, Brown county, on the use of listers. It will appear in our next issue.

There is to be a National Agricultural convention on the exposition grounds of New Orleans the 20th inst., continuing three days.

A friend in Cowley county sent in an article on forestry last week and promised several on the same subject. No. 1 will appear next week.

Although this has been a very severe winter, and a great many people were out of employment, there is no report of unusual destitution from any part of the country.

The ground hog case was not as glaring a fraud this year in Kansas as it was a great many times before. His day was full of sunshine, and there have been a few such since; but snow has fallen a dozen times since the day of his hogship's appearance.

We see by the *Capital* that Frank Durein, a saloon keeper in Topeka, was fined \$800 the day for selling liquor unlawfully; also \$200 for keeping a nuisance. The costs amounted to about \$300; total \$1,300. The sheriff was instructed to abate the nuisance and Durein was required to give bond for good behavior two years.

The Fourth Biennial report of the regents and faculty of the State Agricultural College (1883-4) is published. It contains reports of experimental farm work, lists of fruit trees and tame grasses recommended, besides much other useful information. We will have occasion to draw upon it for authentic facts often.

In *Babyhood* for February "The Baby's Bath," with all that pertains to it, by Marion Harland, makes one of the most interesting and practical subjects yet touched upon by this magazine. An article on "False Croup: Its Prevention and Treatment," is by Dr. John H. Ripley, professor of the diseases of children at the New York Polyclinic. Dr. Cyrus Edson, of the New York Board of Health, writes on "Poisonous Candy" in a manner calculated to make a vast difference in the purchases of certain kinds of colored confectionery if his advice were heeded. The department of "Nursery Problems"—queries by readers, with answers by the editors—is becoming exceedingly useful, comprising a great variety of topics of interest to all. 18 Spruce street (P. O. 3123), New York. \$1.50 a year.

THE LEGISLATURE.

A great deal of work was done last week, though no bills have yet become laws. A considerable number have been passed by the respective houses—that is, some bills have passed the Senate and some other bills the House, but none of them have yet passed both houses except in an amended form, which makes it necessary for action again in the house in which the bill originated. Last Friday the House agreed to go home and yet remain in session. Some of the members left the city, while those who had local bills to look after remained and got them in shape for passage when the House should be full again. The Senate adjourned over Monday.

Discussions have taken a wide range thus far, and some very important matters have been handled. There is no excitement, however, all the members of both houses being reasonable men. This is fortunate, too, for we may expect better results. Two years ago the House was extreme on railroad legislation, while the Senate was conservative; this year neither house is radical on that subject, though there are some very earnest members. Senator Kelly, of McPherson, delivered a strong argument in favor of a reduction of freight rates on wheat, and while his argument will not be successfully answered, it is very doubtful whether the bill he advocates will pass. The same situation is found in the House. Several members are in favor of clothing the commissioners with more authority. There has been a general reduction of rates under and by reason of suggestions of the Board of Railroad Commissioners, but it has been purely voluntary. The people seem to be satisfied with what has been done, and the pressure is not general for placing more power in the commissioners. The KANSAS FARMER believes that the Legislature ought to establish certain general principles, leaving the railroad companies to manage their own affairs within the lines marked. Let the commissioners be empowered to enforce the law.

Mr. Stine, of Wyandotte, introduced a bill to prohibit cock fighting in Kansas. The bill ought to pass. Mr. Anahony, Leavenworth, introduced a bill to authorize cities to establish public libraries. The object of this bill is good. The people, especially the young people of cities, need facilities for reading. A great deal of interest is taken in the bill to provide a uniform system of text books for the public schools; a law of that kind is very much needed, but it must be carefully guarded with a view of economizing the people's money, so that our citizens may not be taxed so heavily for books whenever they change residence. They want to save money by any change that is made in the law, and they are right. We are paying too much for our books.

A bill to establish a board of pardons passed the House. It authorizes the Governor, with the consent of the Senate, to appoint three persons, one of whom shall be an attorney at law, to be known as the board of pardons, whose duty it shall be to meet at least two and not more than four times in any one year, at the State Penitentiary, to consider the advisability of pardoning any convict in said penitentiary or commuting his sentence in any case referred to them by the Governor. Said board shall so far as practicable, diligently inquire into the facts, and report the substance thereof, with their conclusions and recommendations, to the Governor. The members of the board are to receive five dollars a day for actual service at the meetings and for the time occupied in going to and returning from the place of meeting, also their actual traveling

expenses. This law is intended to make the matter of granting pardons more systematic. There is a great deal of work attending this pardon business of recent years, and the Governor ought not to be required to investigate the merits of every case. The judgment of three men, after thorough investigation, will be better than that of one man without examination, or at most a very superficial one. The bill ought to pass.

The resolution proposing to re-submit the prohibition amendment to the people elicited an earnest discussion in the House, and it was indefinitely postponed by a vote of 71 to 33, to which afterwards a few votes were added, making it 83 to 35. The Senate disposed of the same matter in the same way.

The bill proposing amendments to the prohibitory liquor law was before the committee of the whole Thursday afternoon, and nine sections were agreed to in the House. This bill was prepared by the committee on temperance; it was made up from the bills introduced by different members and referred to the committee. It does away with some of the offensive features of the law and adds some new and better ones. It permits druggists only to sell intoxicating liquors. They are to obtain authority from the probate judge on petition signed by twelve freeholders in the county who are voters. They may sell liquors on prescriptions of physicians and on statements of citizens verified by affidavit, showing the use for which the liquor is wanted. Physicians may prescribe liquors for persons who need them, but to none others, and in no case shall they assist persons to obtain liquors for use as a beverage. The bill sets at rest the cider and wine question by providing that nothing in the act shall be held to prevent any person from making cider from his own apples or wine from his own grapes. It authorizes county attorneys to call witnesses before them and examine them concerning their knowledge of unlawful traffic in liquors, and it requires the sheriff to take possession of liquors in certain cases and destroy them. Any body may complain against a dramshop as a nuisance and have the same abated. It is in the nuisance cases that liquor, bottles, &c., shall be destroyed.

The sugar bounty bill was made a special order, and after full debate in the House was rejected. It may be that the proper thing was done, yet we regret the defeat of the bill. It will be interesting now to see how the members that voted against the bill will vote on the bills to donate the people's money to sundry private and local enterprises.

The bill to protect cattle against Texas fever is a strong bill, but no one can now say what its provisions will be when the final vote upon it is taken.

The geological survey bill has had a hearing, but there is no certain indication now as to what will be done with it.

Several insurance bills are pending, and it is to be hoped that a good, strong measure in the interest of the people will be provided. A great deal of money is unjustly taken from policy holders both life and fire.

An interesting debate took place in the Senate on a bill to establish a labor bureau—a department of the State government in the interest of working people.

The number of bills introduced in the House up to Saturday was 430, and in the Senate 275.

Farmers' Institute at Sabetha.

From C. H. Isely we have a brief outline of proceedings at Sabetha, for which we thank him. Cold weather, bad roads, and home needs prevented

some persons from attending who would otherwise have been present. As it was, the attendance was fair and a great deal of good was done. J. E. Price was made president and T. L. Bundage secretary. Five sessions in all were held. At the first, Tame Grasses and Corn Culture were discussed by J. M. Boomer, E. F. Bouton and others. Professor Shelton entertained the people during most of the second session in a lecture on Farm Experiments. His listeners turned questioners, and many interesting facts were brought out. Third session was opened by C. H. Isely with a paper on Farm Life—boys and girls at home, and that was followed by Prof. Graham on Education for Farmers' Boys. Prof. Popenoe discussed Insects of Kansas. The addresses of these gentlemen elicited a great many questions. [That is one source of benefit in these institutes—questions and answers.] Wheat culture provoked a spirited discussion. Our correspondent says there is a very general disposition in that region to discontinue the culture of wheat and pay more attention to grass and stock.

Mixed farming was discussed at the fourth session by James Cleveland, J. M. Kenreigh and others, and W. S. White talked on cattle and Jo. Stevens on hogs. These were followed by others in brief remarks.

The last session was occupied chiefly by Prof. Cunnick on Silk Culture, and Messrs. Rabbit and Price on draft horses.

The Institute organized permanently with M. Coleman, president; J. M. Boomer, vice president, with a business committee consisting of J. M. Kenreigh, W. S. White and John McCoy.

A Righteous Judgment.

A good mechanic—one capable of doing first class carpenter and joiner work, and who had much of it to do in Topeka, was overtaken by whisky, and he became reckless, drunken, worthless, neglecting his family. His wife and children suffered for necessities while he was spending his money and time in rumshops. His wife died, the children became paupers and were scattered. One of them for herself and the others brought suit against half a dozen men who kept saloons in Topeka and whom she and her mother had notified and warned not to sell liquor to the man who ought to protect them.

Last Saturday a verdict was returned into court allowing \$1,500 to the children as civil damages, and \$600 more as exemplary damages—\$2,100 in all.

This is a righteous judgment. When men will destroy families and make paupers and outcasts of innocent women and children, they ought to be made to pay as far as possible for the ruin they make. If there is a worse character in all the world than the rum seller he hides himself from the gaze of good people. Whenever a man begins to sell drams he begins to make drunkards, thieves, counterfeiters, house burners, home destroyers, heart breakers and child slayers. The whole catalogue of crimes lies at his door. No wonder that decent people want to get rid of all such.

Mr. D. W. Brockway, Harvey county, writes that snow in that region was ten inches deep and remained a week in '72. The present winter the ground was covered with snow six consecutive weeks in December and January, the depth ranging from one and one-half to six inches. He says, also, that in the winter of '78-9 the ground was covered with snow about six weeks. Mr. Brockway also informs us that farmers in Harvey county are taking great interest in fruit growing.

New Spirit in the Union Pacific.

Charles Francis Adams, president of the Union Pacific Railroad Company, wrote a letter to the Board of Railroad Commissioners of Kansas last week in which he states that whatever may have been the character of the management of the Union Pacific in past years, he proposes to so conduct its affairs that the people will be faithfully served. He recognizes that railroads are public corporations, and that unless they are made to accommodate the people they ought not to exist. He wants to cultivate friendly relations with the people and communities all along the line of the road. He enclosed copies of letters which he had addressed to heads of departments on the Union Pacific proper and on the Kansas division, directing them to study the situation and be friendly with the people.

This is very encouraging. Kansas people had learned to look upon the Union Pacific as an enemy, and they were not wrong, as one of the letters forwarded by Mr. Adams shows. The company so discriminated against a new salt making industry as to kill it. Mr. Adams says this is wrong. The company must help to build up the country, not to tear it down. He says the people must furnish the business of the road, and if it does not work for their interests it simply depriving itself of its chief source of supplies.

We repeat: This is very encouraging. If the spirit manifest in these letters is to govern the management of the Union Pacific railroad, a new era of prosperity will soon appear along the lines of that magnificent system. Railroads and the people ought to be co-workers. Their interests are common. They ought to be the very best friends.

Kansas Short-horn Breeders.

Last week in Topeka the third annual convention of the Kansas Shorthorn Breeders' Association was held. O. W. Bill, president, E. M. Shelton, secretary. Cold weather prevented some members from attending.

Aside from the routine business, some instructive addresses were delivered. Col. Harris read a good paper—"What shall we breed for?" Hon. F. D. Coburn talked about—"The trouble with shorthorns—some odious comparisons." "The place of fashion in Shorthorn breeding" was discussed by H. H. Lackey, and Col. S. A. Sawyer talked "How to sell Shorthorns." J. M. Hunter spoke of "Fashion and Fancy in Shorthorn breeding." A number of other gentlemen took active part in the discussion.

Officers elected for the ensuing year are: President, W. A. Harris, Lawrence; vice president, J. B. McAfee, Topeka; secretary and treasurer, E. M. Shelton, Manhattan. The executive committee comprises ex-Governor G. W. Glick, of Atchison; O. W. Bill, Manhattan; S. F. Bennett, Safford.

New members were received and honorary members appointed as follows: New members—A. H. Lackey, Peabody; A. W. Brewerton, Marion; J. F. True, Newman; A. F. McCaslin, Topeka; F. M. Gifford, Milford; H. W. McAfee, Topeka; M. Waltwire, Carbondale. Honorary members—F. D. Coburn, of the Kansas City *Live Stock Indicator*; Judge W. A. Pepper, of the *KANSAS FARMER*; Col. Ed. Haren, secretary of the Kansas City fat stock show.

The constitution was amended, changing the date of the annual meeting to the second Tuesday in December.

Sprinkle a little lime (air slacked) over the potatoes in your cellar. It will tend to prevent rot and purify the air of the cellar.

Kansas Trotting Breeders.

