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KANSAS FARMER.

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Special Items.—No. 33.

THE
OF CONTRACTION.
The old Westminster Abbey, in the west city of London, were giving way. Brought to their original position a large number of heavy bars of ironing cold they gradually contracted, this venerable edifice was saved. If my memory serves me right the abbey was erected by William I. King over eight hundred years ago. I made an addition to it, which is known as the "King Henry's Chapel." One of the beautiful abbey is known as the "White Hall" which affords interest to the administrative poets. There you find Pope, Dryden, Addison, Goldsmith, and others. Lord Byron, the first one to be denied a niche in the "White Hall," was the Bishop of London for a long time.

ANIMAL LIFE.
There is a balance, says Dr. Prentiss, on the laws of life, between the manner in which the highest degrees of heat are maintained. The process is one of assimilation, respectively in the union of its elements. It does not take place from the mutual exposure of heat, which elements of fire. Thus wood or coal, oxygen, would never inflame; but, by the union of both, and, like life, it takes itself from both, and, before existing, or otherwise combined, has another agreement with life, namely, each the elements are combined from the sources of earth and air.

KNOWLEDGE OF TRIAL OBJECTS.
Dugald Stewart, in *Lectures on the Intellectual Powers*, says: "We impressions made on our organs of sense, build have been impossible for us to arrive at the knowledge of our faculties, and the occasions on which all our notions are formed, are faded either immediately or ultimately, by the sense of hearing and seeing alone, would have no conception of an external world." Many other able writers have taken like view.

A man by losing his sense of sight, improves his sense of feeling, and he is fond of music, will, in all humbly, make a good musician. One of the most skillful musicians I ever knew was a blind man who had lost his sight after he became of age. The sense of touch and sight are both necessary to obtain the shape of an object. A man losing one of his eyes after he is advanced in life, will again have to learn by experience the shape of an object and its distance from him. The celebrated case of Casper Hauser, who was confined from infancy until he became grown to manhood, in a cell, without seeing the face of a human being, supplies a chapter in human history of great interest. The information it affords will always occupy a place which conjecture hitherto has supplied. We may, at some time, give a sketch of this strange character.

Hardy Ornamental Shrubs.
Prof. Popenoe, of the Agricultural College, furnishes the following report to the Industrialist:

At a meeting of the Manhattan Horticultural Society, held in the horticultural building at the college, on last Saturday, the president of the society, Mr. T. C. Wells, presented the following valuable list of shrubs, climbers and perennial herbs, that he had found reliable and worthy of cultivation in this locality:

PERENNIAL SHRUBS.
Dwarf Flowering Almond.—Covered in early spring with double pink flowers. If carefully pruned to a compact growth, it makes a very desirable shrub.
Barberry.—Foliage of different colors in different varieties; fruit edible.
Common Elder.—When well trained, becomes a very ornamental shrub. Flowers visited by bees.
Staff-tree, Wahoo, (*Euonymus*).—A valuable fruit shrub. Fruit bright crimson and scarlet. Very conspicuous during winter.
Red Tartarian Honeysuckle.—Upright; flowers pink, in May.
Common Buckeye.—Worth cultivation; flowers and leaves come very early; easily grown from seed, but difficult to transplant. (The horse chestnut was mentioned as proving a failure.)
Bluemont Plum.—Believed to be a hybrid. Highly ornamental, when young and well cared for; branches pendant; foliage clean and bright; flowers, large white; fruit highly flavored, spicy; bright red; native of the vicinity of Manhattan.
Common Lilac.—White and purple.
Persian Lilac.—More hardy than the common lilac; flowers later in spring, and buds consequently less liable to be killed by late frosts.
Wild Thorn, (*Crataegus*).—A rare native; of value as an ornamental shrub.
Pawpaw.—Very desirable; easily grown from seed, but transplanted with difficulty.
Tamarix.—A deciduous, flowering shrub of considerable value.
Japan Quince, (*Cydonia*).—In different varieties; the flowers are large and beautiful, of bright colors, covering the shrub in spring.
Snowball, (*Viburnum*).—Flowers white, in large globular clusters, very handsome.
Spiraea.—Several varieties succeed well, prominently those known as Bridle Wreath and Elmleaved Spiraea.
Lyringa, Mock Orange, (*Philadelphus*).—The large-flowered and fragrant varieties are very satisfactory.
Common Smooth Sumac, (*Rhus glabra*).—Foliage handsome, deep red in autumn. (This plant is frequently defoliated by the leaf-eating beetle, *Blepharida rhodis*.)
Bladder-Nut, (*Staphylea trifolia*).—Foliage pleasing, light green; flowers white, in pendant cymes; native shrub.
Rose, *Acacia*.—Highly ornamental; flowers large and crimson, early.
Red-Bud.—Native; susceptible of great improvement in cultivation.
Jersey Tea, (*Ceanothus*).—Low, perennial, shrubby plant; flowers white, fragrant, in clusters, covering the whole bush.
Chokecherry.—A pleasing, native tree; flowers in racemes, white and fragrant.
Snowberry, (*Symphoricarpos racemosus*).—Flowers white; leaves very persistent; berries large, waxy, white, remaining on the bush until mid-winter.
Coralberry.—A low, native shrub, bearing a profusion of coral-red berries, that are persistent until severe frosts.

PERENNIAL CLIMBERS.
Virginia Creeper, (*Ampelopsis quinquefolia*).—A well-known and appreciated native climber.
Trumpet Vine, (*Tecoma radicans*).—Fine and hardy on the uplands, but sometimes becomes troublesome, through its habit of sprouting; flowers large, conspicuous.
Bittersweet, (*Celastrus*).—An ornamental and rapid climber; fruit orange and scarlet, conspicuous in winter.
Climbing Honeysuckles.—All succeed, but the "Monthly Fragrant" most highly recommended.
Chinese Wistaria.—Rapidly growing climber; flowers blue, in large clusters.
Roses.—The Prairie Queen and Seven Sisters are recommended as being quite hardy, while the Baltimore Belle is not entirely so.
Apios Tuberosa.—A native herbaceous climber; gives good results as an ornamental plant.
Wild Balsam-Apple.—A native annual, also recommended for general purposes; a climber of rapid growth; habit graceful; flowers borne in great profusion, white and fragrant.

PERENNIAL FLOWERING HERBS.
Many of the following list become more beautiful by cultivation:
Anemone.—Purple and white, double, native, blooming on the prairies in early spring.
Columbine, (*Aquilegia*).—Both native and exotic varieties succeed and give much satisfaction.
Larkspur, (*Delphinium*).—Both exotic and indigenous species cultivated with success.
Dalea Laxiflora.—A beautiful, white-flowered plant, with slender, erect, graceful habit; native from Manhattan westward on the high prairies.
Union Grass, (*Uniola*).—A beautiful native grass, growing in shaded spots; highly ornamental, and valuable for winter decoration.
Verbena.—A trailing, pink-flowered, native variety, does well in cultivation; flowers fragrant.
Gaura.—Tall herbs, covered with pink and white blossoms in late summer; very effective in thick clumps.
Sensitive Brier, (*Schrankia*).—Flowers rose, globular in shape, with a very delicate fragrance.
Yucca.—The native and introduced varieties are equally satisfactory; quite hardy; leaves evergreen.
Lobelia.—The blue and scarlet native species are both susceptible of cultivation, and have proved desirable.

Evening Primrose, (*Acnothera Missouriensis*). Flowers very large, yellow; native on the high ground around Manhattan.
Liatris.—Several species of this genus, all native, are well worth cultivating, and are easily transplanted.
Asclepias Tuberosa.—An orange-flowered native milkweed, that is very ornamental in cultivation.
The list contained a few others of less general value, but of botanical interest.
The consideration of the subject will be resumed at the next meeting of the society, which will be held in the horticultural building on the afternoon of the second Thursday in January.

Occupation During Winter.
I noticed an item in the agricultural department of the Chicago Times, with the above heading. As it was meant for the western farmers, I will give you part of his words and a few comments on it:
"As agriculture is at present conducted in the prairie regions of the west, farmers are virtually without remunerative employment from the first of November to the first of April. A few husk corn and a small number do a little teaming, but, as a rule, there is nothing done in the line of work except to deal out food for a herd of stock. At the time when most farms were fenced with rails, and wood was generally employed as fuel, there was considerable work during winter, but now coal has taken the place of wood for fuel, and it requires little or no preparation, while wire has superseded rails or any kind of lumber for fencing.
"Machinery has taken the place of many things that were done through the winter months, such as threshing grain, shelling corn, working up flax and hemp, drying apples, and many other things.
"Any merchant, and nearly every manufacturer, would be amazed, if he were to shut up his store or manufactory on the first of November and keep it closed until the first of April? But that is substantially what every western farmer does. Not only is he out of employment but his teams are. His working stock as well as himself are of great expense. As to the other animals they are generally unproductive. The milk cows do not afford half milk enough to pay for their feed. The other animals will weigh less and be in poorer condition in the spring than when they were put into winter quarters. In short the gains of summer are largely consumed during the winter."

In many cases the above are real facts, but on a well conducted farm there is a great deal that can be done during the winter, in Kansas, after the corn is all in the crib. There is generally plenty of good weather, after the first of November, to plow for the spring crops. When the ground has become too hard frozen to plow, there is plenty of manure to haul out and put on the poorest part of the farm. When that is done there may be out-buildings to make or repair yards to build or repair, and when the weather is too severe for that, if there is a workshop, which should be on every farm, there will be machinery to repair and repaint, harness or wagons to repair, and when not otherwise employed, the time is not wasted in looking over the accounts of the previous summer's work and plowing for the spring planting, or in reading agricultural papers and gaining the experience of others. Farming is not done by muscle alone; there must be some brain work, also, to make it a success. The farmer, as a rule, generally puts in long hours during the cropping season, and works hard, and if there are some idle days in winter that are not employed, he needs them for rest, and his teams need rest.
If the milk cows do not give sufficient milk to pay for their food, what has the farmer been doing all summer that he has not provided good hay, straw, corn, fodder, pumpkins and corn to grind for them. A good cow will always pay for her feed, and, if she is not a good milker with good feed, sell her and get a better one; and all the live stock, including the work animals, if it pays to keep them at all, it will pay to have them in as good condition in the spring as they were in the fall.

Drilling Against Hill-Planting Corn.
We have often asked the question why western farmers, whose land is so smooth and clear of stones, should continue to plant corn in hills rather than in drills, and are inclined to attribute the custom to the power of old habit. We know that the ready reason given is that the corn can be worked both ways and the weeds more effectually destroyed. But this is more imaginary than real. In planting with the drill the grains are placed in a smooth line

there is no uneven zigzagging as in the old way of dropping by hand, and the cultivators can be run so close to the young corn as to destroy or cover up all grass and weeds as effectively as by crossing, while in point of yield, drilling has always produced the largest crops when properly done. A discussion was lately held at the Elmira (N. Y.) Farmers' Club, (one of the most celebrated farmers' clubs in the country,) on the subject of drilling corn, where it seems to have been handled by competent speakers, who gave their preference most decidedly in favor of planting in drills as opposed to the hill system. A member said:
"Ten or twelve years ago I saw an article written by John Johnston—a report of successful corn culture, the seed drilled in. It struck me as a new idea, practiced in its character, so I tried the plan and I have not planted corn in hills since. It is true I have not tested the method in comparison with hill planting in the same field, for I am well satisfied with the crops I get from drill planting. I use the Farmer's Favorite drill, and plant pumpkin seeds by the same method. The cultivation I give is like that reported by the gentleman who has just described his method. Several members of this club who visited my cornfield a year or two ago, flattered me by favorable comments on the crop that was drilled. I remember Judge Balcomb, who was with the party, was disposed to rate the crop below his, and I admit it did look so, but later in the season he came again, and told me then, I think, without any intention of flattering me, that my drilled corn was really better than his planted in hills. I husked from the field one hundred and six bushels of ears to the acre. As to the stalks, my estimate is that the increase from drilling is about one-half in amount, and there is considerable gain in quality. I do not get an ear of corn from every stalk, but from some I get two, and in favorable seasons I get fine crops of pumpkins. I drill nine quarts of seed to the acre. On smooth land, free from stones, the kernels will drop very evenly about ten inches apart. Where the land is stony, or otherwise rough enough to disturb distribution, there may be greater spaces, or a sudden jar to the drill in passing may throw out seed thicker in the rows for a short distance. The rows are placed four feet apart."
There is one important requisite which must not be overlooked in preparing the ground for the drill. It is of prime necessity that the plowing be well done and the ground harrowed until the surface is smooth and fine. The future crop largely depends upon the thorough preparation of the soil before planting. Half the work is done in this preliminary stage.

Communications.

Ed. Farmer: Will you please inform me how soon in the spring prairie may be broken so as to sow millet (also the proper time of sowing the same,) preparatory to sowing wheat in the fall? I am a young farmer; never farmed until last year. I find your paper invaluable to me; would not be without it for several times its cost. P. E. C. B.

Break the ground as early as possible, and proceed as you would for a crop of oats. Have your ground in the best condition it can be put in, and sow as early as the season will permit in the spring.

Ed. Farmer: I have been thinking to ask some questions, through your valuable paper, for some time. Will you please inform some of your readers, through the FARMER, what the Rochdale system is, and if it has worked successfully where it has been introduced? Also, what is the best crop, generally, to be put in on fresh broken soil? P. E. C. BLADES.

The FARMER has published the outlines of the system and the results of the Rochdale cooperative plan at various times. The system is of English origin, and probably needs some changes and modifications to suit location and business in this country. Major Sims, Master of the Stie Grange of Kansas, has investigated the working of co-operation on the Rochdale plan, as practiced in this locality, and could probably answer satisfactorily the inquiry of our correspondent.

What is the best crop on first breaking prairie soil.
Castor Beans.
Mr. BATEMAN: I have inquired in the FARMER about the culture of castor beans, and failed to get any information. Will

you be so kind, and let me know, either through the FARMER, or personally, how they are raised, when and how planted, and when ripe, how they are gathered, and how much can be expected from an acre? By so doing you will greatly oblige a new farmer. C. HAUSER.

Sore Foot.
Ed. Farmer: I have a yearling heifer that got a little lame in July last with a crack in the back part of her hoof. About two months after she got lame in the other hind foot, and now she is getting lame in one of her fore feet, and the first sore is extending between the hoof in front, and recently, eruptions are appearing on her nose and back. Can any of your numerous readers tell me what to do for her?
PLOW-BOY.

Shawnee Co., Kansas.
Ed. Farmer: With your permission I will answer the above through the FARMER. The land is prepared for planting castor beans the same as for corn. The planting can be done by hand or with two-horse corn-planters. Put about three beans in a hill. Keep the ground clean of weeds by plowing and hoeing. When the beans are about six inches high thin out to one stalk in a hill. Harvesting is done by cutting the spikes or that part off that contains the beans. Convey them in a wagon or sled to your "popping" ground—a place prepared by taking off the top dirt and making the flooring level and smooth. You then spread out all over the flooring and let the sun do the threshing, which he will do. Quantity per acre, from ten to twenty bushels; price per bushel, 85 cents to \$1.25.
WM. BATEMAN.

BELLE PLAINE, Sumner Co., Dec. 27th.
What would one think to see a banker, merchant, mechanic or a grain and stock dealer doing business without keeping a set of books? Now of all businesses that is carried on in our nation, farming is the most extensive and important. If farming should be done on the wheels of machinery would stop, our country would be crippled, banks would close, and business in every department would fail. Why should not then every farmer be instructed how to keep a set of books? It is just as necessary for him to know what his farm and improvements, his machinery and stock, his corn, wheat, rye, barley, oats and potatoes cost him, as it is for the banker or merchant to know what their profits are, or the amount of capital invested in trade. A safe farmer should keep his books, or instruct the wife or daughter to do it, and I venture that at the end of one year he would find it profitable. He should not only know what his farm and improvements cost him, but should know what his corn, wheat, hogs, wool and cattle cost him, so when market, he can tell the profit, or loss. It will help him to farm profitably. He should also know all bills payable and receivable, then he would avoid unpleasant duns from his banker, merchant, and editor. Enclosed find copies of a set of farm accounts.
H. C. ST. CLAIRE.