A State association was formed in Topeka last week by persons interested in breeding trotting horses. The charter members of the new association are as follows: J. Q. A. Sheldon, Manhattan; E. A. Smith, Lawrence; R. I. Lee, Topeka; A. W. Rollins, Manhattan; C. M. Sheldon, Burlingame; J. Willits, Topeka; J. C. Greenawalt, Atchison; O. P. Updegraff, H. Hamsboro, Guilford Dudley, E. G. Moon, Topeka; A. S. Olney, Minneapolis; Wm. Ducan, Carbondale; Charlie E. Waters, Minneapolis; A. E. Ranson, Salina; W. A. Roberts, Minneapolis; Harris & Rodgers, Solomon City; Henry Vesper, Topeka.

Officers elected for the first year:—President, E. A. Smith, Lawrence; secretary and treasurer, J. Q. A. Sheldon, Manhattan.

It was decided to meet annually at Topeka on the third Tuesday in November, and the initiation fee was placed at \$10.

The bond of the treasurer was fixed at \$5,000, and the Blue Valley bank of Manhattan designated as the depository.

Geo. W. Guser, B. I. Lee, A. A. Smith, W. A. Roberts and A. S. Olney were appointed a board of censors.

The following stakes were then opened to be trotted some time during the months of August or September, 1885: Foals of 1880, 1881, 1882, entrance \$25 each, \$5 to be paid at the time of entering, (April 1, 1885.) \$10 June 15 and \$10 ten days before the race.

A stake for foals of 1882, called the *Chicago Horseman* stake, was opened to April 1. To this stake the *Chicago Horseman* adds \$200.

Gossip About Stock.

E. L. Shockey, of the firm of Shockey & Gibb, Lawrence, importers and breeders of Hereford cattle, writes us under date of 11th inst.: Mr. Gibb and myself have consolidated thoroughbred Hereford herds, and have, in connection with Thos. J. Higgins, of Council Grove, Kansas, a herd of grade Hereford and Short-horn breeding cows from which we will raise steers to graze and feed and save the choice bull calves for the western trade.

R. A. Steele says it is a good plan to teach young calves to lick salt while they are running with the cows. At weaning time they should have tame grass while learning to eat bran, corn, oats or whatever fed, with plenty of good water. When calves are in full condition he puts an ounce of saltpetre to one pound of salt and feeds in troughs so they are sure to get it, often mixing bran in the preparation. No danger of any dying even if they are fat, treated as above described. He says he would be ashamed to have an animal die with blackleg or from turning in on cornstalks and pasturing corn with smut on it.

The display of draft horses at the New Orleans Exposition is said to be very good. Messrs. Dillon have some excellent samples on exhibition.

A Missouri farmer says it is a waste of feed and damage to the calf to give it all the grain it will eat. "Whenever the weather begins to get warm, say the latter part of February or first of March, take the corn away altogether, and feed them a little sheaf or shelled oats, or bright clover and timothy hay; corn is too heating in warm weather. If you have tame grass, turn them on early, as calves will make a good living two or three weeks before the older cattle will. I have bunched calves fifteen years, and when treated as above, I never lost any with blackleg, and always got a good growth during summer."

In the last year there was an increase in this country of 4 per cent. in horses, 3 in mules and 3 in cattle; 2 per cent. in swine, with a small decrease in sheep. There has been a decline in values, of 2 per cent. in horses and mules, 5 per cent. in cows, 2 in other cattle and 10 in sheep and swine.

The average value of different kinds of stock in the country in 1884 was: Horses,

\$73.70; mules, \$52.33; cows, \$19.70; other cattle, 23.02; sheep, \$2.14; swine, \$5.02. The value of cattle aggregates \$1,107,000,000; value of all domestic animals, farm and ranch, \$3,456,000,000.

C. K. Beckett, Rice county, Kansas, writes to the *Live-Stock Indicator*: To ninety head of calves, I feed two quarts of corn per day each and sorghum, with good shelter and warm water. To eighteen half-blood Angus bull calves, I feed fifty quarts of corn, and they are fat. To seventy-five yearling steers, I feed 12 bushels of corn per day, and they will pull down 900 pounds.

Inquiries Answered.

SOWING OATS.—Would you give your views or those of experienced farmers as to the best way of sowing oats in corn land, whether to plow them under, cultivate them in, or drill them.

—Plow the ground well, harrow soft and smooth, and then drill.

LISTING CORN.—In listing corn is it better to list deep and then drill shallow—say about one inch and a half, or is it better to list shallow and drill deep, say about 3 or 4 inches?

—Run the lister deep and drill shallow, unless your ground is hard and rough. In that case, do not use the lister at all.

REMOVING TREES.—How old can catalpa trees be transplanted with safety?

—A tree may be removed at almost any age; but the older it is the more care is required. There is now growing in Topeka a cottonwood tree eighteen inches in diameter. It was removed a year or two ago at a cost of over a hundred dollars. But catalpas may be removed with little danger at any age from one to four years. We prefer one year olds.

SILO FEED.—A correspondent inquires why animals are fond of food preserved in silos. Can he tell why he is fond of cabbage and turnips and pumpkins and apples kept over a few months? Well, that is the reason animals like fresh feed saved for them. There is no fermentation in good silos. If the stuff ferments it spoils. The object of the silo is to preserve the food in its fresh state, and it is done in good silos.

CONVENTION.—There is no danger of any constitutional convention being proposed by the present legislature. The people do not want any convention just now. Politicians and lawyers will have to jog along with the old one a few years longer.

HIDEBOUND TIMOTHY.—If your timothy is too thick, a good harrowing would do it good. Have the teeth sharp.

Can you tell me through your valuable paper whether it will pay to top dress winter wheat with the ashes from burnt straw stacks or would it be better to put them on the corn ground?

—Ashes will not injure any plant unless it is put on too thickly. We would not advise ashing wheat. Better put it on the corn ground.

QUALIFICATIONS OF A FARMER.—An Illinois subscriber wants advice from the *KANSAS FARMER*. He says he is just past 48 years of age, is able bodied, strong for one of his age, quick at discerning things that are for his benefit, takes good care of tools, not a bit lazy, is a good business manager, but he is troubled with rheumatism. He also has several boys, but does not know what they will do in case he should conclude to change his place of abode. In addition to all this he owns a section of raw land in Kansas. Had he better come to his Kansas land? That is the question. It would be impossible to advise safely in such a case. Our correspondent is not too old to open a farm in Kansas; and if his boys would come along and help, they could soon have a good farm if the land is good. But the boys may not want to come; they may not be fit for farmers if they should come; and then, they might quarrel over the property after it is made. This is a good country. Kansas is prospering, and an industrious, sober, intelligent and enterprising man can hardly fail if he knows how to take care of what he earns. Of one thing we feel pretty certain: If our correspondent stays where he is, he will have to run pretty fast to get away from that rheumatism.

GRAPE TRELLIS.—Would you please describe the mode of making trellis for grape vines in the *FARMER* at a date as soon as possible? The arm system preferred.

—It is simply the setting of posts at convenient distances along the rows and stringing wires on them, or fastening wooden

slabs or narrow boards instead of wire, the first one fifteen to eighteen inches above the ground, and others, as many as you wish, above that at about the same distance above one another. The arm system means only training the vines to spread, like arms to run on the wires or slats. The prettiest trellis of this kind we ever saw was only three feet high consisting of three wires. A trellis may be made of only one wire. In that case only two arms can be used. If there are two wires, four arms may be used, and so on.

Prof. Shelton—"I would advise orchard grass and red clover, one and a half bushels of the former, and four or five pounds of the latter per acre. We have a field of clover on the college farm, sown in 1872 on high prairie land which is now good as ever; it produces heavy crops without any fertilizing and to all appearances will be good one hundred years hence."

THE MARKETS.

By Telegraph, February 9, 1885.

STOCK MARKETS.

New York.

CATTLE—Receipts 1,100, shipments 500. Market opened lower and closed dull and weak; steers \$5 00a6 60; extra native steers, \$7 00a7 30.

SHEEP—Receipts 14,700. Market dull; sheep 3 50a6 00; lambs 5 00a7 00.

St. Louis.

CATTLE—Receipts 1,100, shipments 500. Market easier and a shade lower. Exports nominally 5 85a6 15; good to choice shipping 5 25a5 80.

SHEEP—Receipts 1,300, shipments 600. Steady. Common to medium 2 50a3 25, good to choice 3 50a4 25; extra, 4 50.

Chicago.

The Drovers' Journal reports:
HOGS—Receipts 18,000, shipments none. Market lower but steady. Rough packing 4 40a4 70, packing and shipping 4 75a5 10, skips 3 50a4 50.

CATTLE—Receipts 6 50, shipments none, eastern roads refusing to take stock on account of bad weather. Trade slow. Exports 5 90a6 25; shipping steers, averaging 1,30 to 1,500 pounds, 5 25a5 75.

SHEEP—Receipts 2,200, shipments none. Market steady. Common to medium 2 40a3 75; good 4 00a4 25; choice to extra 4 50a5 00.

The Journal's Liverpool cable quotes: Cattle 1c lower; best Americans 13c dressed.

Kansas City.

The Daily Live Stock Record reports:
CATTLE—Export steers 5 60; shippers 4 55a 4 60.

HOGS—Heavy: 4 50a4 70; mixed 4 15a4 25.

SHEEP—Sales 1 35a3 25.

PRODUCE MARKETS.

New York.

WHEAT—Cash a shade higher. No. 3 red 85½; No. 2 red, 92½.

CORN—Cash No. 3 51½a52; No. 2, 51½a63½.

St. Louis.

WHEAT—No. 2 red, 85½a86c cash.

CORN—Higher and inactive; 36½c cash.

OATS—Dull but firm; 29½c cash.

RYE—Higher; 65c bid.

BARLEY—Steady 60a80c.

Chicago.

WHEAT—Quiet. Daily prices strengthened on reports of damage to growing winter wheat and sensational war dispatches. February 77½a83½.

CORN—Strong and higher, partly in sympathy with wheat. Cash, 37½a37¾c.

OATS—Cash and Feb 27a 7½c.

RYE—Firm and higher at 63½.

BARLEY—Dull at 63a65c.

FLAX SEED—Quiet at 1 47.

Kansas City.

WHEAT—Cash nominal, February sold at 63½.

CORN—Cash No. 2 nominal, and February sold at 30½.

BUTTER—Receipts of choice fresh light and demand moderate except strictly fresh. We quote: Creamery, fancy, 30c; good, 22a25; fine dairy in single package lots, 19a20; roll, good, 12a 16; medium, 10a12; store packed 10 a 12; sour and poor, 4a6.

EGG—Supply still large, but market more steady. Shippers are offering 18c per dozen. Sales in single case lots at 20 per doz.

CHEESE—We quote: Full cream, 13c; flats, partly skimmed, 10c; Young America, 13½c.

POTATOES—In car load lots, peachblows, 55a 60c per bu.; neshanocks, 5 a55c per bu.; onions, 3 00a3 25 per bbl.; sweet potatoes, 50a60 per bu.; yellow sweet potatoes, 1 10 per bu. Turnips, per bu., 35a40. Apples per bbl., 2 50a3 00.

BROOM CORN—Demand good for fine, strictly green. Common hard to sell; We quote: Hurl 3a 4c; self working 2a3c; common 1a1½c; crooked ¾a1½c.

Horticulture.

FARM GRASSES--THEIR CULTURE.

A paper read by F. A. Williams before the Farmer's Institute held at Winfield, January 29, 1885, and published in the Telegram.

While the subject assigned me for today is one in which I have taken great interest ever since I came to this country, yet I am satisfied that there are others here whose experience would enable them to edify us all more than I can; and I am therefore glad that it is simply my duty to "set the ball rolling" or to open the discussion.

It is probably still thought by the majority of farmers in our county, that while tame grasses are both successful and profitable in the older states from which they came, it is not worth while in this new and fertile country to fool with them. To illustrate the impression still too common, let me give an incident. When I moved to Cowley county, in September, 1881, I brought a car load of stock and fed them on the road with timothy hay. It was heavily seeded and the floor of the car was pretty well covered with the waste hay and seed. "There," said a bystander as I was unloading my car, "is timothy seed enough to sow an acre of land, you ought to save and sow it." "Yes," said the other, "there's lots of nice seed, but you might as well burn it up as sow it here." And it did look like it just then, in the midst of the drought and hot winds; yet in three or four weeks the rains began, and we had the wettest fall, and the finest growth of wheat, for three years before or since, and those who had the pluck to sow grass seed that fall, got as fine a stand as was ever seen in Illinois.

It seems to me that the somewhat peculiar conditions under which we farm here are the very ones which should stimulate us to the increased culture of grasses. Our distance from market and the high cost of transportation take most of the profit from grain raising, and the two most important problems with us are how to save freight and labor. We do much toward solving the first problem, when we feed our grain to stock, and thus ship in concentrated form, but is not the second problem still more important, and could we not solve it by sowing part of our land in grass, and letting nature perform the labor of raising our crops, and our live stock do the work of harvesting them.