The accompanying forms of farm accounts, were arranged in the customary manner of debits and credits, which are somewhat difficult to set in ordinary newspaper work. Every farmer should keep a set of books and if he has not learned the theory, he may readily do so by procuring a copy of the many systems of book-keeping, and studying it during the long winter evenings. There are blank books to be had arranged with appropriate heading and ruled for the purpose of keeping accounts. But in default of these conveniences, any farmer can keep a memorandum account of his business which is much better than no book at all. The manner of properly keeping accounts should be one of the lessons taught in every county school, for it is information that nearly every child in the course of future life is compelled to use. A great deal is taught in a smattering way in the schools that is soon forgotten because never called into use afterward, but a knowledge of keeping accounts would be of practical benefit to nearly every one. Why is it not taught in the schools and some lessons of minor importance omitted?

NORTONVILLE, Jefferson Co., Jan. 3.—Kansas still keeps her reputation for being a climate of great extremes. Cold weather commenced with us December 11th. Up to the 29th it was clear and cold. On the morning of the 25th the mercury stood 16 degrees below zero. Many were complaining that their wheat had dried up and blown away. On the night of January 3d, the rain came in the shape of a young deluge, so that the roads have been almost impassable. The cornfields have been turned into quagmires, and every feed-lot into a mud-hole, and every hoof of stock that can't get under shingles, wallows in the mud.

The dry, cold weather of last month was well improved in getting in the corn, so the crop is about all harvested. I don't see that wheat is damaged much by the dry, cold weather, except some pieces of late sowing. Fat hogs are about all gone into the market, \$4 is the highest paid for hogs at this point. More beef cattle being fed than last year. This kind of weather is very hard on them; as I have good shelter, we shall have good shelter and ground feed. JOHN

Mr. BATEMAN: I have inquired in the FARMER about the culture of castor beans, and failed to get any information. Will you be so kind, and let me know, either through the FARMER, or personally, how they are raised, when and how planted, and when ripe, how they are gathered, and how much can be expected from an acre? By so doing you will greatly oblige a new farmer. C. HAUSER.
Bunker Hill, Kansas.

Stock.

of the Suffolk Hog.

hog, as it was generally known twenty years ago, was a very diminutive animal, scarce weighing, in most cases, two hundred pounds at maturity, being nearly devoid of hair, and very apt to choke up while being fattened; and it was represented by those who were unfavorable to the breed, that it was almost useless for breeding purposes.

The color of the Suffolk being white, is, in my judgment, a strong quality in its favor, and when you get one dressed it has a very attractive appearance, being of a delicate pinkish white. The meat of the Suffolk hog is very sweet, tender, and fine grained. They almost invariably weigh more than a person would suppose by their looks.

Shelter for Stock.

In my farm notes of December 24th, I referred to the need of shelter for stock, and I find Templin, in an excellent article in the new number, shows the great loss of animal heat when exposed to cold, therefore, enough has been said, I think, to convince the thoughtful that stock should be sheltered.

Some who read L. J. Templin's article may say, All right, but I cannot get pine boards to make shelters. Well, you can use many other articles which make warmer shelters than boards.

I have often made cheap wind-breaks by piling up my coarse manure. Straw, hay and sod will last many years with a little repairing each year, and when well made into barns, sheds and wind-breaks, are more effective in keeping out wind, cold, rain and snow than most of barns made of lumber, especially in Kansas and other windy regions.

Of course every farmer will wish for something more beautiful and durable than such stables and wind-breaks as I have been describing, but as so many in the west cannot build shelters and stables of lumber, stone or brick, on account of poverty, they had better use such material as they can and make their stock comfortable.

Has It Come to This?

The Drover's Journal, of December 11th, published the following: Mr. Josephs is a well known and extensive breeder from Chicago to New York, and one day last week, that he was entitled to more privileges than other shippers to the metropolis, and set up his claims to that effect against the directions and wishes of Mr. S. P. Hopkins, the evener and official, one day last week, assigned Mr. Josephs' cattle for New York over a certain road.

was entitled to more privileges than other shippers to the metropolis, and set up his claims to that effect against the directions and wishes of Mr. S. P. Hopkins, the evener and official, one day last week, assigned Mr. Josephs' cattle for New York over a certain road. Mr. Josephs refused to send his cattle over the road designated, but forwarded them, against the protest of the evener, over another road.

Has it really come to this, that a shipper of live stock from Chicago to the east cannot decide for himself what route he will patronize, without subjecting himself to a fine? Does it not look as though the time had come at last when congressional legislation to protect the public from railroad monopolies is an imperative necessity?—Nat. Live-Stock Journal.

Well it does seem to have something of that appearance to an outsider.

Poultry.

The Hens in Winter.

There is little difficulty in obtaining eggs in summer, but the winter eggs must be worked for, and the fowls managed beforehand. Hens that have laid well during the summer cannot be depended on for late fall or early winter, even if fed well, but will generally commence in January and keep it up throughout February and March, giving a good supply of eggs if not too old. But it is better not to allow such birds to go into the winter. They are generally fat, after having finished the annual moult, and should be killed for the table.

To obtain a supply of winter eggs, we must have the chicks out in March or April. Leghorns and some of the smaller breeds will do in May or the first of June, but the Brahmas and Cochins must come off early, that they may have the full season for growth. The Asiatics are generally good layers in winter, and need less artificial heat, as nature has not furnished them with any ornamental appendages which suffer by exposure to frost.

Fowls that are regularly trained have certain portions of the day for their different feeds. My birds require their shells at night, as well as their greens, and their grain in the morning, and always fresh water. When one has the time and convenience, and enjoys the petting of fowls, making warm stews on very cold days is a very good plan, and the birds relish them marvelously.

The combed varieties require warmer quarters and sunnier exposures than the Asiatics, and are good winter layers after December and early January. They will lay in the fall if early hatched, but the change from fall to winter, and the getting into winter quarters, affects them, and they seldom commence again before the days begin to lengthen, at which time Brahmas will cease egg-production and become broody.

When one has the convenience it is well to keep both kinds, in order to insure a supply of eggs. It is useless to expect many eggs from old fowls of any variety. Have the buildings ready early and the fowls of the right age and in condition to insure success. The business of our domestic hen is to produce eggs, and we must feed her for it.—Cor. Country Gentlemen.

Another correspondent in the same paper says: "Let your hens sit, if early, on eggs; if late, on cobs or an empty nest—anything to them rest before moulting. I have noted that in the farm-yard few hens die from moulting, and the reason is that they hide their nests, or sit on empty nests for weeks at a time, without any molestation except a boy throwing cobs at them occasionally. Sometimes a hen will not moult in her second summer; yet I find the same danger. I feed them plenty of skin, which produces a good feather. I give also plenty of milk; also 'grinders'—sand, broken glass and dishes. Do not be troubled if your hens stop laying through November. It is a hard month for all animals—the 'toning' season for winter. The skin thickens, feathers tighten, everything fixes the bird for winter.

heads towards the entrance, occasionally advancing towards it, as if to note more particularly the place of entrance and its immediate surroundings, they then increase the distance, taking a survey of buildings, trees, fences, or other noticeable objects near by, after which they return to the hive, and start in a direct line from it. On returning, they come directly to the hive and enter; the surrounding objects and color of the hive are all noted by the bees.—Thomas G. Newman.

Dairy.

The New Departure in Cheese-Making.

In the old method, now current wherever the factory system prevails, the practice is to let the curd lie in the whey until fermentation sets in and acid becomes apparent. The fermenting whey reacts upon the curd, changing it to its detriment. It occasions, according to the extent of fermentation and development of acid, injury to the flavor, texture, digestibility and keeping quality of the mature cheese, and inclines the surface to dry up quickly and crack when cut, all of which, with other defects, tend to make factory cheese undesirable, to diminish its consumption and lower its saleable value.

It is one of the most unfortunate defects of the acid system of making factory cheese, that it cannot work milk which is much varied from a specific condition. It is unable to cope with variations in milk occasioned by summer heat; by changes in food and drink; and by soil and climate. It fails with milk fresh from the cow. It must have certain conditions as to age, sweetness and quality before it can successfully proceed in making cheese which will not be seriously objectionable. The consequence has been that immense losses have annually occurred in mid-summer from cheese so imperfect and short-lived that it has been necessary to force it into consumption, or it would spoil on the hands of the holders.

Apiary.

Bees Notes for January.

At this quiet season, so far as regards the operations of the apiary, it is proper for those who have not introduced the Italians into their hives, as well as those who are about to commence bee-keeping, to consider the claims made for superiority of the Italians over the ordinary, or black bees. In the first place, the Italians are much more beautiful than the black, a point not to be overlooked in the choosing of anything, even if all the other qualities are equal. They are more prolific; the queens depositing more eggs than the native. The expert bee-keeper can distinguish the Italian eggs by the compactness with which they are stored in the combs. The Italians are more hardy than the natives, venturing out in colder weather and doing work while common bees remain at home.

As a natural result from what has just been said, the Italians gather more honey than the natives. Again, they work upon plants that the blacks do not visit, which, of course, gives them a wider range for honey gathering. Cases are known where Italians were gathering white honey exclusively, while the common bees were working only on the buckwheat. The Italians are notably fond of the red clover, and will gather much more honey from this plant than the natives, which derive but little from it.

As they are more vigorous than the natives, they are better able to protect themselves, and to protect their stores, being more watchful and swift to discern the enemy. If harshly treated the Italian is worse to handle than the native. This naturally follows from its superior vigor and more active disposition, but when treated kindly, experience has shown them to be more docile and more pleasant to manage than the others. The honey-comb made by the Italians is more compact, and presents a finer appearance than ordinary comb, the difference being so marked that experts claim that they can tell the kind of bee that produced a given box of honey. Lastly, the Italians are much longer lived than ordinary bees. This has been proved in many cases, and is a strong characteristic in favor of the foreign bee.—American Agriculturist.

How to Care for a First Colony.

If it comes by express or freight, from a dealer, or bee-raiser, take it home carefully in a spring wagon. Be sure that the combs run lengthwise of the wagon; drive slowly, and handle with care. Place the hive in the position you wish it to occupy, and let it remain until evening, when the wire cloth that is usually nailed over the entrance may be removed, and the same board or other obstacle placed in front of the hive, so that when the bees come out in the morning, they will circulate around and mark the location before going to their work, and thus return in due time with safety. About midday it may be well to open the hive and see whether any combs are broken down, and if so, get them straightened up, and fastened either with twine or wire, until the bees have secured them, when such fastenings should be removed. Be sure to smoke them well before opening the hive.

BEES MARKING THEIR LOCATION.

This is done through the sense of sight. A large percentage of the bees that fly out in the early spring, are those who have come into being during the winter and early spring; consequently they do not leave the hive in a straight line, but only go a few inches, then turn their heads toward the hive and oscillate back and forth in front of it; then moving further back, still hovering in front of the hive, with their

Progress in the Right Direction.

Some improvements and advances are made backward, but a new creamery plan seems to have been started in Iowa which is evidently in the right direction. It is thus described by a correspondent of the American Stockman. We should judge, a similar enterprise would pay well in many locations in Kansas:

"Mossin & Co. started the factory last May, right in the city. It is run on the Fairlamb plan. This is to buy the cream from the farmers, going out after it with their own teams. They furnish to all the same kind of a pan, which is the Fairlamb. These pans hold seven gallons each, and have a graduated scale or glass at the top to indicate the depth. The cream is bought by the inch. They gather it up in very hot weather once a day, but mostly once in two days. They now have the cream from about fifteen hundred cows, some of which comes in by rail thirty miles. That brought in by horse teams comes, some of it, ten miles. We understand that all who sell cream are much pleased with the plan, and will double the number of cows next year. We examined some of the butter and found it excellent. A groceryman came while we were there, for some butter, and the price was then twenty-seven but he was informed that after that he must pay thirty-two. 'Well, now, here is a man buying cream

from all sorts of people—people some of which are so unskilled and careless about milking that they could scarcely sell it at all when they did, for only four to six cents. This man has, since last May, so educated people to cleanliness, that he makes this cent. butter from the cream of the milk of some cows that before made only five cents.

"We do look upon this new departure creamery business as a wonderful advance one that will be almost universally adopted. This plan leaves all the skim milk and sweet, ready to feed calves and pigs; it does away with the necessity of taking from the farm and delivering milk twice to the factory, as the factory man can skims the milk himself and carries it cream."

Horticulture.

Kansas State Horticultural Society.

From a report published in the Union, of January 3d, we learn that the association held its annual meeting at some time recently. (The report does not give the date):

The secretary's report showed that the society to be greatly increased, and as evidence of the appreciation of the society, the state legislature doubled the amount. The last report of the society, is the best one yet published by the society, and may be had by calling on the writer, C. Kelsey, of Humboldt, or by a secretary before the supply is exhausted. The price for postage is all that is required to be paid.

The treasurer's report showed a balance of debt and over \$100 ahead at the end of the year. A new departure was taken in the constitution, which makes it possible to elect an "ad interim" committee of this is to make it their duty in person to call from some local horticulturist, or persons about to organize, to the secretary for assistance in some other matter of unusual horticultural matters.

On the second day "Orchard" was quite earnestly discussed during the afternoon. The points generally mentioned by men of experience, were as follows: The best time to plant apple trees, is in the spring just before the ground begins to start. However, there is no preference the fall. Peach and plum trees were decided upon unanimously for planting, except in rare cases. Corn was the best crop to grow in the orchard, five or six years. Then seed orchard grass, and scatter a plentiful manure every year or two as a top dressing, and resow to grass after it was advised. Small grain was severely condemned in an orchard, apart to set apple trees was advised. But those who now have large orchards, find thirty feet, or over, to be no highly recommended to set peach trees, like Winesap and Mission, between the permanent orchard trees in out as the space was needed by other trees. This affords protection of each other, and is very little more expensive than to be planted.

Election of officers occurred in the afternoon: E. Gale, of Riley county, president; G. Y. Johnson, of Douglas, vice-president; F. Wellhouse, of Leavenworth, treasurer; G. C. Brackett, of Douglas, secretary; W. Robson, of Dickinson, H. E. Van Buren, of Allen, and Judge Newman, of Wya, trustees. Discussions on Entomology occupied a portion of the time of the third day. An interesting essay on "The Peach" was read. The evening was devoted to small fruits and flowers. Mulching (unnecessarily) pronounced necessary in growing any kind of berries to the best advantage. Prairie hay is the best material and may be used at any time of the year. Coarse manure was also recommended.

It seems to us that the horticultural society could be made more valuable to the public as a branch of the state agricultural society, with headquarters at the capital. At the most, horticulture is an adjunct of agriculture—a very important branch—which should be encouraged and fostered. But when it sets up on its own hood, it is like the ambitious snail of the fable, who set up housekeeping in an empty lobster's shell.

State Historical Society.

The fourth annual meeting of the Kansas State Historical Society will be held in the senate chamber, at Topeka, on Tuesday evening, January 20, at 7:30 p. m., for the object of choosing eighteen members of the board of directors, and the transaction of such other business as may come before the society.

A full attendance of members is desired. F. G. ADAMS, Secretary.

Will correspondents please write their post office address at the top or bottom of their communications. In a separate letter or a private note, they are apt to be mislaid. We often have inquiries for addresses of correspondents, and if not published with their communications we cannot always readily give them. We often receive inquiries for the post office address of correspondents several weeks after their communications are published, when the "copy" has probably been destroyed.

Granges of Husbandry.

extracts from the proceedings of the grange was incorporated in the Worthy Master Sims, of the grange, which we published in last

submit for your consideration and may deem proper, the following resolutions relating to the grange of the United States, national grange at its last session.

1. On page 89, paragraph 9, defining one of the duties of a master of a state grange, it reads: "It is especially enjoined on masters of state granges to use all diligence in restoring dormant granges to an active working condition."

2. Reorganization of the grange with proper material, impressing upon all the importance of remembering that ours is a farmers' organization, and that when a person's most important interests are in that direction will be the most earnest and active.

3. Careful and thorough instruction by the deputy or other person sent to reorganize or revive the grange.

4. Education; urging upon all members a careful study of our "Declaration of Purposes," and all the plans provided for carrying them into effect.

5. Encouragement. Those who have become indifferent because they did not succeed in putting into practice and at once receiving all the rewards our order offers should be encouraged and cheered by all proper means—taught that, even as the farmer is sometimes compelled to plant and replant before securing a crop, so should all patrons remember the lesson that perseverance in a good cause always brings success.

6. Competent deputies should be appointed in each county—not appointed because they wish the position, but because of their known fidelity and zeal, proven by their works, they are qualified to become teachers of all that pertains to the grange.