Take hog raising for example. It is admitted by most of our farmers that they are making more money out of corn and hogs than anything else, and yet could they not save half the labor, and nearly double their net profits, by putting half of their corn land into grass, and pasture their hogs on it? Clover is considered an essential to profitable hog raising in the older states, but here we try to raise hogs in a corral, ten rods square, and nothing but corn, corn, corn, from one year's end to another. It is claimed on good authority that an acre of clover will produce more pork than an acre of corn, but even suppose it only produce as much, is not the saving of the labor of producing an acre of corn a very large item, and is not the saving of machinery another important item? Then your hogs will be far more healthy on clover pasture half the year, than when confined in small lots and fed nothing but corn, and not only will your hogs be healthier and less liable to disease, but your pork will be far more wholesome and palatable, more likely to have the muscular growth, the sprinkling of fat and lean, which is so desirable in meat for our own eating. But the fencing of pastures is too great an expense, says one. Well, against that I put two items

not heretofore mentioned which I think will more than counterbalance it; first, your land will be growing richer all the time, instead of poorer, as it will in corn. I am sure it would richly repay every hog raiser in Cowley county, who has not already done so, to sow an acre of grass, (Alfalfa is my preference for hog pasture) for every ten head of hogs he intends to keep. Last summer I completed a hog pasture of about five acres--mainly of Alfalfa--and I have not made an improvement on my farm which has given me more satisfaction. My hogs would often refuse to come for their corn when called, and would keep on eating clover.

Perhaps I have said enough as to the desirability of tame grasses in this county, and I hope we will have testimony enough before this discussion is closed to convince those who are not already satisfied, that the raising of grasses in Cowley county is no longer an experiment, but--with proper knowledge of sorts adapted and culture, and the exercise of that knowledge--is a decided success. The seed of tame grasses in Cowley county being recognized, and their success under judicious culture granted, we should enquire first: What kinds of grass to grow? Writing for the State of Kansas, and more especially the central and western parts thereof, Professor Shelton of the State University, (one of our best authorities on this subject) names the grasses as follows in the order of their importance: For pasture, orchard grass, Alfalfa, red clover, English blue grass, perhaps meadow oat grass and timothy. Writing for Cowley county from the best light I can gather, the experience of others and my own, I would change his order a little and put Alfalfa first for pasture and timothy first or second for mowing. Let us notice briefly a few of the characteristics and adaptation of the grasses mentioned.

ALFALFA.

From my experience of 1882, I was disposed to rank red clover ahead of its western relative, but the latter made so much better growth, and furnished so much more pasturage both in spring and fall, last year, that I am now inclined to place it ahead. The great objection to it heretofore has been the high price of the seed, but that is being gradually removed, and last year it was quoted in Kansas City at but little more than the price of clover seed. The merits of alfalfa are the ease of getting a stand, its tenacity of life's power or enduring drought, very early and late growth, and amount of pasture or hay per acre. In this latter respect it exceeds any grass I have tried. Its detriments as a pasture grass are none, so far as I know; but it is open to some objection as hay, as it is difficult to cure and its first and heaviest crop must be cut in June when we are liable to frequent showers and to get our clover spoiled before being sufficiently cured to stack. Moreover, owing to its peculiar form, and amount of forage, it does not save well in stack, and if cut for hay should be put in a barn or shed, or else the stack thatched with prairie hay or millet.

Our old favorite

RED CLOVER

succeeds well in this country, and furnishes a large amount of either pasture or hay. For the latter, however, it is open to the same objection as alfalfa, of being difficult to cure and keep in stack. Prof. Shelton wrote of it some time ago: "When land is once seeded to clover it never 'runs out' as in the Eastern States, but thickens and spreads continually by self-seeding." A neighbor said once in passing my patch of orchard grass that I would "repent sowing it, for I could never get rid of it." I think he was mistaken, but if either orchard grass or clover will hold its own against the heat and dry spells of our climate, and not run out, then indeed is the future of Cowley county assured.

ORCHARD GRASS

is ranked first for pasture by Prof. Shelton. I cannot speak much of it from my own experience, but have seen one very fine field of it near Winfield, which furnished a large amount of feed the first fall after it was sowed. Prof. Shelton said of it a year or more ago, and I have not learned of his recalling his favorable opinion: "Two years ago in giving our experience with this grass, we stated that it had proven to be one of the very best and safest of all the pasture grasses that we had tried." The same must be said of it to-day with emphasis. We feel confident that it

will yield fully twice the feed that can be obtained from the same area of blue grass or timothy, and in nutritive qualities it is certainly greatly superior to blue grass.

Of English blue grass I sowed only a small piece in the spring of 1882, but got a good stand, and my horses prefer it to anything else when running in the field. Indeed they pastured it so close during the dry part of last spring that I feared I should never see it again, but as soon as I stopped pasturing it grew up and raised a fine crop of seed. I believe it for horse pasture especially very desirable, but it does not make much hay.

Timothy is, I believe, very successful in this county, and in view of the rapid disappearance of our prairie meadows, it behooves every farmer to sow at least enough of it to furnish hay for his own horses. I sowed three or four acres in May, 1882, on a piece of low, wet ground which had before been almost worthless and the following summer it produced as fine a crop of hay as I ever saw anywhere. Last year it did not produce so heavy a crop, but still the land paid better than it ever had before.

MEADOW OAT GRASS,

or Evergreen grass, has been very highly recommended by our best authorities, and is no doubt worthy of a trial by the farmers of Cowley county; but as I have neither tried it myself or seen it tried here I will not speak of it further; but hope we shall learn something about it in the course of this discussion.

CULTURE.

On this division of my subject there are three important points I would emphasize. First, thorough preparation of the soil. It is not likely that any farmer who is sufficiently enthusiastic and painstaking to try to raise tame grasses in Cowley county, will neglect this point, and yet we all need "limp upon line," and are often tempted to do things poorly when we are in a hurry, as farmers generally are. But if you have not time to prepare your grass-land well, do not sow at all. It will just be time and money thrown away. The ground should be old and well cultivated--it will not do to sow on prairie sod or on ground lately broken. It should be clean of trash, well plowed and then thoroughly harrowed. It is of the greatest importance to have the soil fine and well w. Then sow your seed--preferably with a seeder--cover well with a light harrow, and follow with a roller. Do not seed with any other crop. On this point all our best Kansas authorities and experience agree. There are, of course, cases where grass has succeeded with other crops, but this is the safe rule for Kansas climate, and where one side is doubtful and the other side safe, we should always take the safe side.

THE TIME TO SOW

is in the spring, and not too early in the season, when it is apt to be dry and windy. Wait until the spring rains commence, as a rule about the middle of April, and you are reasonably sure of a good stand. I have sown in May with very good success. The trouble with fall sowing is that the ground is almost always hard and dry in August and September, often almost impossible to plow, and even if plowed early and reduced to good condition, the showers at that period are so scanty and uncertain as to make grass growing unsafe. And if you wait till October, when the fall rains come, the grass does not get a sufficient start to withstand the winter.

In conclusion. One thing is certain: our prairie grass, like the Indian and the Chinese, "mus go." It remains for us to say whether our farmers and farmers shall be worn out or whether both shall be enriched by a judicious mingling of grass culture and dairying with grain farming. Our best authority on stock and grass says: "Tame grasses will carry at least 15 head of three-year old cattle on twenty acres from April 25 to November 15, or 6 1/2 months, equally as well as wild pasture will carry eight head from May 1 to October 1, or 5 months. In cutting both kinds of hay the difference is fully as great, aside from having the late pastures on tame grasses." In a late paper it is stated that Kansas farmers will sow more grass seed this spring than ever before. Shall we of Cowley county fall into line? This subject of raising tame grasses is a vital one to the farmers of this county; and if this discussion shall serve to increase the interest in their cultivation, it will be time and labor well spent.

Johnson Grass Seed.

Fresh, well-cleaned Seed for sale at \$2.50 per bushel. Cash to accompany order. Descriptive circular sent on application. JOSE HARRIS & CO., Selma, Alabama.

GRAPE VINES.

All varieties old and new. Including NIAGARA. Largest Stock in America. CATALOGUE FREE. SILAS WILSON, ATLANTIC, Iowa. Trees and Plants. Large stock of Fruit and Ornamental Trees, Small Fruits--especially Grape Vines,--Shrubs, and Evergreens. Low prices on Dwarf Keiffer Pear and Seedling Catalpas. Special facilities for Dealers. Price List free. KELSEY & CO., St. Joseph, Mo.

YORK NURSERY COMPANY

(Established 1870). Nurseries and Green Houses at FORT SCOTT, KANSAS. Largest Stock of Nursery and Green House Plants in the West. BEAUTIFULLY ILLUSTRATED CATALOGUE now ready. Mailed to applicants free. 100,000 Peach Trees in storage for immediate shipment. Also Apple, Apricot, Plum, Grapevines and Fruit Tree seedlings. 200 Acres in Nursery. Write for price list--Free. Address J. B. Wild & Bro., Sarcoxie, Mo.

The NIAGARA GRAPE

(The New White Grape.) The only bearing vineyard in Kansas. I will sell the rooted two-year old Vines at \$2 each, free from restrictions. In large quantities, to the vineyard, I can be made to make from a half net proceeds of receipts of fruit, at greatly reduced prices. Write for a Address: M. CRUMRINE, Junction City, Kas. Aut. of 2d Agent for sale of the New White Grape (1884) propagator and dealer in all the leading varieties of Strawberries, Raspberries, Blackberries, Gooseberries and Grape Vines.

Trees, Trees, Trees. IMMENSE STOCK.

100,000 Rooted Mulberry; 500,000 Hardy Catalpas (as an Apricot, Dwarf Jun-berry, and all other kind of Fruit, Forest and Ornamental Trees, Grape Vines, Small Fruits, etc. A PAPER devoted to fruit-growing Free for one year to those who buy \$1 worth of trees--100 Rooted Mulberry for \$1. 12 Corn and Grape, 1 4 Rooted Apricot \$1 and 122 other \$1 sets per mail, postpaid. Fruit Trees for Timber Farms. Send at once for a Price List. Address CARPENTER & GAGE, Bower, Jefferson Co., Neb.

TOPEKA SEED HOUSE.

Orchard Grass, TIMOTHY, CLOVER, :: BLUE GRASS.

Our Garden Seeds are direct from Growers, fresh and of uniform quality. Orders promptly filled, Seed Catalogue sent free on application. Address: DOWNS & MEFFORD, 78 Kansas Ave., TOPEKA, KAS.

FIRE! FIRE! FIRE!

Strawberries grown by an entire new process which saves at least 75 per cent. of the labor and expense of cultivation annually. It destroys weeds, insects, etc., saves summer-cultivation and re-setting of stens than once in eight years. I have the Largest and Healthiest Vines in this section, and the total cost of cultivation has been less than \$4.00 per acre this season. I have for sale hundreds of thousands of STRAWBERRY, BLACK and RED RASPBERRY PLANTS, my own growing, all warranted pure stock and No. 1 product. The above system is free to every purchaser of \$2.00 worth of plants, to others \$1.00. Send for Price List of Plants and full particulars. FRED LUCIA, Fruit & Veg. Genesee Co., Michigan.

Lee's Summit Nurseries.

BLAIR BROS., PROPRIETORS, Lee's Summit, Missouri.

Our Patrons, Orchards and Planters: We would respectfully call attention to our heavy supplies and most excellent quality of Nursery products consisting of Apple, Peach, Pear, Cherry, Plum, etc., Berries and Grape Vines of the various sorts. Also ornamental and shade Trees, Plants, Roses and Shrubs, Hedge Plants, Forest Tree Seedlings and Evergreens, from 6 in. to 4 feet. Prices low. Special attention is called to the fact that our agents are furnished with written certificates of authorized agency signed by us. We insist upon our patrons requiring agents to show these certificates, so as to avoid any mistakes or deception. Orders sent by mail promptly attended to. BLAIR BROS., Proprietors, Lee's Summit, Mo.

The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

THUMPS.—Please answer through the columns of the *Farmer* a remedy for thumps in a pig. Pig about six months old and in good condition. [This disease in horses is known as spasms of the diaphragm, caused by pressure on the phrenic nerve from a full stomach. In hogs it is caused by constipation or accumulation of hard dry feces in the rectum. Give a physic of oil and empty the rectum by injections. Change the feed to slops, or any diet which will relax the bowels.]