7. Visits should also be made to the neighborhoods where the dormant grange is located by committees appointed by some neighboring grange, or the pomona grange of the county or district, or of good patrons who have the success of our order at heart, whose words of council and encouragement will cause the sleeping ones to awake and once more girl on their armor.

8. We believe that a good, active pomona, county or district grange exerts a reviving influence upon dormant granges, and tends to keep others from becoming so.

9. Lecturers. The importance of lecturers, both public and private, is now so well understood by all that it is not necessary more than to allude to it here, but even a church could not exist without its preachers, or any cause prosper without its advocates, so the lecturer generally has an influence for good.

Advertisements.

Our readers, in replying to advertisements in the Farmer, will do us a favor if they will state in their letters to advertisers that they saw the advertisement in the Kansas Farmer.

Shannon Hill Stock Farm. Thoroughbred Short-Horn Cattle and Berkshire Pigs, bred and for sale. Only first-class animals allowed to leave the farm. Address: G. W. GLICK, Atchison, Kansas.

POULTRY BREEDERS TAKE NOTICE. I have a few choice Plymouth Rock and Brown Leghorn fowls for sale at reasonable figures if applied for soon. Address: Mound City Poultry Yard, Mound City, Kansas.

TREES and PLANTS. If you want to sell GRAPE VINES, SMALL FRUITS and choice varieties of PEACHES, PEARS, CHERRIES, PLUMS, ETC., ETC., on commission, I will give you the most liberal terms.

FARM TO BE GIVEN AWAY. Write for particulars immediately or you will be too late. If you have a farm write. If you have no farm write. If you wish a farm write. If you have a home write. If you have no home write.

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FOR SALE.

Native Bees in Quinby beehives. Mrs. E. D. VAN NIKLE, Pleasant Ridge, Leav. County, Kansas.

Pure Blooded Chickens. I breed Light Brahmas only. Have superior ones for sale at \$5, for two pullets and one cockerel delivered at station in shipping order.

Wanted. By a Practical Sheep Breeder of more than twenty-five years' experience, both in the east and west, a partner with a cash capital of two thousand dollars or more, either with or without experience in the business, or will take one to three thousand head of good young Ewes Sheep on shares for two or three years.

To Bee-Keepers. Many of our subscribers are lovers of Honey and would keep bees enough to supply their own tables at least if they know how.

Durham Park Herds. ALBERT CRANE, BREEDER OF Short-Horn Cattle and Berkshire Pigs, Durham Park, Marion Co., Kansas.

HOGS. THOROUGHbred POLAND-CHINAS and BERKSHIRE Pigs for sale. The very best of each breed. Early maturity, large growth, and fine style are marked features of our hogs.

Holstein Cattle. The largest Importers and breeders of Holstein Cattle in America. Also large Importers and breeders of Clydesdale horses, and breeders of Hambletonian horses of the most approved strains.

400 Short-Horns WANTED. Books will be opened for the great combination sale of Short Horns at Kansas City on the 1st of March, and close the 1st of April.

FARM TO BE GIVEN AWAY. Write for particulars immediately or you will be too late. If you have a farm write. If you have no farm write. If you wish a farm write. If you have a home write. If you have no home write.

TREES and PLANTS. If you want to sell GRAPE VINES, SMALL FRUITS and choice varieties of PEACHES, PEARS, CHERRIES, PLUMS, ETC., ETC., on commission, I will give you the most liberal terms.

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M. W. DUNHAM

Has Just Imported 36 Head PERCHERON-NORMAN HORSES.

FOR HIS OAKLAWN STUD OF LARGEST AND MOST COMPLETE ESTABLISHMENT OF THE KIND IN THE WORLD.



Imported from best stud stables of France. Winner of First Prizes in Europe and America. Awarded First Prizes and Gold Medals at the Universal Exposition at Paris, 1878.

Wool-growers. Can rely upon immunity from contagious disease in their flocks after use of LADD'S TOBACCO SHEEP WASH.

American Berkshire RECORD. Notice is hereby given that entries in Volume IV of the Record will close December 1, 1879.

C. H. BARTON, General Canvassing Agent, FOR NEWSPAPERS and PERIODICALS. Office with the County Clerk. Headquarters in the field. Subscriptions taken at club rates.

A. PRESCOTT & CO., TOPEKA, KANSAS. Have on hand \$100,000 TO LOAN In Shawnee and adjoining Counties on good Farm security At 8 and 9 per cent. For Annum.

IF YOU Want a FARM or HOME, with Independence and plenty in your old age. "The best Thing in the West," IS THE ATCHISON, TOPEKA & SANTA FE R. R. LANDS IN KANSAS.

DIPHTHERIA! Johnson's Anodyne Lincture will positively prevent this terrible disease, and will positively cure it when contracted. Information that will save many lives, sent free by mail. Don't delay a moment. Prevention is better than cure. Sold Everywhere.

THE CENTRAL KANSAS BREEDERS ASSOCIATION. Offer FOR SALE. As good Short-Horn Cattle, Berkshire and Poland China swine as can be found in the West. All orders should be sent to the Secretary of the Association.

Brooders.

BLUE VALLEY HERD. Spanish or Improved American and Hammond stock, noted for hardiness and fleece. \$500 each for sale.

JOSHUA FRY, Dover, Shawnee County, Kansas. Breeder of the best strains of Imported English Berkshire Hogs. A choice lot of pigs from 3 to 8 months old for sale.

L. A. KNAPP, Dover, Shawnee Co., Kas., breeder of Pure Short-Horn Cattle, and Berkshire Pigs. Several choice young bulls for sale.

Nurserymen's Directory. THE KANSAS HOME NURSERY offers a superior and Large Variety of trees for Western Planters.

MRS. DEBORA K. LONGSHORE, M. D. Office west side of Harrison St., 1st door south of Sixth St.

A. H. THOMPSON, D. D. S., Operative and Surgeon, Dentist, No. 123 Kansas Avenue, Topeka, Kansas.

THE BEST OF ALL LINIMENTS FOR MAN OR BEAST. When a medicine has infallibly done its work in millions of cases, far more than a third of a century; when it has reached every part of the world; when it has cured the most obstinate cases of rheumatism, sciatica, neuralgia, and all other forms of chronic pain or accident, it is every way to call such a medicine THE BEST OF ITS KIND.

MEXICAN MUSTANG LINIMENT. This is the case with the Mexican Mustang Liniment. Every mail brings intelligence of a valuable horse saved, the agony of an awful scald or burn subdued, the horrors of rheumatism overcome, and of a thousand and one other blessings and mercies performed by the old reliable Mexican Mustang Liniment.

MUSTANG LINIMENT. It penetrates muscle, membrane and tissue, to the very bone, banishing pain and curing disease with a power that never fails. It is a medicine needed by everybody, from the ranchero, who rides his

THE BEST OF ALL LINIMENTS FOR MAN OR BEAST. speedily cures such ailments of the HUMAN FLESH as Rheumatism, Swellings, Stiff Joints, Contracted Muscles, Burns and Scalds, Cuts, Bruises and Sprains, Poisonous Bites of Snakes, Scorpions, Lameuses, Old Sores, Scars, Frostbites, Chilblains, Sore Nipples, Cuts, Bruises, and indeed every form of external disease.

THE BEST OF ALL LINIMENTS FOR MAN OR BEAST. It is the greatest remedy for the disorders and accidents to which the BRUTE CREATIONS are subject that has ever been known. It cures Sprains, Swellings, Stiff Joints, Founder, Horns, Scalds, Wind-galls, Sprains, Farcy, Ringbone, Old Sores, Poll Evil, Flux upon the Night and every other ailment to which the occupants of the Stable and Stock Yard are liable.

STRA 30. broad

Magazines stores and alterative Golden... for the week ending...

Woman's Wisdom. 'She insists that it is of more importance that her family shall be kept in full health...

From the Hub. There is perhaps no tonic offered to the people that possesses as much real intrinsic value as the Hop Bitters...

From Rev. J. E. Rankin, D. D. June 19, 1879, the Rev. J. E. Rankin, D. D. of Washington, D. C., certified as follows: 'I have known of several persons who regarded themselves as greatly benefited...

The Next President. The politicians are anxious on the subject, but a much more important thing for all who have poor appetite, or impaired digestion...

Reed's Tonic. The firm of Reed & Co., of the city of Topeka, Mo., have just published a book...

Mag's Golden. We would advise all our readers to make a vegetable or fruit salad...

Sheep Wanted. The subscriber desires to secure some shares. Have plenty of feed, and years old...

Weekly Capital for 1880. One of the most desirable family papers...

ONE DOLLAR PER YEAR. OUR LOW CLUB RATE. Ten copies, to one or more post office...

ST. LOUIS LIVE-STOCK MARKET.

St. Louis, Jan. 12.—Hogs, Good demand; light shipping, \$4 15 2 1/2; packing, \$4 35 5 0; butchers to fancy, \$4 50 2 1/2...

Chicago Produce Market. Chicago, Jan. 12.—Flour, dull and nominal. Wheat, active but lower...

Liverpool Market. Liverpool, Jan. 12.—Breadstuffs, Market unchanged. Flour, 100 1/2 1/2...

Kansas City Produce Market. Kansas City, Jan. 12.—The Indicator reports: Wheat, receipts, 9,879 bushels...

Markets. Grocers retail prices list, corrected weekly by J. A. Lee. Country produce quoted at buying prices.

Table with columns for various goods (Apples, Beans, Butter, etc.) and their prices.

Table with columns for various goods (Beef, Pork, Mutton, etc.) and their prices.

Table with columns for various goods (Wheat, Corn, Oats, etc.) and their prices.

Table with columns for various goods (Hides, Green, etc.) and their prices.

Table with columns for various goods (Wool, Tub-washed, etc.) and their prices.

Table with columns for various goods (Wool, Unchanged, etc.) and their prices.

Table with columns for various goods (New York, Government, etc.) and their prices.

Table with columns for various goods (Kansas City, Receipts, etc.) and their prices.

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SEEDS

Our large Illustrated Catalogue of everything for Farm and Garden mailed free to all. It will pay you to send for it.

HOP BITTERS! If you are a man of letters, toiling over your midnight work, to restore brain nerve and waste...

HOP BITTERS! If you are young and suffering from any irritation or disposition; if you are married or single, old or young...

KNOW THYSELF. THE untold miseries that result from indiscretion in early life may be alleviated and cured.

HEAL THYSELF. The untold miseries that result from indiscretion in early life may be alleviated and cured.

THE VICTORY CORN MILL. The Victory Corn Mill will grind corn meal coarse or fine...

STRAYED. A large, fat, white milch cow, with red nose, ears and three red feet...

ESTRAY. Strayed from the subscriber, 3 1/2 miles west of Carbondale, Kansas...

ESTRAY. Taken up by the subscriber in July last, one red and white steer...

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CASH!

A Rosewood Piano for \$165. A Rosewood Piano for \$175. A Rosewood Piano for \$185. A Rosewood Piano for \$200.

A. REED & SONS. TEMPLE OF MUSIC, 191 & 193 State St., Chicago, Ill. TOPEKA Carbonated Stone and Pipe Works.

PAVEMENTS CEMENTS, LIME, PLASTER and HAIR. Factory and Office on Kansas Ave., between 21 and 31 streets.

M. A. Spear, P. O. Box 170. E. D. STOCKING, BROKER, 176 Broadway, New York City.

JEWELRY, SILVER-PLATED WARE WATCHES, AND CUTLERY. For price list and terms, address as above.

WARNER'S SAFE BITTERS. In eliminating the impurities of the blood, the natural and necessary result is the cure of Scrofulous and other skin eruptions...