URTICARIA.—Have I overheat my horse? The hair is coming out in spots from the size of a pea to the size of a silver dollar, leaving the hide entirely bare. He is in good order and eats hearty. What shall I do to prevent it, and also to cause the hair to grow out again? [A rash of the skin occurs in horses in a plethoric condition. The exciting cause in such animals is sudden and severe exercise, getting them heated. Give Barb aloes pulverized 7 drachms, bi-carb soda 4 drachms, ginger pulverized 4 drachms; mix and dissolve in a pint of warm water; when cold enough drench. Feed mashes of bran or scalded oats when the bowels are relaxed; give 2 drachms of pulverized nit. potassium in the water; dress all parts affected once every two days with linseed oil 1 pint; carbolic acid 1 ounce; mix, and apply with a sponge or the hand.]

DISEASE IN HOGS.—Please prescribe for the following disease, which seems to be an epidemic among my hogs: Coat of animal becomes rough and staring, and in two or three days hog is attacked by a severe chill, followed by lameness, usually in right hind leg. Neck, chest, belly and ears become a dark purple color. Is very drowsy; anxious to be fed, but walks to trough with great difficulty. Temperature seems normal, except during the chill, when the belly and head are very hot. Animal remains in this condition for a week or ten days, when it suddenly appears better for a few hours, and then drops dead. Appetite during sickness is good. Breed of hogs, Small Yorkshire. Am very particular as to cleanliness of piggery, and feed swill and corn meal in moderation. Sulphur is the only remedy I have used. [Send to T. W. Lawford, Baltimore, Md., for a gallon of cold water dip, and use it as a disinfectant. Also, dilute some with water in proportion of 1 to 50 and give hogs a wine glass full three times a day.]

SPAVIN IN HORSE.—While driving my horse, during the past three months, and stopping for a few minutes, on starting him again, he cannot bear to step upon his right rear-foot. But after getting along on three feet for three or four steps, it passes away. He does not do this every time he starts after resting. He has the stringhalt slightly in his left leg. Please tell me what I shall do for him. [Spavin is probably the cause of lameness and stringhalt. Actual cautery or blistering, or both, may be resorted to as remedies.]

When all other remedies fail then try Dr. King's New Discovery for Consumption. Trial Bottles free.

Give a quart of meal a day to each of your young animals, and you will soon be praising them to your neighbors.

It is said to be a great damage to land to raise two crops a year, and yet the poorest farmers do it. One crop is weeds.

There is complaint among the grazers of live stock in Iowa that red top is threatening to kill out the blue grass pastures.

YOUNG MEN!—READ THIS.
THE VOLTAIC BELT CO., of Marshall Michigan offer to send their celebrated ELECTRO VOLTAIC BELT and other ELECTRIC APPLIANCES on trial for thirty days, to men (young or old) afflicted with nervous debility, loss of vitality and manhood, and all kindred troubles. Also for rheumatism, neuralgia, paralysis, and many other diseases. Complete restoration to health, vigor and manhood guaranteed. No risk is incurred as thirty days trial is allowed. Write them at once for illustrated pamphlet free.

TOPEKA MEDICAL AND SURGICAL INSTITUTE.
PERMANENT AND RELIABLE.

DRS. MULVANE, MUNK & MULVANE,
Physicians and Surgeons in charge.

Treat successfully all curable diseases of the eye and ear. Also catarrh of the nose, throat and lungs, by new and sure methods.

All Manner of Chronic, Private and Surgical Diseases Successfully and Scientifically Treated.

Patients Treated at Home, BY CORRESPONDENCE.

Send for circular and printed list of questions. Correspondence and consultation strictly confidential.

DRS. MULVANE, MUNK & MULVANE
86 east sixth street, Topeka, Kas 646.

FRANK CRANE,
Formerly of the firm of A. A. Crane & Son, Osco, Ill.

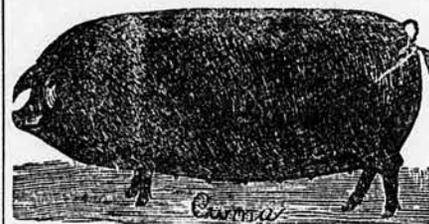
COMMISSION AGENT
—For the Sale of—

HEREFORD, POLLED ANGUS, GALLOWAYS, SHORT-HORN,
And Thoroughbred and Grade Cattle of all breeds.
Carload Lots a Specialty.

Stables, Riverview Park. Address
F. P. CRANE,
Stock Yards, Kansas City, Mo.

GRAPE VINES OF OVER 100 kinds Nursery
Established 28 yrs Delaware, Concord, Lady, Empire State, Niagara, Vengeance, Hayes, Early Victor, Lady and all the best, new and old varieties. Splendid stock. Prices low. Catalogues FREE. **GEO. W. CAMPBELL,** Delaware, O.

Pioneer Herd of Holstein Cattle
—AND—
DUROC JERSEY SWINE.



For beef, butter, and cheese, breed **HOLSTEINS.** For largest return on money invested in swine, breed **DUROC JERSEYS.** Choice registered animals for sale by **WM. A. GARDNER,** Oregon, Mo. Correspondence solicited. When writing mention this paper.

IF YOU WANT
A Young Sow bred to our crack boars,
IF YOU WANT
A Young Boar Pig,
IF YOU WANT
A Young Sow Pig,
IF YOU WANT
Any kind of Poland-China Swine,

POLAND-CHINA SWINE

IF YOU WANT
A lot of Plymouth Rock Fowls at \$1.00 each
IF YOU WANT
A Thoroughbred Short-horn Bull Calf,
Write to
MILLER BROS.,
JUNCTION CITY, KANSAS.



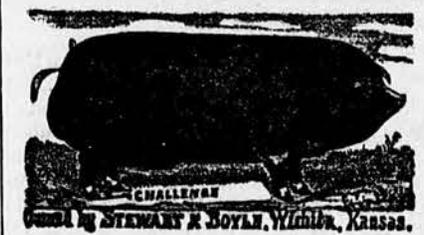
RANKIN BALDRIDGE,
Parsons, Kansas,
Breeder of Pure Poland-China Hogs. This herd is remarkable for purity, symmetry, and are good breeders. Black Jim, a prize-winner, bred by B. F. Dorsey, heads the herd. Stock recorded in Central Poland-China Record. Correspondence invited.



THOROUGHbred POLAND-CHINAS

As produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of Thoroughbred Poland-Chinas in the world. Shipped over 700,000 in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 16 sows and 10 males we are breeding from. Our breeders are all recorded in American P.-C. Record. Pigs all eligible to record. Photo card of 48 breeders free. *Swine Journal* 25 cts. in 2 cent stamps. Come and see our stock. If not as represented we will pay your expenses. Special rates by express.

Acme Herd of Poland Chinas



At the head of our select herd of 25 mated sows, stand two noted boars, Kentucky King 2661 and Challenge 4839, both prize-winners, and for individual merit unsurpassed in the State or elsewhere. Stock of all ages generally on hand for sale. Pedigrees "at-edge." Prices reasonable and satisfaction guaranteed. Address: **SEWARD & ROYLE,** Wichita, Kas.



ISAAC WOOD, Oxford, Kas.—PIONEER!
The swine stakes herd of the Southwest for three consecutive years. Comprising the blood of all the popular strains of the day. Six years a specialty. Pigs furnished not of kin. Quality of stock and pedigree first-class. Prices low, and favorable rates by express to all points. Pigs of different ages ready to ship, and orders taken for future delivery. Satisfaction guaranteed. For history of herd, see Vol. IV, page 31; Vol. V, page 47, and Vol. VI, page 37 Ohio P.-C. Record.



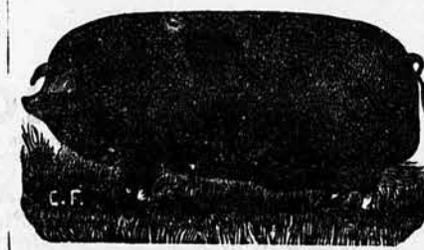
S. V. WALTON & SON,
Box 207, Wellington, Kansas,
Breeder of IMPROVED POLAND-CHINA HOGS of the highest type. All well pedigreed. Correspondence solicited.

MEADOW BROOK HERD



OF POLAND-CHINA SWINE.
Breeding Stock recorded in American and Ohio Records from Diffield 1875 A. P.-C. R. at head of herd. Always a pace with latest improvements of the favorite breed. Personal inspection solicited. Correspondence promptly answered.
JELLEY & FILLIEY, Proprietors,
KINGMAN, KANSAS.

ROME PARK STOCK FARM



T. A. HUBBARD, WELLINGTON, KAS.,
Breeder of Large English Berkshires, headed by the noted sire—Sweetstake, R. at S. cr. 10. G. n. er-1 Fulford and Jumbo. The Poland-Chinas, headed by the celebrated boars, Corn's Victor, Ohio King Hubbard's Choice, Jim Bisnie and Cleveland. The stock represents the best and is reliably bred and recorded in the Ohio and American Records. Also Short-horn Cattle for sale. For further information or first-class stock, call or write.

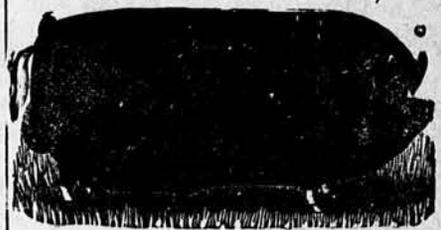
PURE-BRED Berkshire and Small Yorkshire SWINE.



We are breeding 25 of the best selected sows of the above named swine to be found in the country, direct descendants from Imported Sires and Dams. We are prepared to fill orders for either breed, of both sexes, at the very lowest prices. We have tried Small Yorkshires thoroughly, and are satisfied that they cannot be excelled as a profitable hog to raise. They are very docile and mature rapidly. Send for prices and catalogues to
WM. BOUTH & SON,
Winchester, Jefferson Co., Kas.

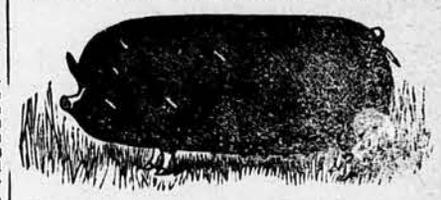
JAMES ELLIOTT

Ablene, Kansas,



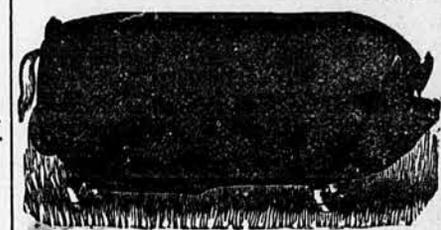
Breeder of HIGH CLASS BERKSHIRE SWINE. My herd is composed of twenty breeding sows of the leading families known to fame, headed by Carl of Carlisle 10439. My hogs are noted for size, uniformity, fine heads, broad hams, great depth, with short, strong legs. They are perfectly marked, having good coats of hair; with quality of bone that enables them to carry great weight, combining quick and easy feeding qualities. Stock all recorded in A. B. R. I am now prepared to fill orders for pigs, of either sex. Prices reasonable. Correspondence and inspection invited.

PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.



I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for pigs of either sex not akin, or for matured animals. Prices reasonable. Satisfaction guaranteed. Send for catalogue and price list, free.
S. McCULLUGH,
Ottawa, Kansas.

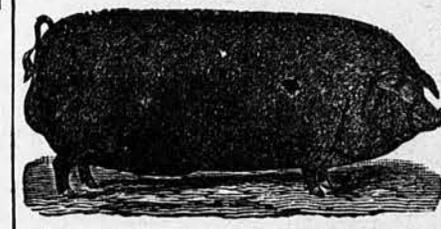
WELLINGTON HERD ENGLISH BERKSHIRES.



The Wellington Herd of well-bred and imported Berkshires is headed by HOPEFUL JOE 4889. The herd consists of 16 matured brood sows of the best families. This herd has no superior for size and quality, and the very best strains of Berkshire blood. Stock all recorded in A. B. R. Correspondence and inspection invited. Address **M. B. KEAGY,** Wellington, Kas.

Chester White, Berkshire and Poland China Pigs fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by **W. GIBBONS & CO.,** West Chester, Chester Co., Pa. Send stamp for Circular and Price List.

Poland-China and Berkshire HOGS.



We have for sale a fine lot of Poland-China and Berkshire Pigs, from 2 to 6 months old. Ours is the largest herd of pure-bred swine in the State, and the very best strains of blood of each breed. If you want any of our stock write us and describe what you want. We have been in the business many years, and have sold many hogs in this and in other States, and with universal satisfaction to our patrons. Our hogs are fine in form and style, of large size, quick growth, good bone, hardy and of wonderful vitality. Our Poland-Chinas are recorded in the American Poland-China Record.
RANDOLPH & RANDOLPH,
EMPORIA, LYON CO., KANSAS.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1868, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5 00 to \$50 00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

How to post a Stray, the fees fines and penalties for not posting.