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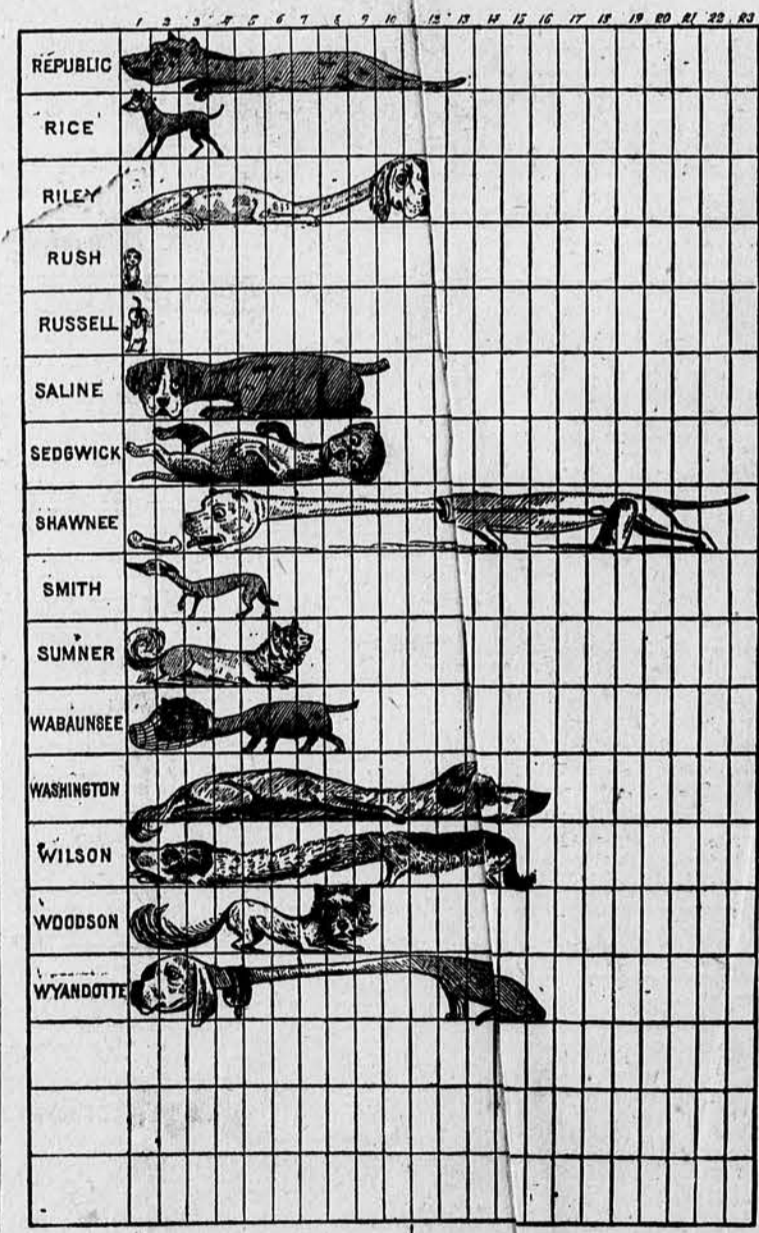
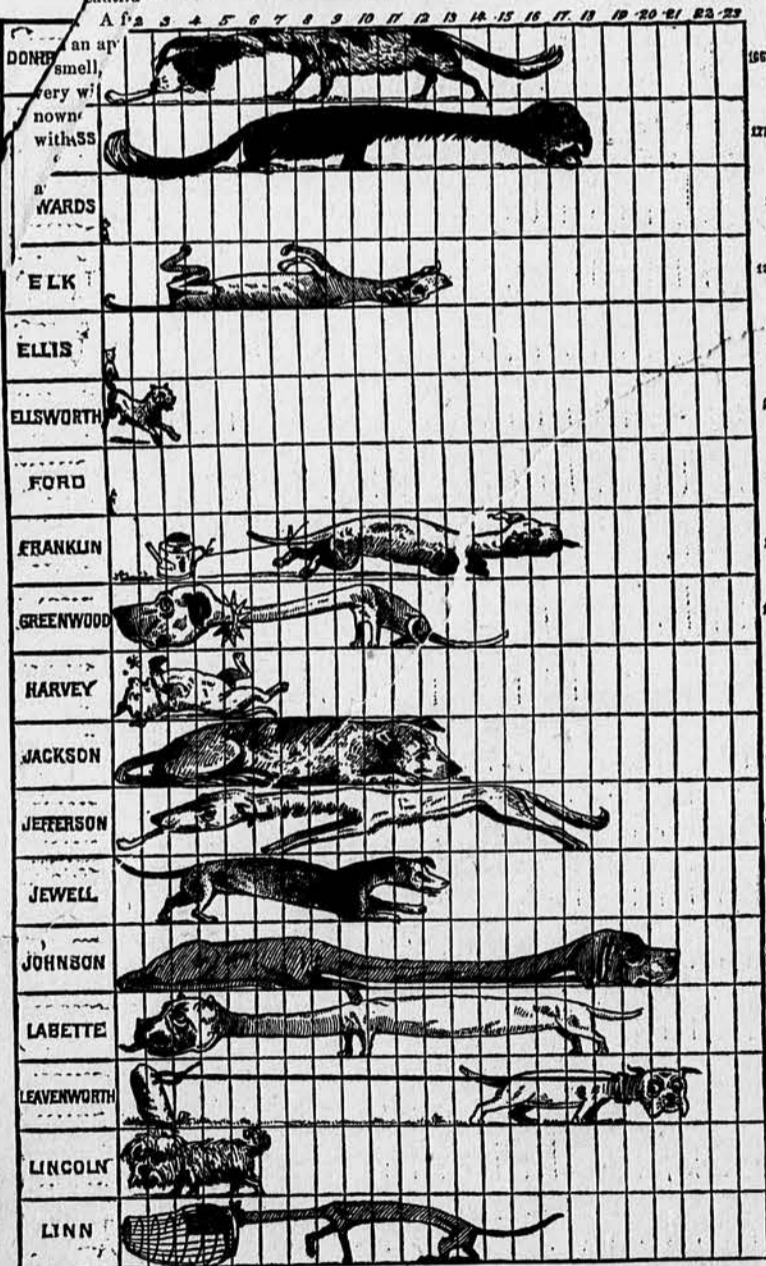
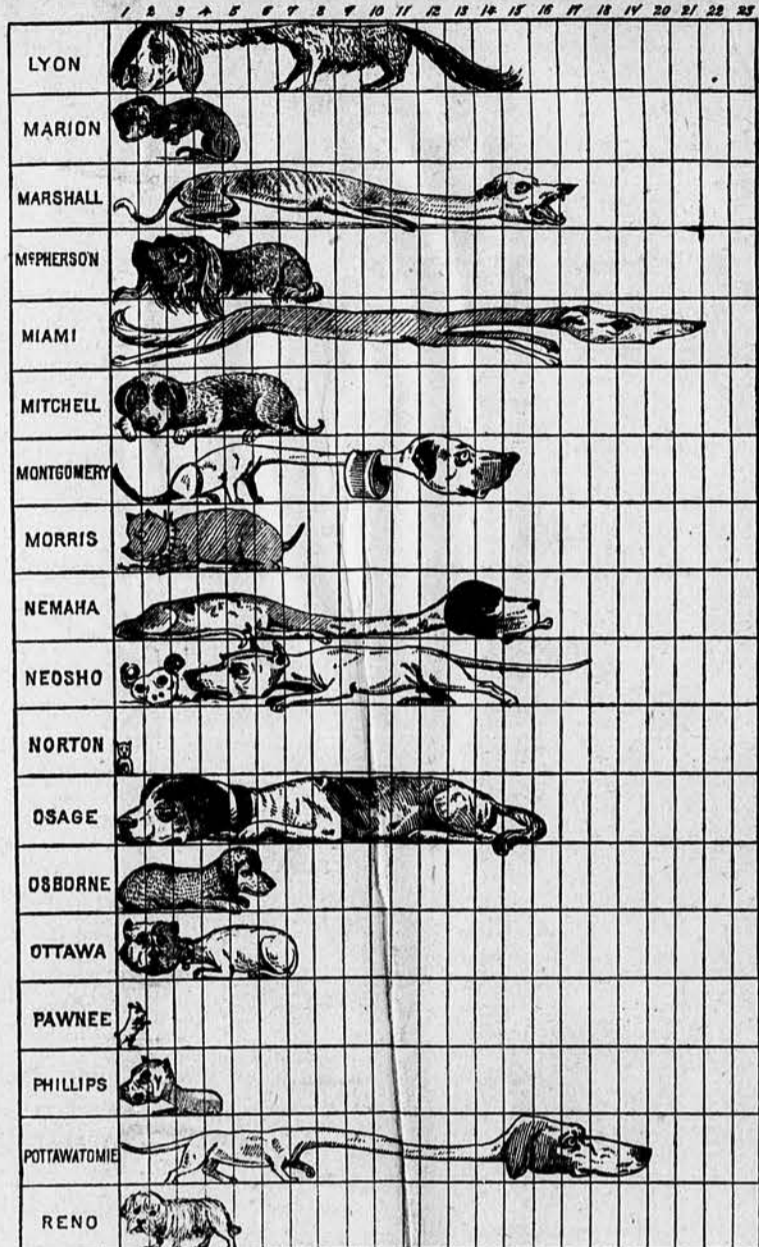
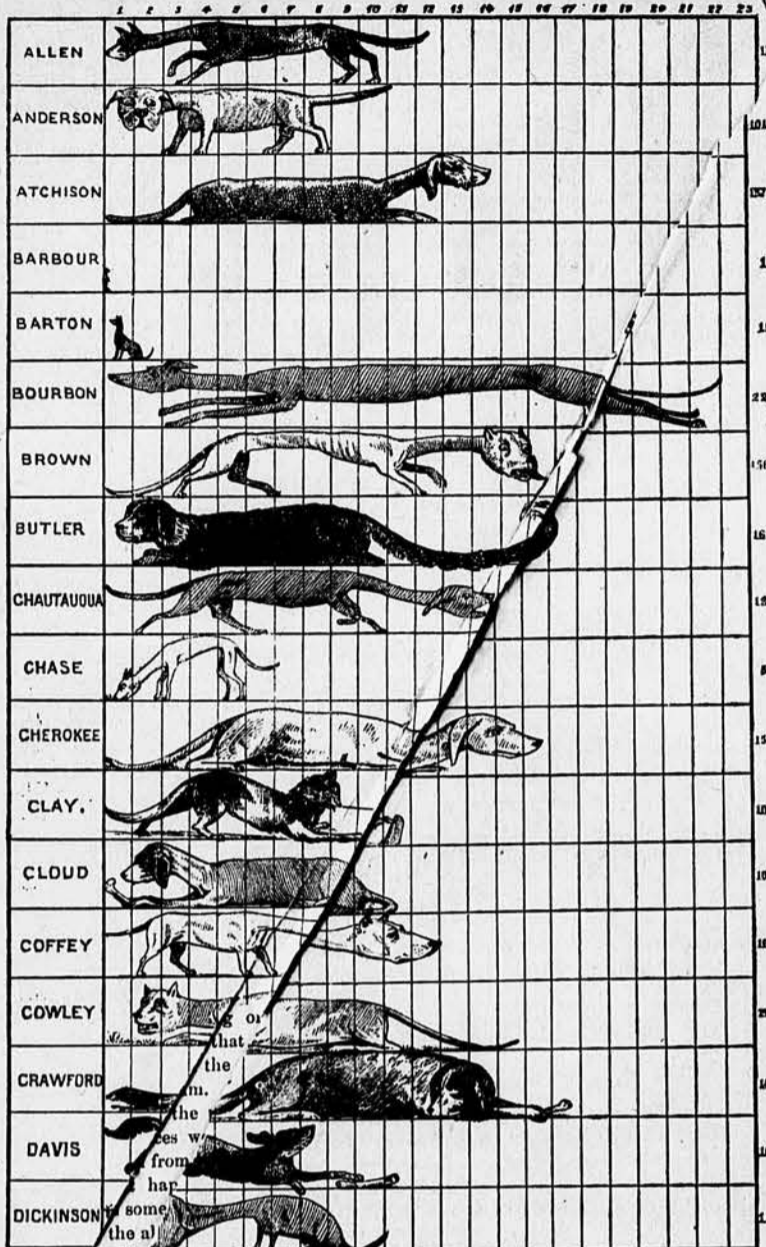
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Advertisement for FERRY & CO'S SEED ANNUAL, 1880, featuring various seed products and prices.

Advertisement for \$10 REWARD, STRAYED OR STOLEN, featuring details of a lost horse and contact information.

Advertisement for Publication Notice, detailing a legal notice regarding a partition action in a land dispute.



The Dogs of Kansas.

The great demand for the issue of last week's FARMER, containing our diagram of the dogs of Kansas, exhausted the edition before all were served, and we are, in order to supply all, compelled to republish it.

The dog census of the state has not been carefully taken since 1875, when this work was performed by the state board of agriculture, and for the tabulated statement by counties which is presented in connection with our dog diagram, we are indebted to the report of the accomplished secretary, Hon. Alfred Gray, for 1875.

The number of dogs contained in each county, as shown by the census of 1875, will be found on the right hand margin of the diagram, which is divided by vertical lines, each space between the lines representing one hundred. For illustration, the dog in Atchison county, from the tip of his tail to the point of his nose, extends through thirteen and seventy-two hundredths

dogs in the county in 1875. And so on through the entire list; a glance at the diagram will reveal the number and variety of dog each county is blessed with. We doubt not that a census for the present year would reveal a marvelous increase in this species of property, an increase that has kept pace with all other live stock of the state. The total number of dogs in the state in 1875, was 74,905, valued at \$300,000. This is a species of property which defies the power of the assessor to fix its worth, and evades the figures of the statistician in attempting to approximate its value.

Total number of sheep in the same year in the state, 106,224; number killed by dogs, 5,233, valued at \$12,192.80. It will be seen that while the value of our dogs to the community eludes the computer's pencil, their destructiveness is easily estimated.

There is one remarkable fact shown by the diagram, which is that the counties having the most elongated dogs, are, almost invariably,

herd dogs to assist in driving the cattle. Nearly all the owners of large flocks of sheep also use the Colly dog for keeping their flocks together. On the grain farms and in the towns is where he worthless, sheep-stealing curs abound, and were a numeration of the dogs made in 1880, there is little doubt that this latter class would greatly predominate. Worthless curs multiply with village population amazingly.

Farm Letters.

NAOMI, Mitchell Co., Jan 5.—We were much disappointed last week in not having the FARMER to read, as we have learned to prize it very highly. We find it full of excellent advice to Kansas farmers. I am much interested in what is said about planting or setting forest trees on our western prairies. I made a small beginning last spring by sticking about 1,300 cottonwood cuttings. It was so dry that I lost about one-fourth. What did live made an average growth of about five feet. It was no more trouble to tend them than to plant

tend so much, and it was a real pleasure to see them grow. Next spring I intend to put out several acres, from my little experience, and from observation, I cannot agree with a writer in a late number of the FARMER, who advocates planting close-leave trimming. We find here that unless the cottonwood grove is well cultivated, that the "rag-weed" will choke out trees of even two three years' growth. If the writer were I, I could show him a nice grove of trees four feet each way, that made a beautiful grove, as long as it was cultivated, but now nearly every tree is dead, choked to death with that that we call rag-weed.

Another grove of several acres, set in the spring of 1876, trees eight feet apart each way, cultivated each year and of course trimmed, now a, but very few vacancies, the trees standing at fifteen feet high, with trunk from two to four inches in diameter. I think I shall set trees through apart for cultivation.

My inquiry for talpa seed, published some time ago, was very promptly responded to by Mr. Samuel Lill of Gosport, Indiana, who sent me a large bag of seed; also, I received a pack of talpa seed from Rockford, Ill.

young grove next year. As I know that about the cultivation of the catalpa, I was very thankful for information about how to cultivate; that, G. M. Burger, of Alconada county, Kansas, offers to give. If he will wish the same in the FARMER, I have no others will be glad to give the information.

I was so much pleased with the description of the "sour-wood" tree, given by Prof. Steele, of Mobile, Ala., and published in FARMER of November 7th, that I sent for a package of the seed, and received it last week. I hope it will be as hardy and a forage plant for bees as the professor thought it will.

Many thanks, Mr. Editor, for information and advice about the alanthus. I got some seed in Nebraska in the fall of 1875, but did not know what they were at the time seed planted last spring made a good crop, but I shall take care to set the trees at a distance from the house as you advise.

Would the paw-paw and persimmon do well here and pay for raising?

Weather, for several days, has been and spring-like. Farmers plowing. Christmas week was cold. On the 24th of December, mercury was 15 degrees below zero. Fall seems to be all right, but would be better. Stock looks well and is in good condition. Wheat, 90c; corn, 15 to 20c; oats, 25c; hogs, 80c; butter, 15c; eggs, 15c; hay, \$3.

F. W. BA...

Persimmon and paw-paw saplings, neither of them reach the proportions to them to the name of trees) are little else cumberers of the ground. The fruit of the veriest trash. The persimmon is hard wood and makes good mallets and small articles requiring tough wood to manufacture. The paw-paw is a soft wood, grows four to six inches in diameter, its best, and is a very fair specimen of a weed. Neither is worth cultivating.

NEWTON, Harvey Co., Jan. 8th.—I give you a list of products I raised last year 1879: 60 acres wheat, averaging 15 els per acre; 20 acres corn, averaging 45 els per acre; 70 acres fenced with three wires for pasture; outside of this, the rest under cultivation.

The second contract of 80 acres—10,000 bushels corn; 125 bushels potatoes. After cutting the wheat I plowed less than an acre, sowed the same with turnip seed, which yielded 100 bushels. This crop was mostly raised on first and second sod. Locality, five miles northeast of Newton.

We cut down cottonwood trees that had grown four summers from the cuttings. The largest was seven inches through, solid wood.

B. BRUSH.

RUSSELL, Russell Co., Jan. 3.—My experience in farming in sunny Kansas, began three years ago last March. Have never failed in raising good crops—wheat, corn, millet, seed and oats. The first year I harvested 3,000 bushels; 2d year, 10,000 bushels, and the 3d year 7,000 bushels of fall wheat; have 700 acres in now. Have raised 2,000 bushels of millet seed. I don't think there is 10,000 bushels of German millet seed in Kansas, and there will be a big demand for the same. I expect \$1.25 per bushel for mine. I have hopes of a big wheat crop in this county. It has all come up since the big rain, two weeks past.

I think of selling all my plows, harrows and drills, and buying two screw harrows to put in my next crop, at an expense of not over 25 cents per acre, and let my neighbors find their own machinery, and I will give them one-third or one-fourth of the crop to harvest and thresh it. I will then only be out 25 cents per acre for putting in crop, and, say, \$1.00 for seed. We can expect an average of 18 bushels per acre, and if I give one-third for harvesting and threshing, I will have 12 bushels of wheat left for an outlay of \$1.25. In other words, will seed 800 acres to wheat, and suppose it yields 18 bushels per acre, will have 9,600 bushels of wheat at 75 cents per bushel, which will be \$7,200 for an outlay of \$1,000, not counting the use of land, and only have two screw harrows in the way of farm machinery.

Farming will pay in Kansas, if it is well followed. Brother farmers, tell us through the FARMER what you think of my theory.

RUSSELL COUNTY.

BALDWIN CITY, Douglas Co., Jan. 2.—The new year comes in the first and second days with a heavy sleet and drizzling rain, and at this hour has every appearance of a January thaw. The wet has come in good time, as it will materially help the growing wheat, for the surface of the ground had become quite dry and dusty, consequently the wheat was needing some moisture. The stock water was becoming somewhat scarce on account of the heavy freezing; the rain and thaw-out will remedy that.

I think, in retrospect of the year just passed the people, generally, are in better spirits and more hopeful than they were a year ago. I think we are more proud of our great state and of her record than we have ever been. We hardly have any bounds for the future. It is true as farmers and horticulturists we have not had all the success desired, but take everything and put in the balance, and we find the Kansas side pulls down the heaviest.

There is, by far, more wheat growing in Douglas county to-day, yes, all of one-third more than ever before, and every prospect of an abundant crop. The crop of the past season was better in yield than was anticipated at harvest. The price for No. 2 here is about \$1.15 per bushel. The corn crop of the past year was very heavy in this section, and there is a large surplus on hand. In consequence of high railroad tariff the price is low, too low, from 22c to 24c per bushel.

There seems to be a growing disposition among a great many farmers in this part of the county to engage more in the stock business, especially cattle. It is a fact well demonstrated that those farmers who have given attention to this business for a few years past, have been the most successful financially. We see this more particularly shown in the extreme southeastern portion of the county.

There has been a large number of hogs shipped at this point. They range from \$3.25 to \$3.60 per cwt. gross.

The prospect for fruit is good; we hope for a bountiful crop. The extreme cold after the middle of December, affected the peach bud slightly, but there is yet a good prospect for plenty.

I think we start out on this new year, as a town, county and state, with more flattering prospects in regard to every interest than we have ever done before.

I am getting up a club for the FARMER.

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