Broken animals can be taken up at any time in the year. Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders, can take up a stray.

If an animal liable to be taken, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered, also he shall give a full description of the same and its cash value. He shall also give a bond to the state of double the value of such stray.

The Justice of the Peace, all within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray. If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray, may within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs. If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear and appraise such stray, summons to be served by the taker up; said appraiser, or two of them shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker up may have had, and report the same on their appraisal.

In all cases where the title vests in the taker up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the state before the title shall have vested in him shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Strays for week ending Feb. 4, '85

Riley county—F. A. Sohermerhorn, clerk. STEER—Taken up by Magnus Vilander, Big Timber, one red yearling steer, bush of tail mostly white, nick in left ear.

2 STEERS—Taken up by Chas Larson, Leonardville, two red steers coming 3 years old.

HEIFER—By same, one red and white spotted heifer, coming 3 years old, no marks or brands.

Chautauqua county—A. C. Hilligoss, clerk.

HEIFER—Taken up by W A Taukalev, of Salt Creek tp, Nov 25, 1884, one red roan yearling heifer, crop off top and bit out of each ear; valued at \$15.

COW—Taken up by J G Tenney, of Salt Creek tp, one dark red cow, crumpled horns, white all along belly and in each flank, heart-shaped in forehead, branded R on right side, 4 years old; valued at \$3.

HEIFER—Taken up by W D Vance, of Washington tp, Dec 18, 1884 one red yearling heifer, crop off left ear, and r-slope in right ear, white in face, branded R on right hip; valued at \$14.

Marion county—W. H. Hamill, clerk.

STEER—Taken up by John Odle, in Fairplay tp, one red yearling steer, with half crop off right ear, branded with letter T; valued at \$15.

Osage county—C. A. Cottrell, clerk.

COW—Taken up by Wm Strickland, of Scranton, Dec 13, 1884, one 2-year-old red cow, right horn off; valued at \$15.

STEER—Taken up by F L Jones, of Arvonia, Dec 2, 1884, one white steer with red spots crop on right ear, eye in left ear, indistinct brand on left hip; valued at \$25.

Pottawatomie county—I. W. Zimmerman, clk.

STEER—Taken up by J S Force, in Lone Tree tp, Nov 12, 1884, one red yearling steer, left ear slit, end of tail white; valued at \$23.

HEIFER—By same, one pale red yearling heifer, star in forehead; valued at \$18.

HEIFER—By same, one pale red yearling heifer, star in forehead, end of tail white; valued at \$10.

Ness County—James H. Fling, clerk.

COW—Taken up by George Norris, of Waring tp, Jan 17, 1885, one red line-back cow, L on left side; valued at \$2.

COW—By same, one dun cow, spot in face, branded on right side something like II; valued at \$20.

COW—By same, one white cow with calf, diamond-shaped brand on left side; valued at \$20.

STEER—By same, one 2-year-old brown steer; valued at \$18.

HEIFER—By same, one 2-year-old red heifer, slit in left ear; valued at \$15.

HEIFER—By same, one 2-year-old white heifer, slit in left ear; valued at \$15.

CALF—By same, one black calf, branded something like II on right side and diamond with line under on left side; valued at \$8.

Shawnee county—Chas. F. Spencer, clerk.

STEER—Taken up by Simon Main, (P. O. Dover), Dec 20, 1884, one light roan steer, 1 year old, no marks or brands; valued at \$15.

Greenwood county—A. W. Hart, clerk.

COLT—Taken up by I B Hohn, Janesville tp, Dec 22, 1884, one 3-year-old horse colt, pony stock, bright bay, star in forehead no marks or brands; valued at \$30.

STEER—Taken up by J E Oriswell, Janesville tp, Nov 12, 1884, one red and white roan yearling steer, mostly white, crop off left ear and slit in right ear, no brands; valued at \$25.

STEER—Taken up by M B Campbell, Eureka tp,

Jan 5, 1885, one red and white yearling steer, under-bit in left ear, no brands; valued at \$20.

HEIFER—Taken up by Cyrus Standley, in Madison tp, Jan 6 1885, one red heifer, white belly, white hind legs under-bit in right ear.

STEER—By same, one roan steer, left ear split.

STEER—By same, one black steer, left ear split.

HEIFER—By same, one red heifer, line back, no marks.

HEIFER—By same, one spotted heifer, both ears split.

STEER—By same, one red and white steer, both ears split, under-bit in left ear; value of last six animals, \$90.

Ottawa county—W. W. Walker, Jr, clerk.

HEIFER—Taken up by Vincent Krupecka, of Buckeye tp, one red heifer, brown face, 2 yea s old; valued at \$20.

Bourbon county—E. J. Chapin, clerk.

COW—Taken up by R A Johnson, of Pawnee tp, one red cow, 6 years old, white star in forehead, end of tail off; valued at \$20.

STEER—Taken up by A C Numer, of Marmaton tp, one red yearling steer, white on belly, faint brand on left hip; valued at \$15.

Strays for week ending Feb. 11, '85.

Cowley county—J S Hunt, clerk.

HEIFER—Taken up by William Mercer, in Bolton tp, January 22, 1885, one pale red 2-year-old heifer, JJ on left side slit ears; valued at \$20.

STEER—By same, one dark roan 2 year-old steer, ind-scribable brand on left hip slit ears; valued at \$18.

STEER—By same, one red line-back 2-year-old steer, branded H; valued at \$18.

Hodgman county—J. P. Atkin, clerk.

HORSE—Taken up by Isaac R Dilley, in Roscoe tp, Jan 23, 1885, one medium-size bay horse, L on left shoulder and V on left hip; valued at \$20.

Nemaha county—R. S. Robbins, clerk.

STEER—Taken up by Frank Riley, in Clear Creek tp, Jan 25, 1885, one white yearling steer, no marks nor brands; valued at \$18.

Jewell county—W. M. Stephens, clerk.

STEER—Taken up by R W Owen, Dec 25, 1884, one red steer, weight 650 lbs., no marks or brands; valued at \$20.

Decatur county—R. A. Reasoner, clerk.

COW—Taken up by J L Worthington, of Jennings tp, Nov 24, 1884, one light red cow, 9 years old, white belly and star in forehead, branded on left hip O A and on side with three indistinct letters; valued at \$30.

COW—By same, one dark red cow, 6 years old, white belly, same brands as first; valued at \$30.

HEIFER—By same, one red heifer, 2 years old, white face and belly, branded LOV on left side; valued at \$25.

STEER—By same, one earling steer, red and white, branded W V W on left side; valued at \$20.

Wabausee county—H. G. Lecht, clerk.

STEER—Taken up by I N Davis, of Mill Creek tp, Dec 22, 1884, one 2-year old white and red spotted steer, dim brand on left hip, no other marks; valued at \$22.

Allen county—R W Duffy, clerk.

STEER—Taken up by Wm Lynch, Jan 7, 1885, one red and white steer, principally white, bushy white tail, no marks or brands; valued at \$11.

Chase county—J. J. Massey, clerk.

MARE—Taken up by J H Wright, in Toledo tp, Jan 14, 1885, one light sorrel mare, no marks, supposed to be 6 years old; valued at \$50.

COLT—By same, one brown sucking mare colt; valued at \$25.

MARE—By same, one sorrel mare, no marks, supposed to be 2 years old; valued at \$50.

HORSE—By same, one dark brown horse, no marks, 1 year old; valued at \$35.

BULL—Taken up by P C Jeffrey, in Diamond Creek tp, Jan 3, 1885, one yearling bull, mostly red, with some white spots, white spot in forehead, small ring in right ear; valued at \$15.

MARE—Taken up by David McKee, in Bazaar tp, Jan 19, 1885, one brown pony mare, branded 1 on left shoulder and L on right shoulder, about 15 years old; valued at \$20.

MARE—By same, one brown mare with white face, both hind legs white half way up to the knees, 3 years old; valued at \$40.

COLT—By same, one horse colt (gelding), 2 years old; valued at \$30.

MARE—By same, one dark roan mare with small star in forehead, branded L on right shoulder, 4 years old; valued at \$40.

MARE—By same, one roan mare, light mane and tail, left hind foot white and white stripe in face, 3 years old; valued at \$30.

FILLEY—Taken up by John Tod, in Falls tp, one brown 2-year-old filley, right hind foot white, no marks or brands visible; valued at \$60.

Lyon county—Roland Lakin, clerk.

MARE—Taken up by H J Stratton, in Elmendorf tp, Jan 2, 1885, one 3-year-old half-pony mare, no marks or brands visible; valued at \$40.

MARE—Taken up by Ned Armstrong, in Emporia tp, Dec 3, 1884, one 3-year-old dark bay mare, white blaze in face both hind feet white up to first joint, no marks or brands; valued at \$60.

STEER—Taken up by C C Patten, in Reading tp, Jan 17, 1885, one yearling red and white steer, small and staggy; valued at \$15.

STEER—Taken up by Charles A Weaver, in Waterloo tp, Jan 8, 1885, one red and white spotted yearling steer; valued at \$15.

STEER—By same, one red and white-roan yearling steer; valued at \$15.

Strays for week ending Feb. 18, '85.

Woodson county—I. M. Jewett, clerk.

HEIFER—Taken up by J B Gray, in Eminence tp, Jan 8, 1885, one roan 2-year-old heifer, branded S on right hip; valued at \$15.

Elk county—J S Johnson, clerk.

STEER—Taken up by A B Swisher, in Greensfield tp, Jan 26, 1885, one red and white steer, 1 year old, no marks or brands; valued at \$15.

STEER—By same, one red and white steer, 1 year old, no marks or brands; valued at \$15.

STEER—By same, one white steer, 1 year old, branded O on right hip; valued at \$15.

Wabausee County—H. G. Licht, Clerk.

MARE—Taken up by Henry Salter, in Wabausee tp, Feb 1, 1885, one bay mare, about 12 years old, five feet high, branded C on left shoulder; valued at \$40.

Ford county—Sam'l Gallagher, Jr., clerk.

HEIFER—Taken up by Geo B Allen, in Croked Creek tp, one red and white 2-year-old heifer, under-slope off left and crop off right ear.

HEIFER—By same, one red and white 2-year-old heifer, branded J A K on right side.

Finney County—A. H. Burtis, clerk.

STEER—Taken up by David J Bell, in Garden City tp, one red and white steer, branded C on left hip, X and ind-scribable brand on left side and Z on right side, medium size.

KANSAS FARMERS' MUTUAL FIRE INSURANCE CO., ABILENE, : KANSAS.

OFFICERS: J. E. BONEBRAKE, President. C. H. LEBOLD, Vice President. W. A. MORTON, Secretary. INSURES FARM PROPERTY AND LIVE STOCK Against Fire, Lightning, Tornadoes and Wind Storms.

AGENTS WANTED in Every County in Kansas. For any information, address the Secretary, Abilene, Kansas.

Send For My New 24-Page Catalogue and GUIDE TO SMALL FRUIT CULTURE With illustrations of new and old strawberries, of new and old raspberries, blackberries, grape vines, etc., including short papers on their culture Free to all. B. F. SMITH, Lock box No 6. Lawrence, Ks

Headquarters for ENGLISH SHIRE AND NORMAN HORSES.

ROSEDALE STOCK FARM Wm. Thompson & Son, Maysville, De Kalb Co., Mo.

One hour's ride from St. Joseph, Mo., and two hours from Kansas City, Mo.

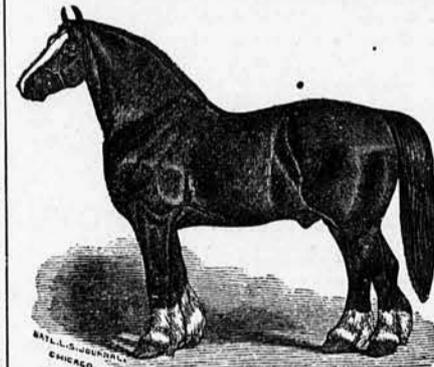
Three importations of Thirty Stallions and Mares now on hand—a grand selection to pick from.

LOCATION.—ROSEDALE STOCK FARM is situated 9 miles north of Osborn, on the Hannibal & St. Joseph R. R., and 39 miles east of St. Joseph, Mo. and 15 minutes ride west on the H & St. Joe R. R. from Cameron Junction, Mo.

Free conveyance furnished at Messrs. Chipps & Berlin's stable, close to depot at Osborn.

EVERY HORSE RECORDED and guaranteed a breeder. Send for Catalogue. Prices low and terms easy.

OVER ONE HUNDRED CLYDESDALE, ENGLISH DRAFT AND PERCHERON NORMAN Stallions and Mares arrived in August, '84.



Another importation just received, ages range from two to four years old. Our stock won fifteen premiums at the Iowa State Fair of 1884; also sweetstakes on Clydesdale stallions and yearlings on Percheron Norman stallions, 300 High-Grade Mares, in foal to our most noted horses, for sale. Advantages offered to customers at our ranch: Many years' experience in importing and breeding. Immense collections, variety of breeds, enabling comparison of merits. The best of everything. A world wide reputation for fair and honorable dealings. Close proximity to all the through railroad lines. Low prices consequent to the extent of the business. Low rates of transportation and general facilities. Visitors welcome at our establishment. Ranch 2 miles west of Keota, Keokuk Co., Iowa, on the C. E. I. & P. R. R.; 15 miles west of Washington, Ia. SINGMASTER & SONS, Keota, Keokuk Co., Iowa.

PERCHERON NORMAN, CLYDESDALE and ENGLISH DRAFT HORSES.

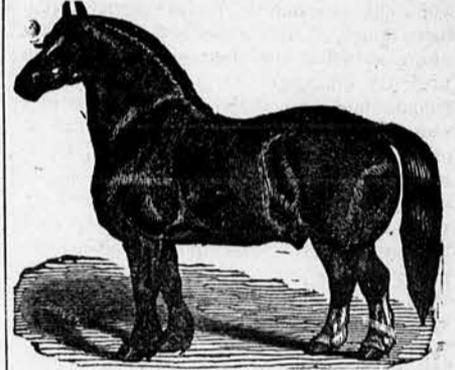


E. BENNETT & SON Importers and Breeders, Topeka, : Kansas. All stock registered. Catalogues free.



CRESS BROS., NORTH HILL STOCK FARM, Washington, Tazewell Co., Illinois, Importers and breeders of Clydesdale, English Draft and Norman horses. With our recent addition of a large importation August 20th together with those previously on hand have now one of the finest studs in Illinois. CLYDESDALES made a specialty. Quite a number of them have distinguished themselves both in Europe and America as prize-winners this season. All are superbly bred. Visitors welcome, and all parties in need of such high-class stock would do well to give us a call and save money, as we will convince you when you call. Send for catalogue. Reasonable prices. Terms easy.

175 HEAD OF IMPORTED CLYDESDALES Now on Hand.



The largest importation of Clydesdale horses, the largest breeder of pure Clydesdales—37 Mares now in breeding. Moderate prices. No equal opportunity can be found elsewhere to buy matured Stallions or young Stallions and Mares all ages. Persons invited to examine the stock. Correspondence invited. For particulars, call on or address

ROBERT HOLLOWAY, Alexis, Ill. GALBRAITH BROS., JANESVILLE, WISCONSIN, Breeders and Importers of CLYDESDALE HORSES.



Have at present on hand a splendid collection of Stallions and Mares of all ages, and every animal guaranteed. Our buying facilities being unequalled, we can offer our stock cheaper than the same quality can be bought at elsewhere. Send for illustrated catalogue. Correspondence solicited. Visitors welcome. Janesville is 61 miles from Chicago by the C. & N. W. railroad, and 20 miles from Rock Island by the C. M. & St. Paul railroad

MARYLAND FARMS.—BOOK AND MAP free. By C. E. SHANAHAN, Au'y, Easton, Md.

TILE and BRICK MACHINERY. STONE-SEPARATING CLAY-CRUSHERS Illustrated Catalogue free. H. BREWER & CO., No. 146 Mill St., TECUMSEH, MICH.

Management of Sheep.
Kansas Farmer:
 I add this as my opinion about keeping sheep in Kansas, after several years experience with keeping sheep in Osage county.

It will not pay to keep a few sheep as well as to keep a few cattle, because a few sheep need the same constant care as a large flock to protect them from dogs and wolves, and on account of the extra cost to fence for sheep. It seems a great injustice to advise inexperienced farmers in Kansas to keep a few sheep to go into the sheep business.

With a good flock, a good range, and a good farm to produce winter feed, a love for the sheep business and a practical knowledge of the same, success is within reach by sticking to it about as in other things.

If all the farmers were compelled to fence against sheep, and there were no dogs nor wolves, the case would be different.

GEORGE PHINNEY.
 P. S. I also add this: That in Kansas, at least, wool is inconvenient to market in small quantity, and Kansas wool brings a lower price in the market than eastern wool; and even in quantity it has generally to be sent to commission men to sell for you, men of whom the seller has no knowledge as to their honesty or responsibility, and the seller practically has no recourse if defrauded.

It seems to me the FARMER owes it to its subscribers who want to know about the sheep business to set these things in their true light.

Woman in Cold Weather.

The real endurance of woman, tender, fragile woman, is something actually remarkable. Passing over the Walnut street bridge every one of these cold days recently, one can meet from two to a dozen women with the slightest head gear on, with ears and cheeks uncovered, trudging along with apparent unconcern, while great, rough men, bundled and swaddled, go rushing along abjuring the thermometric stage in unpretty language. Only yesterday a gentleman met two ladies walking placidly along, conversing animatedly. He saw at once that the pretty nose of one of the ladies was badly frost-bitten. He spoke up kindly, saying, "Madam, your nose is frozen." The frigidity of her look congealed his breath, but he managed to repeat the remark. Do you suppose they paid the least attention to his information? They walked quietly on and let the little iceberg form without let or hindrance, and he, feeling cheap and chilly, pulled down his fur cap and ran to keep warm. Women are not tender—it is all a misprint of the poets. They are tougher than buffalo robes, with an endurance that shames the ice-cutter or the street car driver. But yesterday a young man on Walnut street bridge, almost frozen, walked behind two girls whose heads and faces were nearly bare. One of the girls lost her overshoe, and as it came off it rolled over the edge to the ice below. A workman on the breakwater below picked it up and attempted to throw it to the gallant, half-frozen young man, and he clawed wildly in the air three or four times for it, but it never quite came to him. (The young lady lives in Council Bluffs, and the workman was not feeling very well.) Then the young man begged the workman to desist, and he would throw the girl down to the shoe. All this time those half-uncovered heads stood in the little breeze that sweeps down the river and never seemed to mind the cold a particle. No, it is wrong. Women are not tender flowers. They can endure twenty-five degrees below zero better than anything else.—*Iowa State Register.*

When Punctuation was Invented.

Printing had been in existence several years before any system of punctuation was generally adopted. A straight stroke passing obliquely through the line generally indicated a pause, and a full point closed a paragraph. A colon was occasionally introduced, and the *Lactantius*, printed at Subiaco, in 1465 (the first book printed in Italy), has a full point, colon and note of interrogation.

But improvements by one printer were not followed by others, and it was not until about the year 1470, that we approach to the mode of punctuation adopted at the present day.

The first book printed in France was the

Liber Epistolarum of Gasparinus Barzizius, which was produced by three Germans, Crantz, Gering and Freiburger, and contains the full point, semicolon, comma, parenthesis, note of interrogation, and note of exclamation. But the semicolon appears to have more force than the full point, for while it is often reversed indiscriminately with the full point in the middle, or at the end of a sentence, it is alone used at the end of a chapter, or of a heading to a chapter, and then turned as we use it now. It will be observed that the colon is wanting in this book altogether.



BEAUTY'S BATH CUTICURA SOAP.

To keep the pores open, the oil glands and tubes active and thus furnish an outlet for impurities in the circulation and blood which cause humbling blotches, itching humors, blackheads, and minor skin blemishes: to cleanse, whiten, and beautify the skin, remove tan, freckles, sunburn and its matter; to keep the hands soft, white, and free from chaps and roughness; prevent contagious skin and scalp diseases; and provide an exquisite skin beautifier and toilet bath, and use only Cuticura—gentle with delicious flower odors and Cuticura's healing balsams in the preparation of the CUTICURA SOAP. CUTICURA and CUTICURA SOAP, the greatest skin cures and beautifiers, and CUTICURA RESOLVENT, the new Blood Purifier, cure every form of skin and blood disease, from Pimples to Scalds, \$4.00 per bottle. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1.00. POTTER DRUG AND CHEMICAL CO., BOSTON.

CATARRH



What is Catarrh?

It is a disease of the mucous membrane of the nasal cavity, originating in the nasal passage and maintaining its strength in the heat of the brain. It is a contagious virus, and is transmitted by the breath and through the digestive organs, contaminating the blood and causing other emblematic and dangerous symptoms.

Cream Balm is a remedy here upon a correct diagnosis of this disease and can be depended upon.

Ely's Cream Balm Causes no pain. Gives Relief at once. A Thorough Treatment will Cure. Not a Liquid. Not a Snuff.

Apply into nostrils. Price 50 cts. at drug stores; 65 cts. by mail, registered. Sample bottle by mail 10 cts. ELY BROTHERS, Druggists, Owego, N. Y.

HALL'S VEGETABLE SICILIAN Hair Renewer.

Seldom does a popular remedy win such a strong hold upon the public confidence as has HALL'S HAIR RENEWER. The cases in which it has accomplished a complete restoration of color to the hair, and vigorous health to the scalp, are innumerable.

Old people like it for its wonderful power to restore to their whitening locks their original color and beauty. Middle-aged people like it because it prevents them from getting bald, keeps dandruff away, and makes the hair grow thick and strong. Young ladies like it as a dressing because it gives the hair a beautiful glossy lustre, and enables them to dress it in whatever form they wish. Thus it is the favorite of all, and it has become so simply because it disappoints no one.

BUCKINGHAM'S DYE FOR THE WHISKERS

Has become one of the most important popular toilet articles for gentlemen's use. When the beard is gray or naturally of an undesirable shade, BUCKINGHAM'S DYE is the remedy.

PREPARED BY **R. P. Hall & Co., Nashua, N.H.**
 Sold by all Druggists.

BUY NORTHERN CROWN SEEDS. Catalog free. J. A. SALZER, Seed Grower, La Crosse, Wis.

BIG BERRIES and lots of them can be grown if you follow our method. Free Catalogue describes all varieties. **HALE BROS.,** So. Glastonbury, Conn.

SAMPLE SEEDS. Brother Farmers: My new catalogue of Superior Pedigree Field Seeds. Gives 25 subjects about the corn plant, seed breeding, acclimatization, etc. Will delight and please you. **FREE TO ALL.** Address **J. C. SUFFERN,** Bement, Illinois.

GRAFTS, STOCKS, TREES—Everything for Nurseries, Fruit Growers and Amateurs. **TARK USHERIES,** Louisiana, Mo. 51st year. 3 acres.

BUISST'S SEEDS ARE THE BEST. WARRANTED TO GIVE SATISFACTION OR MONEY RETURNED. Sow them, and your garden will be a success. Send for our Garden Guide and Price List, and SEE OUR SPECIAL DISCOUNTS.

ROBERT BUIST, Jr., Seed-Grower, PHILADELPHIA.

FERRY'S SEED ANNUAL FOR 1885 INVALUABLE TO ALL! Will be mailed FREE to all applicants and to customers of last year without ordering it. It contains illustrations, prices, descriptions and directions for planting all Vegetable and Flower SEEDS, BULBS, etc. **D. M. FERRY & CO.,** DETROIT, MICH.

MANGELSDORF BROS. SEED MERCHANTS, ATCHISON, KAS.

Sell the most reliable SEEDS. Send us your address and we will mail you a nice ILLUSTRATED Catalogue Free of Charge.

BUY NORTHERN CROWN SEEDS. No Seeds produce finer Flowers, Vegetables and Crops, than our reliable Northern Crown Seeds. Buy them. Don't buy worthless Seeds when for less money, ours are delivered FREE BY MAIL at your door. Catalogue free. **JOHN A. SALZER,** La Crosse, Wis.

SEEDS FREE BY MAIL. Illustrated Catalogue of Vegetable and Flower Seeds, Plants, Bulbs, Garden Tools, etc. FREE to all applicants. Market Gardeners send for wholesale list. **J. B. ROOT & CO.,** Rockford, Illinois.

NEW SEEDS \$1.45 FOR 50 Cts. a Garden of Novelties.

AN UNPARALLELED OFFER: To introduce our Seeds among new customers, and that all may test the great superiority of our valuable new varieties, we will send free by mail for only 50 cents (in postal note or stamps) our novelty collection containing large packets of each of the following (actual value \$1.45). New Pine Apple Squash, a perfect wonder, valuable as both a Summer and Winter Squash, and most productive variety ever introduced. New Golden Champion Tomato, richer than Cauliflower. Mammoth Silver King Onion, very handsome and productive, growing to enormous size, mild flavor. New Stratagem Pea, immense pods filled with large, fine flavored Peas, unusually productive. Wonder of France Bean, a remarkable new variety, superior to all others. New Kolb Gem Watermelon, sweet, sugary, luscious, enormously large and solid. New Ruby King Pepper, very large, brilliant, and handsome. New Large Violet Gournay Radish, mild, crisp, and tender, sure to become a favorite. New Guerande Carrot, superior for table use. Our Special In-handsonest, large, late, sure heading variety, very solid and fine grained. **Another Liberal Offer:** Seeds making a Complete Vegetable Garden containing 33 Large Packets of Choices. Seeds making a Complete Vegetable Garden mailed for \$1.00; 3 Boxes, \$2.50. Our Flower Collection, comprising 10 Packets of popular Flower seeds, sets, & collections, \$1.00. All who purchase the above collections are entitled to \$1.00 in CASH PRIZES FOR 1885. Order now complete for \$1.00 in CASH PRIZES FOR 1885, and get our New Garden and Farm Manual, mailed free. **JOHNSON & STOKES,** Seed Growers, Philadelphia, Pa.

1885 GREGORY'S SEED CATALOGUE FREE

SEEDS SOLD by watchmakers. By mail 12c. Cirenley Iron, J. S. BRUCE & Co., 28 Day St., N. Y.

SWEET POTATOES!! Seed of all best varieties, and PLANTS in season, in large or small quantities, to please purchaser. The old reliable grower of Sweet Potatoes. **BENJ. F. JACOBS,** Wamego, Kansas.

SEEDS SENT FREE. If you want Fresh Reliable Tested seeds cheap, send for our new Illustrated Catalogue. Sent free. We give extra with every order. Ladies and Gardeners say our seeds are the best. Special wholesale price list for Gardeners. **ALNEER BROS.,** Rockford, Ill.

SHAKER'S FAMOUS Garden Seeds. New Crop at Greatly Reduced Prices. If you want Splendid Vegetables and Beautiful Flowers, always plant them. Special inducements to Grangers and Market Gardeners. Splendid Illustrated Guide mailed FREE TO ALL who want seeds. Write for it. Endorsed by the leading Agricultural Journals of the country. Established 1784. Address **SHAKER SEED CO.,** Mt. Lebanon, N. Y.

SEEDS FOR THE GARDEN, FARM & FIELD. 1845 Established 40 Yrs. 1885 RELIABLE **Vegetable Seeds,** Flower and Tree Seeds, Grass Seed, Seed Potatoes, Onion Sets, SEED DRILLS, GARDEN CULTIVATORS, &c. Catalogue Mailed Free to all. Address **PLANT SEED COMPANY,** 812 & 814 N. 4th St., St. Louis, Mo. Name this Paper

MARKET CHAMPION TOMATO.

SEEDS Our Illustrated Catalogue of "EVERYTHING FOR THE GARDEN." Full of valuable Cultural Directions, containing Three Colored Plates, and embracing every thing New and Rare in SEEDS and PLANTS, will be mailed on receipt of stamps to cover postage (6 cents). To customers of last season, sent free without application. **PETER HENDERSON & CO.,** 35 & 37 Cortlandt Street, NEW YORK. **PLANTS**

In bees the crop is called the honey-bag. The gizzard is found in insects having mandibles, and is frequently lined with rows of horny teeth, which are specially developed in grasshoppers, crickets and locusts. Insects have no true liver, but its functions are performed by little cell masses on the inside of the stomach.

In the majority of mammals the teeth are limited in number and definite in their forms. The number ranges from one in the narwhal to 220 in the dolphin. The average is thirty-two, occurring in ruminants, apes and man, but forty-four, as in the hog and mole, is called the typical or normal number, and this number is exceeded only in the lower groups.

The body of the elephant is nearly naked, but the mammoth, an extinct species, had a covering of long, woolly hair. Elephants live in large herds, and subsist on foliage and grass. There are but two living species, the Asiatic, with long head, concave forehead, small ears and short tusks; and the African, with round head, convex forehead, large ears and long tusks.

He Thanks His Paper.

Mr. Editor:—I was induced by reading your good paper to try Dr. Harter's Iron Tonic for debility, liver disorder, and scrofula, and three bottles have cured me. Accept my thanks.—Jos. C. Boggs.—Ex.

The France cheesemakers do not consider a cow profitable unless she produces to the value of from \$150 to \$200 per annum.

Cuts from barbed wire fence, cured with Stewart's Healing Powder. No scar or gray hair, 50 cts a box.

Patent Channel Can Creamery.
Used in dairies now all over the United States. Makes more butter than any other process with less ice. We manufacture Curves Butter-Workers, etc. First order at wholesale where we have no agents. Agents wanted. Send for circular.
W. M. E. LINDEN & CO.,
Warren, Mass. and Ft. Atkinson, Wis.

Automatic Steam Generator.
Patented August 19, 1884.
Saves one-third to one-half by cooking feed.
JERSEY CATTLE POLAND CHINA SWINE and HIGH CLASS POULTRY. Circulars free.
C. O. BLANKENBARKER,
Ottawa, Kas.

THE PROFIT FARM BOILER
Is the best feed boiler, the BEST FEED COOKER, in use. Cook your corn and potatoes, and save one-half the cost of pork. Send for circular.
D. R. SPERRY & CO.,
SATAVIA, ILLINOIS.
Chicago Salesroom 237 Lake St.

COOK FEED FOR STOCK
With the TRIUMPH STEAM GENERATOR it will save 1/3 to 1/2 of your feed, and your stock will thrive better and fatten quicker. Send for illustrated circular. Address
RICE, WHITACRE & CO.,
35 So. Canal St., Chicago.

GRAPPLING HAY FORK
AND CONVEYORS
For Trunk, Rope or Rod For BARN or STACKING. BEST Combination. Used by Thousands. Prices Reduced. Send for Circular. AGENTS WANTED.
G. B. WEEKS, SYRACUSE, N. Y.

ACME CREAMERY AND BUTTER COOLER
Consists of Refrigerator, Water Tank, Galvanized Iron Butter Cooler or Safe, and perfectly ventilated Butter. Ice is not necessary; water passes through the tank and accomplishes desired results. Cream is taken from the top, leaving all sediment in the milk. Can be used for keeping Fresh Meats, Vegetables, &c., in place of Ice Refrigerator.
Send for Illustrated Price List to
ACME MFG CO., KALAMAZOO, MICH.

SOMETHING ENTIRELY NEW!
Buy the Porter Hay Carrier, the only carrier that uses this new improvement. Ask your Dealers or send to J. E. PORTER, Ottawa, Ill., for circular showing this new invention. Pat. April 17, 1883.

ALTHOUSE VANELESS WINDMILLS, pumping and geared, are taking the LEAD wherever known. OVER 10,000 IN USE. Wooden and Iron Pumps equal to the best. Catalogues free. ALTHOUSE, WHEELER & CO., Wauwaton, Wisconsin.

MATTHEWS' SEED DRILL.
Hand Cultivator, Wheel Hoe, SINGLE OR COMBINED.
Admitted by leading Seedsmen and Market Gardeners everywhere to be the most perfect and reliable implements in use for planting and cultivating garden crops. Beware of cheap imitations! Inquire for the genuine machines which are made only by—
T. B. EVERETT & CO., Boston, Mass.
Send for circulars, giving latest prices and improvements.

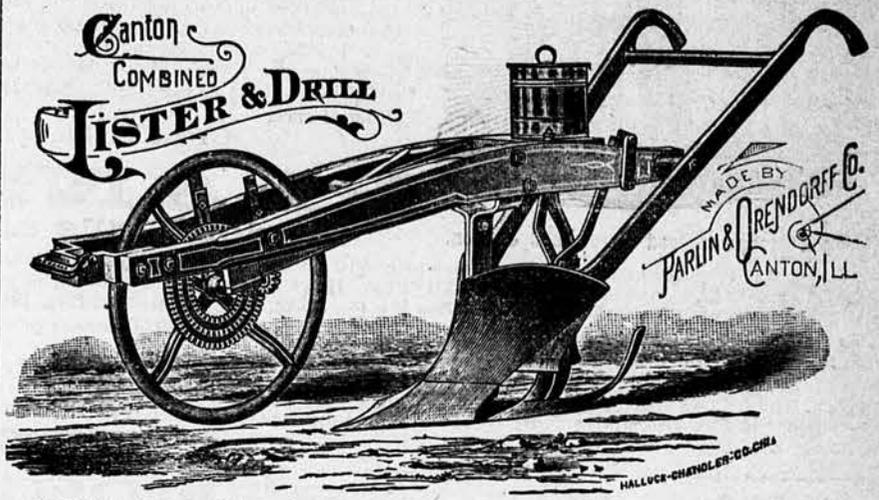
OVER 100,000 NOW IN USE. SPOONER PAT. COLLAR!
PREVENTS CHAFING, Cannot Choke a Horse
Adjusts itself to any Horse's Neck, Has two Rows of Stitching, Will hold Hames in place better than any other Collar.
None genuine unless stamped "SPOONER PAT." Ask Your Harness Maker For Them.
MANUFACTURERS.
J. B. SICKLES SADDLERY CO., ST. LOUIS, MO.

ANDERSON, HARRIS & CO.
—Wholesale Manufacturers—
Carriages, Buggies, Phaetons, Platform & Half-platform Spring Wagons.
402 LIBERTY ST., CINCINNATI, O.
BEST WORK EVER MADE FOR THE MONEY.
Send for Illustrated Free Catalogue.

MARSEILLES-ADAMS POWER CORN SHELLERS.
HAND ONE, TWO, FOUR OR EIGHT HORSE HORSE POWERS.
Belt or Geared FEED GRINDERS. Pumping or Power WIND MILLS, ALL SIZES AND STYLES OF Iron Pumps, Iron Pipe, SHELLERS BRASS CYLINDERS

SEND FOR ILLUSTRATED CATALOGUES.
MARSEILLES MFG. CO., MARSEILLES, La Salle Co., Illinois.

PARLIN & ORENDORFF CO.,
Manufacturers of and Jobbers in Agricultural Implements.



The Celebrated Canton Fertilizer, Cultivator, Harrow, Corn Drill, Hand Lift and Horse-Lift Spring-tooth Sulkey Hoe, Rakes, Evans' Corn Planter, Corn Shellers, and a complete line of Buggies, Farm and Spring Wagons, etc. Send for Descriptive Circulars. Address

PARLIN & ORENDORFF CO., : : KANSAS CITY, MO.

The Grebe Iron-teeth Revolving Stalk Rake

For raking cornstalks into windrows to burn them and to clean the fields.
First Premium Awarded at Nebraska State Fair, 1884.
Sold by Wm. S. Blakely, Junction City; L. W. Libby, Marysville, and Watson & Tait, Concordia, Kas. County right in Kansas for sale. For circulars and price, send to HENRY GREBE, Patentee and Manufacturer, Omaha, Nebraska.

STROWBRIDGE SOWER BROAD CAST
Sows all grains, grass seeds, plaster, salt, ashes, commercial fertilizers—everything requiring broadcasting—any quantity per acre, better and faster than any other method. SAVES SEED by sowing perfectly even. Not affected by wind, as seed is not thrown upwards. Sows half or full cast, on either or both sides of wagon. Readily attached to any wagon or cart without injury, and used wherever they can be driven. Lasts a lifetime. Sows 80 acres wheat per day. Crop one-fourth larger than when drilled. Only perfect Broadcaster made; most accurate agricultural implement in the world. Endorsed and recommended by Agricultural colleges and best farmers in U. S. Fully warranted—perfectly simple. Do not be put off with any other. Send at once for new free illustrated catalogue with full information and hundreds of testimonials.
BEST. CHEAPEST. SIMPLEST.
C. W. DORR, Manager
RACINE SEEDER COMPANY, 262 FOURTH ST., DES MOINES, IOWA.

THE "PLANET JR" HOLLOW STEEL STANDARD HORSE HOE
As lately introduced, has no equal in the world. Its excellent work in the field has distanced that of all competitors. It is, in some sections, doing in one passage, the work of four or five old-style implements, and in others surpassing the cumbersome and expensive two-horse tools. The "PLANET JR" HAND SEED-DRILLS AND WHEEL HOES are the newest and best, lightest and strongest known. There are 7 distinct tools, each with special merits, no two alike or the same price; all practical and labor-saving. Let no Farmer or Gardener fail to study up during the winter evenings our 1885 CATALOGUE, which gives reduced prices, careful and exact engravings of these different machines, and such descriptions as will enable the reader to judge correctly of their merits. Thirty pages and forty engravings. Free to all. Correspondence solicited.
S. L. Allen & Co., Mfrs., 127 & 129 Catharine St., Phila., Pa.

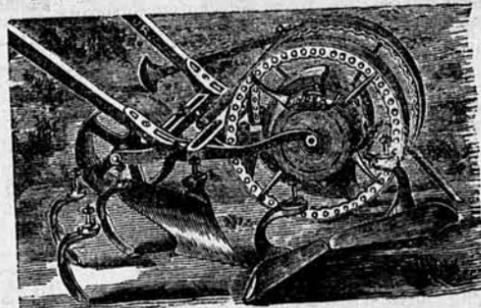
Cheap and Durable FENCING.
NO ROTTING OF POSTS.
Wrought-Iron Posts and Barbed Wire.
Material furnished at Topeka, at from 35 cts. to 60 cts. per rod. Contracts for construction of fences taken. For particulars, address
SOUTHWESTERN FENCE CO.,
238 Kansas Ave., Topeka, Kansas.

Great Reduction in the Price of CAHOON BROADCAST SEED SOWERS.



Cahoon Broadcast Seed Sower in Operation.

This is the best HAND SEED-SOWER ever put upon the market, and thousands upon thousands of them have been sold. The price was \$10 each when they first came out, and never was less than \$6, until now we are able to offer them at \$5 EACH, shipped to any point in the country by express, charges prepaid. The price soon saved, as seed can be sown accurately and not a grain need be wasted. It sows equally well in the wind. Sows Wheat, Oats, Rye, Buckwheat, Flax seed, Clover seed, Timothy, Alfalfa, Millet, Hungarian, Sorghum, Hemp, etc., at the rate of four to eight acres per hour. Directions accompany each machine. Order at once.



Planet Combined Drill and Cultivator.

Great Reduction in Prices of PLANET JR. Garden Drills and Cultivators.

No. 2 Drill—Reduced price \$10, former price \$12; Combined Drill, Wheel Hoe Cultivator and Plow combined—Reduced price \$12, former price \$15; Double Wheel Hoe Cultivator and Plow—Reduced price \$8, former price \$10; Wheel Hoe Cultivator and Plow—\$6; Fire Fly Plow—\$3. Steel Standard Combined Horse Hoe—Reduced price \$10, former price \$12; Steel Standard Plain Horse Hoe—Reduced price \$9.50, former price \$11; Steel Standard Plain Cultivator—Reduced price \$6.75, former price \$10.

Goods packed, ready for shipment, and delivered at Express office or Depot, upon receipt of money at above reduced prices. Every Farmer, Professional or Amateur Gardener should have one or more of the above Tools. Goods, send for full descriptive pamphlet. Every Farmer, Professional or Amateur Gardener should have one or more of the above Tools. Also our line of Hay and Heavy Machinery. Send for Descriptive Circulars of our New Improved Automatic Hay Stacker and Gatherers (our own manufacture).

TRUMBULL, REYNOLDS & ALLEN, Kansas City, Mo.

SEEDS! SEEDS! SEEDS!

THE LARGEST AND BEST STOCK OF FIELD, GRASS AND GARDEN SEEDS IN THE WEST. 5,000 Bushels Red Clover, 5,000 Bushels Timothy, 10,000 Bushels German Millet, 10,000 Bushels Kentucky Blue Grass, 5,000 Bushels English Blue Grass, 5,000 Bushels Common Millet, 10,000 Bushels Orchard Grass, 5,000 Bushels Red Top, 2,000 Bushels Alfalfa. Johnson Grass, Sorghum, Tree Seeds, Hedge Seeds, in Large Quantities. ALL NEW CROP. Send for Prices.

NOTICE WHAT OUR PATRONS SAY ABOUT OUR GARDEN SEEDS:—"Not a single ounce but what gave entire satisfaction and were everything we recommended them to be." "Parties sent East, had no success, bought our seeds, and gave them great satisfaction." "The only strictly reliable seed sold in town." "Will buy no other," etc. Notice the testimonial of the "Kansas City Times," which represents over 1,000 families. No other Seed House can show such a record:

OSAGE MISSION, KAS., July 27, '84.—T. R. & A.: Your seeds better than seeds they have been buying East and you require us to say that the seed we bought of you gave perfect satisfaction in every particular; were considered the only strictly reliable seed sold in this town last season. It gives us pleasure to make this statement. CHAS. C. COFFINBERRY & SON.
OSBORNE, KAS., Aug. 10, '84.—T. R. & A.: Your seeds have given us and our customers the best of satisfaction. SMITH & HATCH.
HARPER, KAS., Aug. 13, '84.—T. R. & A.: Have sold your seeds for three years. Have always found them to be just as you represented them, fine and true to name; and in fact, most of the farmers will buy nothing else. Very truly yours, WILSON & BAUMSTARK.
ARROW ROCK, MO., July 20, '84.—T. R. & A.: The garden seeds I bought of you gave entire satisfaction; all came up and gave great satisfaction to my customers. ANDREW OLARK.
SALISBURY, MO., July 17, '84.—T. R. & A.: We liked the seeds bought of you this season very well. No complaints from any of our customers. Several percents bought of us, after planting several times, seeds of other parties, without success, and found our seeds all right. We think another season we will do a good business selling bulk seeds; as this was a new method to our people, this year, they were slow to "catch on." Yours truly, HUTCHINSON & DAVIS.
OFFICE KANSAS CITY TIMES, Nov. 20, '84.—Messrs T. R. & A.—Gents: We wish to say that from the thousands of packages of your garden seeds sent to our subscribers the past season as premiums, we have received one complaint, although they were guaranteed, while garden seeds procured from an Eastern house the year before were very unsatisfactory, and we had complaints from all sides. Your seeds will do to stand by. KANSAS CITY TIMES.
SHERMAN, TEX., Aug. 12, '84.—T. R. & A.: I take pleasure in saying your seeds have given entire satisfaction. I guaranteed them to my customers, and upon inquiry find they were in every instance as represented. Respectfully, J. R. COLK.
FALLS CITY, NEB., Aug. 6, '84.—T. R. & A.: Have found your seeds first-class in every respect. Our customers have been well satisfied with them, and we like to handle them better than the unreliable seeds in your papers. Yours, W. W. WARDELL.

If you have not used our Seeds, try them, and you will use no other. Our 1885 Catalogue, now ready, Sent Free. Address TRUMBULL, REYNOLDS & ALLEN, Seedsmen, Kansas City, Mo.



TWO-CENT COLUMN.

"For Sale," "Wanted," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

SHEEP WANTED—In exchange for half-blood Clyde Stallion. W. Guy Metcalfe, Cottonwood Falls, Kas.

SEND TO F. E. Marsh, Manhattan, Kas., the veteran breeder, for pure-bred Fowls

FOR SALE—Plymouth Rock and Partridge Cochins. Cockerels. Good stock. S. R. Edwards, Emporia, Kas.

BALDWIN CITY NURSERY—Sixteenth year. Apple Trees for sale cheap. Of the leading and best varieties for Kansas: 7,000, 5 to 6 feet, \$30 per 1,000; \$6 per 100; 4 to 4 1/2 feet, \$4 per 1,000; \$5 per 100; 3,000, 3 to 4 feet, \$30 per 1,000; \$3.50 per 100; 2,000, 2 1/2 to 3 1/2 feet, \$20 per 1,000; \$2.50 per 100. All boxed and on cars, free. Reason for such low prices, want to change location of Nursery. All kinds of nursery stock equally as low. Wm. Plasket, Baldwin Kansas.

REMOVED—Skinner's Shoe Store, to 219 Kansas avenue, corner of Seventh street.

FOR SALE—Two full blood Jersey Cows and two Bull calves. Address S. F. Davidson, Treasurer's office A. T. & S. F., Topeka, Kas.

HIGHLY GRADED Short-horn Cows, Heifers & Calves For sale. Bred to Sharon Bull. Apply to MAKIN BROS., Florence, Kas.

HEDGE PLANTS! 6,000,000 —For sale by— BABCOCK & STONE, NORTH TOPEKA, KANSAS.

Red Cedars and Timber Tree Seedlings! LARGE STOCK! LOWEST PRICES! Transplanted Red Cedars (sure to grow), Hardy Catalpa Russian Mulberry, Cottonwood, Sycamore, Yellow willow, White Ash, Elm, Box Elder, Maples, Dogwood, Red Bud, Sweet Gum, Tulip Tree, Strawberry and Raspberry plants, Apple scions and grafts, Peach pits, blackberry plants for the famous "Old Iron-Clad" Strawberry, the highest and best strawberry yet produced. Write for Price Lists. BAILEY & HANFORD, (On II. C. B. R.) Makanda, Jackson Co., Ill.

EVERGREEN SEEDLINGS for NURSERY-PLANTERS. 1 1/2 to 2 1/2 ft. variety 20,000, 2,000 Arbor Vitae seedlings at 50 cents per 1,000. Call on the tree. GEO. FINNEY, Sturgeon Bay, Wis.

MAMMOTH SALE Clydesdale Horses AND MARES.

GALLOWAY :: CATTLE.

The Clydesdale Horse Company of Rockford Farm, Cedar Rapids, Iowa, and Glasgow Scotland, will sell at Public Auction at their American Headquarters, a large number of Clydesdale Horses and Mares; also Polled Cattle, on Thursday, February 26, 1885.

They have been selected with great care, and strict attention has been paid to their breeding. On inspection they will be found to be decidedly the best and most uniform lot ever offered. The mares are all in foal to our best stallions. Catalogues on application, giving terms and conditions of sale. Address, THE CLYDESDALE HORSE COMPANY, Rockford Farm, Cedar Rapids, Iowa. J. W. JUDY, Auctioneer. WM. BUCHANAN, Manager.

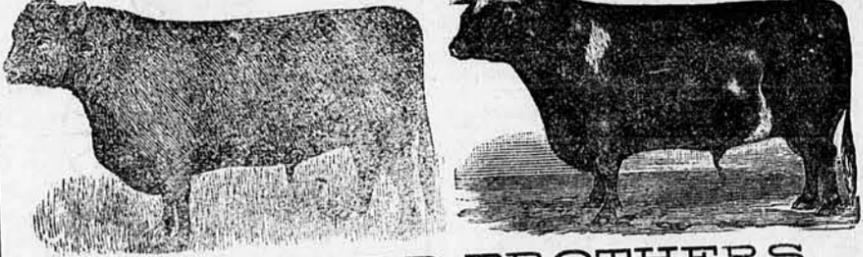
Hart Pioneer Nurseries, [Established, Dade Co., Mo., 1857; Ft. Scott, Kas., 1863; Incorporated, 1884.] FORT SCOTT, :: KANSAS.

A full line of Nursery stock, all warranted true to name. No substitution of varieties to our purchasers. Reference: Bank of Ft. Scott. For other testimonials see our catalogue.

400,000 Genuine Gregg Plants The best and most profitable Black Raspberry grown. Fruit men and dealers will save money by sending for our prices before ordering from any other firm. Our large stock of plants are guaranteed pure and well rooted. Correspondence solicited. J. W. NELSON, Indian Run, Mercer Co., Pa.

WESTERN GROWN TREES! THE MIAMI NURSERIES, Louisburg, Kansas,

Offer for the Spring Planting their usual large stock of well grown, well assorted, and finely rooted Fruit Trees and Plants. Estimates furnished free, and correspondence solicited. Address, CADWALLADER BROS., Louisville, Kansas.



THE LEONARD BROTHERS, Importers and Breeders of Galloway, Aberdeen-Angus and Short-Horn CATTLE, SPANISH - JACKS - AND - JENNETS, MOUNT LEONARD, :: :: :: MISSOURI. A very choice lot of Black Polled and Short horn Grades for sale. Carload Lots a specialty for Ranchmen. We have some of the largest and choicest herds of Pure-bred stock to select from. Prices Reasonable. Call on or address LEONARD BROTHERS, Mount Leonard, Missouri.

PUBLIC SALE OF IMPORTED CLYDESDALES

—AT— Oakdale Park, SALINA, KANSAS, —ON— Thursday, March 5, 1885. FRANK R. SHAW

Will hold his Second Annual Sale at the above time and place. The offering includes—"Lord Blantyre" (2242), a horse that has no equal in America—the winner of three gold medals and eight first prizes at the great Chicago, St. Louis and Topeka Fairs; also at the Western National, at Lawrence, Mo. "Lord B." is justly titled the great Darnley's greatest son. Also "Links of Forth" (2223) "Clan Alpine" (1898), the winner of nine first and second prizes in Scotland before he was three years old—"Grafton," "Glentworth" (3644), "Bonny Brig," and "Glentworth" (36-3). Such a lot of Stallions never were brought together in Kansas before. "ROYAL EXCHANGE" (1520), the son of the world-renowned "Prince of Wales." "Royal Exchange" was sold for \$6,000 seven years ago, when that was thought a large price. The Mares are all young and bred to "Lord Blantyre." A large tent, comfortably seated and heated, will insure comfort on day of sale. Free lunch. Reduced rates at principal hotels, and good treatment to all is guaranteed. Catalogues now ready. Correspondence invited. P. S.—I give a satisfactory guarantee that all stock is just what I represent it to be, and can show any man a better lot of stock than any man or firm in Kansas. COL. S. A. SAWYER, Auctioneer.

